2023 Annual Water Quality Report



Cedar Rapids Linn County Solid Waste Agency Site 1
Cedar Rapids, Iowa

January 2024

IDNR Permit No. 57-SDP-03-75C
Project I.D.: 23C071.00

Solving our clients' toughest science and engineering challenges.

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January 23, 2023

Brian Rath, P.E.
Iowa Department of Natural Resources
Wallace State Office Building
502 East 9th Street
Des Moines, IA 50319-0034

Re: 2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
2250 A Street SW, Cedar Rapids, IA 52404
Permit No. 57-SDP-03-75C

Dear Brian Rath:

On behalf of the Cedar Rapids Linn County Solid Waste Agency (Agency), Foth Infrastructure & Environment, LLC (Foth) is submitting the 2023 Annual Water Quality Report (AWQR) as required by Iowa Department of Natural Resources (IDNR) Permit No. 57-SDP-03-75C. The contents of this report are intended to satisfy the requirements of 567 Iowa Administrative Code (IAC) 113.10(5)c(1) and 113.10(6)d(1), related to recordkeeping and notification, and annual reporting requirements listed in IAC 113.10(10) (effective 12/10/07).

This report was prepared using the IDNR AWQR report format required by Permit Amendment #14. The Monitoring Well Maintenance and Performance Reevaluation Schedule and Summary, Leachate Control System Performance Evaluation Report (LCSPER), and Methane Monitoring Report (MMR) have been incorporated directly into the AWQR as Tables 3, 4, 11, 12, and 13.

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

Sincerely,

Foth Infrastructure & Environment, LLC

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Project Environmental Scientist
(319) 297-2055

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2023 Annual Water Quality Report

Distribution

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2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1

Project ID: 23C071.00

Prepared for

Cedar Rapids Linn County Solid Waste Agency

1954 County Home Road
Marion, IA 52302

Prepared by

Foth Infrastructure & Environment, LLC

January 2024

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Certifications

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

1/31/2024
Gina Wilming (date)
Iowa G.W.P. No. 2099.

My certification renewal date is
December 31, 2025.

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

LICENSED PROFESSIONAL ENGINEER BRIAN K. HARTHUN 14049 IOWA	I hereby certify that the Leachate Control System Performance Evaluation Report and Methane Monitoring Report were prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa. 1/31/2023 Brian K. Harthun (date) Iowa P.E. No. 14049 My license renewal date is December 31, 2024. Pages or sheets covered by this seal: Tables 11, 12, and 13

List of Abbreviations, Acronyms, and Symbols

ACM	assessment of corrective measures
Agency	Cedar Rapids Linn County Solid Waste Agency
AWQR	Annual Water Quality Report
bTOC	below top of casing
cm/s	centimeters per second
ft/ft	feet per foot
Foth	Foth Infrastructure & Environment, LLC
GWPS	groundwater protection standard
HMSP	Hydrologic Monitoring System Plan
HRG	Howard R. Green Company
IAC	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
LCSPER	Leachate Control System Performance Evaluation Report
LEL	Lower Explosive Limit
mg/L	milligrams per liter
MMR	Methane Monitoring Report
MNA	monitored natural attenuation
SSL	statistically significant level (over GWPS)
TSS	total suspended solids

1. Executive Summary

Foth Infrastructure & Environment, LLC (Foth) was retained by the Cedar Rapids Linn County Solid Waste Agency (Agency) to provide an annual report summarizing the groundwater quality and hydrogeologic monitoring activities at Site 1 during 2023. This 2023 Annual Water Quality Report (AWQR) was prepared using the Iowa Department of Natural Resources (IDNR) AWQR report format required by Permit Amendment #14. The Monitoring Well Maintenance and Performance Reevaluation Schedule and Summary, Leachate Control System Performance Evaluation Report (LCSPER), and Methane Monitoring Report (MMR) have been incorporated directly into the AWQR as Tables 3, 4, 11, 12, and 13.

1.1 Period of Report Coverage

This AWQR presents an evaluation of the groundwater, methane monitoring, and leachate collection system monitoring, maintenance, and performance activities conducted at Site 1 for the period of January 1 through December 31, 2023.

1.2 Report Priority

No actions or activities are on hold due to the completion of IDNR review or comment. There are no changes to the Hydrologic Monitoring System Plan (HMSP) requested in this report.

Foth requests IDNR review and approval of the following:

- Amend Permit Special Provision X.10 and the leachate monitoring network by replacing W-212 with W-214 and removing W-217, as requested in Table 12 of this AWQR. Replacement of W-212 with W-214 will maintain adequate coverage since W-214 is located approximately 400 feet east of W-212 and will continue to monitor leachate elevations along the mid-central portion of the north side of Site 1. Removal of W-217 is recommended since it cannot be repaired or replaced at the same location, and there are no suitable replacement locations to provide coverage near the top of the landfill due to the construction and demolition debris filled there.

1.3 Site Status and Applicable Rules

Site 1 is a closed, unlined landfill located within the city limits of Cedar Rapids, Iowa. The facility is situated in Sections 27 and 34, Township 83 North, Range 7 West, in Linn County, Iowa. The landfill is situated in a former limestone and dolomite quarry adjacent to a horseshoe bend in the Cedar River. Land use in the area is urban, with nearby industrial, commercial, and residential uses. A site map depicting the characteristics of the landfill and surrounding vicinity is provided in Figure 1.

The facility includes about 95 acres, of which 76 acres have received fill materials. The waste is estimated to be 200 feet in thickness over the central portions of the disposal area and about 25 to 40 feet in thickness along its margins. The facility ceased operation on July 29, 2006. The rules in effect at the time of closure [567 Iowa Administrative Code (IAC) 113.26] were established on January 15, 2003. The closure permit (57-SDP-03-75C) was issued on September 21, 2006, and expires on September 21, 2036.

Groundwater monitoring and reporting activities were conducted in accordance with Special Provision X.6 of the closure permit (including subsequent permit amendments) and a combination of the rules in effect at the time of closure [567 IAC 113.26 (effective 1/15/03)] and the current rules (567 IAC 113.10). Details regarding the statistical methods utilized are included with the statistical reports in Appendix B. In accordance with Permit Amendment #4 and the variance granted on March 26, 2010, monitoring well maintenance and performance was conducted in accordance with 567 IAC 113.10(2)f rather than the rules in effect at the time of closure.

Methane monitoring and reporting activities were conducted in accordance with Special Provision X.8 and 567 IAC 113.26(15)b (effective 1/15/03).

The leachate collection system monitoring, maintenance, and performance activities were conducted in accordance with Special Provision X.10 and 567 IAC 113.26(8)d (effective 1/15/03).

2. Site Background

2.1 Site History

Site 1 began operations in 1965 as an unlined landfill and was first permitted by the State of Iowa in 1975. From 1975 to July 29, 2006, the landfill operated under Sanitary Disposal Project Permit No. 57-SDP-03-75P and received municipal waste generated from residential, commercial, and industrial generators located primarily in Cedar Rapids and Linn County.

The facility ceased operation on July 29, 2006 and construction of the final cap was completed in 2007. The closure permit (57-SDP-03-75C) was issued on September 21, 2006.

In June 2008, the landfill reopened for disposal of disaster debris from the 2008 flooding (in accordance with Permit Amendment #2) and continued to accept debris until Spring 2013 (in accordance with Permit Amendment #5). The facility ceased operation in Spring 2013 and began reconstruction of the final cover. Construction of the final cover was completed in August 2013 and incorporated into the closure permit through Permit Amendment #9.

2.2 Geology and Hydrogeology

The site-specific geologic and hydrogeologic characteristics presented in this section are summarized from the November 1992 *Hydrogeologic Investigation Report* submitted by Howard R. Green Company (HRG, 1992).

The Site 1 landfill is situated within a limestone and dolomite quarry known as the former Otis quarry. The landfill is bounded to the north and east by the Cedar River and to the south and west by residential and commercial areas. The Otis quarry was developed in the Devonian age Otis Formation which is primarily composed of dolomite. Overburden at the landfill consists of quarry spoils, refuse, imported earth cover, Pleistocene glacial drift deposits, and Quaternary alluvium/colluvium.

The surficial stratigraphy is dominated by up to 47 feet of Cedar River alluvium. Along the eastern and northern landfill perimeters (closest to the Cedar River), alluvium directly overlies bedrock. In contrast, glacial till separates overlying alluvium from underlying pre-Wisconsin silt and sand and bedrock along the southern and western perimeters. The alluvium predominantly consists of silt and sand; however, localized zones of clay-rich alluvium are noted. A sand interval of up to 22 feet in thickness occurs in the alluvial sequence along the eastern perimeter of the landfill. Localized, thin remnants of sand-rich glacial till are also noted and appear to attain a maximum thickness of approximately 17 feet in the west-central area of the landfill.

Composed primarily of limestone and dolomite, the bedrock surface spans the Silurian age Gower Formation, the Coggon Member of the Devonian age Otis Formation, the Cedar Rapids Member of the Devonian age Otis Formation, and the Kenwood Member of the Devonian age Wapsipinicon Formation (from oldest to most recent). In the south-central portion of the landfill, where quarry excavations were the deepest, the bedrock surface consists of the Coggon Member of the Devonian age Otis Formation. The Cedar Rapids Member of the Devonian age Otis Formation is encountered in areas of the landfill where pre-landfill quarry excavations were not as deep. The Devonian age Wapsipinicon Formation is present along the landfill periphery in the south-central and north-central portions of the facility.

Two aquifers exist at Site 1: the shallow Cedar River alluvium aquifer and the Devonian-Silurian bedrock aquifer. The two aquifers exist under unconfined conditions and are hydraulically connected forming a single aquifer system which is in hydraulic connection with the Cedar River. During the hydrogeologic investigation, the water table was observed within the alluvium at only two well locations: MW-17 and MW-34. Generally, the alluvial sequence is considered relatively impermeable; however, where saturated, this sequence is hydraulically connected to the underlying bedrock aquifer and the Cedar River.

In all other locations, the water table was encountered within the bedrock aquifer, most typically in the weathered and fractured Coggon Member of the Otis Formation. Hydraulic conductivity typically ranged from $2.7x10^{-8}$ to $6.6x10^{-5}$ centimeters per second (cm/s) where the Coggon Member was not fractured or highly weathered. A hydraulic conductivity range on the order of 10^{-2} cm/s or greater was inferred for the weathered and fractured Coggon Member of the Otis Formation. Hydraulic conductivity ranged from $8.1x10^{-8}$ to $8.1x10^{-7}$ cm/s and $4.0x10^{-7}$ to $2.3x10^{-3}$ cm/s for the Cedar Rapids Member of the Otis Formation and the Silurian age Gower Formation, respectively. Again, values for weathered or fractured zones in these formations are presumed to be on the order of 10^{-2} cm/s or greater.

Groundwater levels measured in monitoring wells installed around the periphery of the landfill are consistent with the regional north-northeast groundwater flow direction toward the Cedar River. The horizontal water table gradient varied from 0.0015 feet per foot (ft/ft) to 0.1671 ft/ft, with an average gradient of 0.0281 ft/ft. The vertical recharge gradient ranged from 0.0007 ft/ft to 0.0447 ft/ft, with an average recharge gradient of 0.0112 ft/ft. The vertical discharge gradient ranged from 0.0005 to 0.0075 ft/ft, with an average discharge gradient of 0.0033 ft/ft. The horizontal gradient is approximately 2.5 times greater than the vertical recharge gradient and 8.5 times greater than the vertical discharge gradient. On average, groundwater flow is dominated by the horizontal flow component.

2.3 History of Groundwater Corrective Action

Groundwater quality assessments were conducted during 1998-2001 in response to a release of leachate. The leachate release was characterized by concentrations above the applicable health-based risk levels for 1,2-dichloroethane, 1,2-dichloropropane, dissolved arsenic, benzene, cadmium, cis-1,2-dichloroethene, nitrogen as ammonia, tetrachloroethene, trichloroethene, vinyl chloride, and dissolved zinc in the upper bedrock system and 1,2-dichloroethane, dissolved arsenic, benzene, tetrachloroethene, nitrogen as ammonia, vinyl chloride, and dissolved zinc in the deeper bedrock system. The groundwater quality assessment work was conducted in accordance with the rules in effect at the time [IAC 103.2(9)]. The reports summarizing the previously approved groundwater assessments are:

- *Groundwater Quality Assessment: Work Plan* (HRG, 1998)
- *Groundwater Quality Assessment: Final Phase I Report* (HRG, 1999)
- *Phase II Groundwater Quality Assessment Expanded Risk Assessment Documentation* (HRG, 2000)
- *Phase II Groundwater Quality Assessment Report, Volumes I & II* (HRG, 2001)

In accordance with the rules in effect at the time [IAC 103.2(9)], the selected remedy was outlined in the Risk Management Plan and Corrective Action Plan (HRG, 2001) which was approved by the IDNR and incorporated into the closure permit through Special Provision X.7. To date, remedy implementation has been conducted in accordance with the Risk Management Plan and Corrective Action Plan (HRG, 2001).

Prior to August 2008, semiannual groundwater sampling for the routine and supplemental indicator parameters was conducted in accordance with the previous rule revisions listed in IAC 113.26(15) (effective 1/15/03) and the Risk Management Plan and Corrective Action Plan (HRG, 2001). In accordance with the 2007 rule revisions, assessment monitoring for the Appendix II constituents [IAC 113.10(6)] was initiated in August 2008 due to indicator parameter control limit exceedances identified after the March 2008 sampling event (Foth, 2008). The initial Appendix II statistical evaluation identified statistically significant levels (SSLs) over the groundwater protection standards (GWPS) in the upper bedrock system (Foth, 2010a). In lieu of initiating assessment of corrective measures (ACM) under IAC 113.10(7), the *2010 AWQR* and *March 2011 Semiannual Report* (Foth, 2010b and 2011) requested IDNR review of the previous groundwater quality assessment activities and continued implementation of the Risk Management Plan and Corrective Action Plan.

In the letter dated June 27, 2011 (IDNR, 2011), IDNR provided written concurrence that the requirements outlined in IAC 113.10(7) do not need to be repeated when previously identified contaminants are found to exceed a GWPS. However, IDNR required the Agency to conduct additional delineation activities and to submit a schedule for completing the existing remedy which demonstrates how and/or when the existing remedy will meet the following performance objectives: 1) be protective of human health and the

environment, 2) attain the GWPS, 3) control the source of the release or eliminate to the maximum extent practicable to prevent further releases, and 4) comply with the standards for management of wastes.

An *Assessment Work Plan* (Foth, 2012) was prepared to outline additional activities for expansion of the background data set, for addressing horizontal and vertical delineation, and a schedule for completing a comprehensive data review (i.e., trend analysis, plume stability) to evaluate the existing remedy and determine a schedule for achieving compliance with the performance objectives. In accordance with the approved *Assessment Work Plan* (Foth, 2012), additional background and delineation monitoring wells were installed and sampled between May 2013 and September 2014. An evaluation of the effectiveness of the existing remedy and compliance with the performance requirements was submitted with the *2014 AWQR* (Foth, 2015a). The conclusions of the data evaluation recommended continued implementation of the existing remedy as outlined in the Risk Management Plan and Corrective Action Plan (HRG, 2001).

In the March 10, 2015 comment letter (IDNR, 2015), the IDNR did not yet concur with the recommendation to continue implementation of the existing remedy. IDNR requested further plume delineation but indicated that if low-flow sampling were initiated, then additional plume delineation activities could be deferred until analysis of the new data is complete.

In accordance with the *Response to DNR Comments dated March 10, 2015* letter (Foth, 2015b), a low-flow sampling and analysis program was implemented between Spring 2015 and Fall 2016. Reevaluation of the background and downgradient data sets based on the sampling methodology change was conducted during the Fall 2016 statistical evaluation. Recommendations were provided in the *Fall 2016 Statistical Notifications* letter (Foth, 2016a) and the *2016 AWQR* (Foth, 2016b). IDNR approved the recommended background and downgradient data set adjustments in the letter dated November 20, 2017 (IDNR, 2017).

Upon completion of the low-flow sampling and analysis program and reevaluation of the background and downgradient data sets, two-dimensional plume stability models were utilized to evaluate horizontal and vertical plume delineation (Foth, 2017). The results indicated that compliance with the horizontal and vertical delineation requirements have been met for nickel, thallium, and vinyl chloride. However, compliance has not been met for arsenic and cobalt. Two additional well nests (MW-108A/B and MW-109A/B) were recommended in a continued effort to meet the delineation requirements for arsenic and cobalt.

In accordance with the *Plume Delineation [IAC 113.10(6)g(1)1]* letter (Foth, 2017), upper and deeper bedrock delineation monitoring wells MW-108A, MW-108B, and MW-109A, and MW-109B were installed in November 2017 to horizontally and vertically delineate the arsenic and cobalt groundwater plumes in accordance with IAC 113.10(6)g(1)1. Delineation wells MW-108A, MW-108B, MW-109A, and MW-109B were installed in November 2017. Five rounds of baseline delineation monitoring for the Appendix I list were conducted between November 2017 and November 2018 at these locations.

In the letter dated November 20, 2017 (IDNR, 2017), IDNR commented that reevaluation of the existing source control and remedy should be conducted after review of the 2017 AWQR and a meeting with IDNR, the Agency, and the Agency's consultant has been completed. A meeting was held between IDNR, the Agency, and Foth on April 19, 2018. The meeting included a history of groundwater compliance activities at Site 1, an update on delineation progress, and discussions regarding property owner notification, remedy evaluation and implementation, and whether any post-closure care reductions could be considered (i.e., sampling optimization).

Based on the discussions and verbal approvals at the April 19, 2018 meeting, a reevaluation of the existing remedy and source control was provided in the *2018 AWQR* (Foth, 2019a). No additional delineation activities were recommended and IDNR approval to finalize completion of delineation activities at Site 1 was requested. Reevaluation of exposure pathways and receptors did not identify any new receptors and indicated that the previous risk assessment remained applicable. Reevaluation of source control suggested that the identified decrease in the number of contaminants comprising the groundwater plume along with steady to declining groundwater concentrations indicated that the leachate release is under control. In addition, steady to declining leachate elevations with no apparent

correlation with precipitation supported that construction of the final cover and additional storm water controls has been effective in reducing infiltration. Based on the reevaluation results, IDNR approval to continue implementation of the existing remedy in accordance with the Risk Management Plan (HRG, 2001) was requested, along with IDNR approval of the revised remedy implementation schedule based on a monitored natural attenuation (MNA) remedy as outlined in Section 4.3 of the *2018 AWQR* (Foth, 2019a).

In the letter dated April 16, 2019, IDNR approved the revised remedy implementation schedule as shown in Section 4.3 of the *2018 AWQR* (Foth, 2019a), except for removal of MW-109B from the groundwater monitoring network (IDNR, 2019). MW-109B has been retained in the monitoring network.

In 2019, the Agency elected to hold a Public Information Meeting to provide the public an opportunity to learn more about the closed Site 1 landfill and to re-notify interested parties and property owners that directly overlie the groundwater plume. The 2019 notifications were a continuation of the historical public notification efforts regarding groundwater quality near the closed Site 1 landfill. Initial public notification was conducted through a press conference and two public meetings held in February 1998. The Agency elected to re-notify property owners that directly overlie the groundwater plume due to the length of time that had passed since the initial 1998 notifications and to be transparent. The Public Informational Meeting was held on October 17, 2019 at the National Czech & Slovak Museum & Library from 5:30 – 7:30 PM. IDNR was provided notice of the Public Informational Meeting, a figure depicting the overall extent of the groundwater plume at Site 1, a listing of property owners that were notified, and copies of the notification letters in the submittal dated October 7, 2019 (Foth, 2019b).

In July 2020, the IDNR approved the spatial and frequency optimizations detailed in "Site 1 Monitoring Optimization" (Foth, 2020) in the Permit Amendment #16 (IDNR, 2020). The spatial optimization recommendations were initiated in Fall 2020, and the frequency optimizations were initiated in Spring 2021. The Monitoring Program Implementation Schedule provided as Table 2 includes the approved spatial and frequency optimizations.

3. Quality Assurance/Quality Control Summary

In 2023, field blanks, field duplicates, and trip blanks were collected and analyzed at the frequencies listed in the *Hydrologic Monitoring System Plan* (HRG, 2006). Data validation reports detailing any resampling, data qualifiers added per data validation, and an overall assessment of the data are included in Appendix A.

In 2023, the overall data assessments indicated that method criteria, precision, accuracy, representativeness, comparability, completeness, and suitability for intended use were acceptable. In 2023, resampling was not conducted; however, it was considered based on the data quality for the Winter and Fall 2023 sampling events.

In Winter 2023, 1,4-phenylenediamine in MW-26 was rejected due to laboratory control sample/laboratory control sample duplicate recoveries that were below the recovery limit. Therefore, the January 2023 1,4-phenlyenediamine (i.e., p-phenylenediamine) result for MW-26 is crossed-out in Table 14. Resampling was not recommended for the rejected 1,4-phenylenediamine datum since 1,4-phenylenediamine was sampled and analyzed at MW-26 in January 2023 as part of the re-triggered quarterly baseline assessment monitoring for the full Appendix II list, this parameter has not been detected at MW-26, and 1,4-phenylenediamine would be included in the second quarterly baseline assessment monitoring event. In Spring 2023, no quality control issues impacted 1,4-phenylenediamine in MW-26, and 1,4-phenlyenediamine was not detected in MW-26.

In Fall 2023, the laboratory inadvertently omitted the acid semivolatile organic compounds for field blank sample FB-2 during the extraction process. The laboratory contacted Foth, and Foth instructed Eurofins not to re-prep FB-2 since it would be outside of hold time. Base/neutral semivolatile organic compounds were prepped and analyzed within hold times and reported. Resampling was not recommended because FB-2 is a quality control sample.

Overall, the 2023 data was found to be of good quality and suitable for the intended use, with the exception of rejected datum.

3.1 Sample Turbidity

Low-flow and no purge sampling techniques were continued in 2023. The sampling methodology utilized was consistent with minimizing turbidity and total suspended solids (TSS) in the groundwater samples. However, in Spring 2023, data set adjustments were recommended based on sample turbidity in background.

At upper bedrock background well MW-101A, the March 2023 TSS concentration of 12.6 mg/L slightly exceeded the 5 mg/L limit for acceptable sample quality. Barium, cadmium, cobalt, copper, nickel, selenium, and vanadium were detected above the method detection limit at MW-101A. Removal of these detected results at MW-101A was recommended since the March 2023 concentrations were above the range of historic concentrations and/or some TSS correlation was evident. The March 2023 barium, cadmium, cobalt, copper, nickel, selenium, and vanadium concentrations at MW-101A are crossed-out in Table 14.

Conversely, upper bedrock background well MW-37, and deeper bedrock background wells MW-38 and MW-101B had TSS concentrations below the 5 milligrams per liter (mg/L) level for satisfactory sample quality in 2023. The 2023 background review indicated that turbidity is not impacting the representativeness of the background data set, and the 2023 background data is suitable for use in interwell statistical comparisons.

Several downgradient and delineation monitoring wells had TSS concentrations greater than the 5 mg/L level for satisfactory sample quality. The IDNR noted in the Unnumbered Permit Amendment (IDNR, 2014) that a TSS level of 5 mg/L may be unattainable and concluded that if extra measures were conducted, the IDNR would consider higher levels for TSS as satisfactory. No additional actions or removal of data were recommended for the downgradient and delineation monitoring wells in 2023. The following additional actions have been conducted to address turbidity: well redevelopment was conducted at wells with elevated TSS concentrations in August 2015 and low-flow or no purge sampling techniques have been utilized since the March 2015 sampling event.

Historical high-volume data at the downgradient wells continued to be reviewed on a case-by-case basis in 2023 to determine whether adjustments were recommended based on the change in sampling technique from high volume to low-flow methods. IDNR concurred with the strategy to evaluate downgradient wells on a case-by-case basis given the large number of wells and volume of data in the letter dated November 20, 2017 (IDNR, 2017). No data set adjustments were recommended for the downgradient wells in 2023.

4. Conclusions and Recommendations

4.1 2023 Data Evaluation Summary

4.1.1 Groundwater

Quarterly baseline assessment monitoring was reinitiated at MW-26 in January and March 2023. No new Appendix II constituents were detected during the two rounds of quarterly re-triggered baseline assessment monitoring events at MW-26; therefore, no additional quarterly baseline assessment monitoring events were recommended. In addition, no new constituents were added to the detected Appendix II constituents during annual assessment monitoring events for the Appendix I and detected Appendix II constituents.

Based on the 2023 data, groundwater quality generally indicates stable or declining plumes. No new upper and deeper bedrock assessment monitoring locations, assessment constituents in corrective action monitoring locations, and assessment constituents in delineation monitoring locations triggered corrective action.

One corrective action constituent/well pair exited corrective action in 2023. In accordance with IAC 113.10(9)e(2), arsenic in MW-20 exited corrective action and returned to an assessment constituent in Spring 2023. In addition, compliance with the GWPS was maintained for cobalt in MW-35 in 2023. Compliance was first achieved for cobalt in MW-35 in Fall 2022; therefore, cobalt in MW-35 will return to an assessment constituent in 2025 as long as concentrations remain statistically below the GWPS during interim statistical evaluations.

Arsenic remains the most prevalent corrective action constituent with SSLs remaining above the GWPS in eleven of the upper bedrock corrective action and delineation monitoring wells and six of the deeper bedrock corrective action and delineation monitoring wells. Cobalt in AW-6, CRL-9, MW-22, MW-105A, MW-105B, MW-106A, and MW-109B; thallium in AW-2, MW-20, and MW-109B; and vinyl chloride in MW-34 also remain as SSLs above the GWPS. As shown in Table 10, stable or decreasing trends were identified for the corrective action constituents.

4.1.2 Leachate Control System Performance

Site operations and management practices have been consistent with the regulatory intent to achieve the lowest possible leachate head levels. The leachate collection system continues to function as designed, and monthly elevations are collected to monitor short-term and long-term trends in the leachate elevation data. In 2023, no significant change to the leachate contour pattern occurred, and the variation in elevations was not correlated with precipitation. Steady to declining leachate elevations were generally observed, which, along with no apparent correlation with precipitation, supports that construction of the final cover and additional stormwater controls appears to have been effective in reducing infiltration.

A review of the average annual leachate elevations indicates stable or declining elevations at W-100, W-102, W-104, W-105, W-110, W-115, W-117, W-203, W-207, W-209, W-211, W-212, and W-219. At W-103, a slightly increasing trend was identified from 2010 to 2023 with elevations increasing by approximately 7.5 feet during this period. The slope of the increasing trend has been decreasing over time. From 2021-2023, elevations have remained approximately stable.

At W-212, a casing restriction was encountered at 72.2 feet below top of casing (bTOC) in December 2023. As depicted in Figure 4, W-214 is an existing leachate piezometer located approximately 400 feet east of W-212. Replacement of W-212 with W-214 is recommended for monitoring leachate elevations along the mid-central portion of the north side of Site 1.

At W-217, a casing restriction was encountered at 63 feet bTOC starting in July and September 2022 and remained throughout 2023. As reported in the *2022 AWQR* (Foth, 2023), repair or replacement of W-217 is not recommended due to the presence of construction and demolition debris within the waste. W-217 is located near the top of the landfill in an area that was reopened and filled with disaster debris from the 2008 flood. Therefore, W-217 cannot be repaired or replaced at the same location. In addition, there are no suitable replacement locations to provide coverage near the top of the landfill due to the construction and demolition debris filled there. Surrounding W-217 at lower elevations, W-110, W-203, W-209, W-211, and W-219 provide good coverage below the top-central part of the landfill. Since leachate elevations remained below the restriction in 2023, the removal of W-217 from the leachate monitoring network is recommended.

4.1.3 Methane

The quarterly methane monitoring results did not indicate concentrations in exceedance of 25% of the lower explosive limit (LEL) for facility structures or 100% LEL for facility boundaries.

4.2 Recommendations for Future Monitoring

On behalf of the Agency, Foth presents the following recommendations for future monitoring at Site 1:

- Continue collecting water level and well depth measurements on a semiannual basis at the HMSP approved monitoring points.

- Continue collecting TSS samples and field turbidity measurements during sampling events in 2024.

- Continue detection, assessment, corrective action, background, and delineation monitoring as listed in Table 2.

- Continue MNA remedy implementation in accordance with the conditions set forth under Special Provision X.7 and the Risk Management Plan (HRG, 2001), and the IDNR-approved remedy implementation schedule. The updated remedy implementation schedule, reflecting the implementation actions planned, is provided in the table below.

Remedy Implementation Schedule

Estimated Completion Date	Activity
On-going – Semiannually or Annually	Continue implementation of the existing remedy in accordance with Special Provision X.7 and the Risk Management Plan (HRG, 2001).
	Continue semiannual or annual detection, assessment, and corrective action monitoring in accordance with IAC 113.10(5), (6), and (9)a and as listed in Table 2. Continue semiannual or annual delineation monitoring as listed in Table 2.
Annually (due January 31)	By January 31 of each year, submit AWQRs including an update on remedy implementation.
Every 5 years (Next due in 2024)	Conduct the five-year review cycle statistical procedures to determine whether first order attenuation can be projected for any of the corrective action constituents not previously estimated, and to review the first order attenuation model results and timeframes to ensure that actual conditions are meeting the modeled expectations for the corrective action constituents which have been projected.

5. References

Foth Infrastructure & Environment (Foth), 2008. *Cedar Rapids / Linn County Solid Waste Agency, Site No. 1, Permit No. 57-SDP-03-75C, Spring 2008 Sampling Event*. July 9. [Doc. No. 26223].

Foth, 2010a. *March 2010 Semiannual Sampling Event, Cedar Rapids/Linn County Solid Waste Agency Site No. 1, Permit No. 57-SDP-03-75C*. June 15. [Doc. No. 58224].

Foth, 2010b. *2010 Annual Water Quality Report, Cedar Rapids/Linn County Solid Waste Agency Site No. 1, IDNR Permit No. 57-SDP-03-75C, Project I.D.: 10C033.00*. December 29. [Doc. No. 62681].

Foth, 2011. *March 2011 Semiannual Sampling Event, Cedar Rapids/Linn County Solid Waste Agency Site No. 1, Permit No. 57-SDP-03-75C*. May 16. [Doc. No. 65188].

Foth, 2012. *Assessment Work Plan, Cedar Rapids/Linn County Solid Waste Agency Site No. 1, IDNR Permit No. 57-SDP-03-75C, Project I.D.: 11C050.00*. March 28. [Doc. No. 69500].

Foth, 2015a. *2014 Annual Water Quality Report, Cedar Rapids/Linn County Solid Waste Agency Site No. 1, DNR Permit No. 57-SDP-03-75C, Project I.D.: 14C061.00*. January 29. [Doc. No. 82643, 82499, 82502, 82503].

Foth, 2015b. *Response to DNR Comments dated March 10, 2015, Cedar Rapids/Linn County Solid Waste Agency Site 1, Permit No. 57-SDP-03-75C*. May 6. [Doc. No. 83348].

Foth, 2016a. *Fall 2016 Statistical Notifications, Cedar Rapids/Linn County Solid Waste Agency Site 1, Permit No. 57-SDP-03-75C*. November 4. [Doc. No. 87660].

Foth, 2016b. *2016 Annual Water Quality Report, Cedar Rapids/Linn County Solid Waste Agency Site 1, 2250 A Street SW, Cedar Rapids, IA 52404, DNR Permit No. 57-SDP-03-75C, Project I.D.: 16C061.00.* December 30. [Doc. No. 88060].

Foth, 2017. *Plume Delineation [IAC 113.10(6)g(1)1], Cedar Rapids/Linn County Solid Waste Agency Site 1, Permit No. 57-SDP-03-75C*. April 28. [Doc. No. 89325].

Foth, 2019a. *2018 Annual Water Quality Report, Cedar Rapids Linn County Solid Waste Agency Site 1, 2250 A Street SW, Cedar Rapids, IA 52404, IDNR Permit No. 57-SDP-03-75C, Project I.D.: 18C061.00.* January 31. [Doc. No. 94330].

Foth, 2019b. *Public Informational Meeting & Property Owner Notifications, Cedar Rapids Linn County Solid Waste Agency Site 1, Permit No. 57-SDP-03-75C.* October 7. [Doc. No. 96064].

Foth, Memorandum to Iowa Department of Natural Resources (Matthew Graesch), 2 June. 2020. "Site 1 Monitoring Optimization, Permit No. 57-SDP-03-75C." [Doc. No. 97853].

Foth, 2023. *2022 Annual Water Quality Report, Cedar Rapids Linn County Solid Waste Agency Site 1, 2250 A Street SW, Cedar Rapids, IA 52404, IDNR Permit No. 57-SDP-03-75C, Project I.D.: 22C061.00.* January 20. [Doc. No. 105540].

Howard R. Green Company (HRG), 1992. *Hydrogeologic Investigation Report, Cedar Rapids Sanitary Landfill, Cedar Rapids, IA, Permit No. 57-SDp-3-75P*. November 13. Unpublished report.

HRG, 1998. *Final Groundwater Quality Assessment - Work Plan, Bluestem Solid Waste Agency, Site No. 1, Cedar Rapids, Iowa.* March 25. [Doc. No. 52560].

HRG, 1999. *Groundwater Quality Assessment: Phase I Report, Bluestem Solid Waste Agency, Site No. 1, Cedar Rapids, Iowa.* October 29. [Doc. No. 52521].

HRG, 2000. *Phase II Groundwater Quality Assessment, Expanded Risk Assessment Documentation, Bluestem Solid Waste Agency, Site No. 1.* December 20. [Doc. No. 52504].

HRG, 2001. *Phase II Groundwater Quality Assessment Report, Volumes I & II, Bluestem Solid Waste Agency, Site No. 1, Cedar Rapids, IA.* April 30. [Doc. No. 52494 & 52495].

HRG, 2006. *Landfill Closure Permit Application, Cedar Rapids Linn County Solid Waste Agency, Site No. 1, 2250 A Street SW, Cedar Rapids, IA, Appendix 4: Hydrologic Monitoring System Plan.* September 21. [Doc. No. 52374-52384].

Iowa Department of Natural Resources (Matthew R. Phoenix, P.E.), Letter to Karmin McShane, 27 Jun 2011. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill (Site #1 – Marion), 2009 and 2010 Annual Water Quality Reports, Permit No. 57-SDP-03-75C." [Doc. No. 65580].

Iowa Department of Natural Resources (Matthew R. Phoenix, P.E.), Letter to Karmin McShane, 10 Jul 2014. "Cedar Rapids/Linn Co. Solid Waste Agency #1 Sanitary Landfill (Closed), Permit #57-SDP-03-75, Unnumbered Amendment Regarding Turbidity." [Doc. No. 80704].

Iowa Department of Natural Resources (Matthew R. Phoenix, P.E.), Letter to Karmin McShane, 10 Mar 2015. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill (Site #1 – Cedar Rapids), 2013 and 2014 Annual Water Quality Reports and 2014 Statistical Notifications, Permit No. 57-SDP-03-75C." [Doc. No. 82674].

Iowa Department of Natural Resources (Matthew R. Phoenix, P.E.), Letter to Karmin McShane, 12 May 2016. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill (Site #1 – Cedar Rapids), 2015 Annual Water Quality Report and 2015 Statistical Notifications, Permit No. 57-SDP-03-75C." [Doc. #86317].

Iowa Department of Natural Resources (Matthew Graesch), Letter to Karmin McShane, 20 Nov 2017. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, Response to Fall 2017 Statistical Notifications (doc 90813)." [Doc. No. 90850].

Iowa Department of Natural Resources (Matthew Graesch), Letter to Karmin McShane, 16 Apr 2019. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, 2019 Annual Water Quality Report (Doc No. 94330)." [Doc. No. 94910].

Iowa Department of Natural Resources (Matthew Graesch), Letter to Karmin McShane, 2 July 2020. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, Groundwater Monitoring Optimization Report (Doc. No. 97853)."[Doc. No 98023]

Iowa Department of Natural Resources (Michael W. Smith, P.E.), Letter to Karmin McShane, 14 June 2023. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, 2023 Spring Annual Water Quality Report (Document No. 106914), 2022 Annual Water Quality Report (Document No. 105540)." [Doc. No. 106985].

Tables

Table 1
Monitoring Program Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Monitoring Well	Formation	Current Monitoring Program [1]	Change for Next Sampling Event	Constituents w/ SSI [2]	Constituents w/ SSL [2]	Total # of Samples in Each Monitoring Program				
						Detection	Assessment	Corrective Action	Delineation	Background
Upper Bedrock Monitoring Locations										
Downgradient Monitoring Locations										
AW-1	Limestone	Corrective Action	No Change	1,4-Dichlorobenzene; Barium; Chlorobenzene; Thallium	Arsenic	0	8	21	0	0
AW-2	Limestone	Corrective Action	No Change	Barium; Chlorobenzene; cis-1,2-Dichloroethene	Arsenic; Thallium	0	5	24	0	0
AW-3	Limestone	Assessment	No Change	Arsenic	None	5	25	0	0	0
AW-4	Alluvium - Sand, Silt, Clay	Assessment	No Change	Copper	None	8	23	0	0	0
AW-5	Alluvium - Sand	Assessment	No Change	Arsenic; Barium; Cadmium; Thallium	None	3	15	11	0	0
MW-12	Dolomite	Corrective Action	No Change	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Chlorobenzene; cis-1,2-Dichloroethene; Nickel; Thallium	Arsenic	0	6	26	0	0
MW-13	Dolomite	Corrective Action	No Change	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene	Arsenic	0	5	27	0	0
MW-16	Limestone/Dolomite	Corrective Action	No Change	1,1-Dichloroethane; Benzene; Chlorobenzene	Arsenic	0	8	24	0	0
MW-17	Silty/Clayey Sand & Dolomite	Corrective Action	No Change	Barium	Arsenic	0	6	26	0	0
MW-20	Dolomite	Corrective Action	No Change	Arsenic; Barium; Zinc	Thallium	1	5	23	0	0
MW-21	Dolomite	Assessment	No Change	Arsenic; Barium; Chlorobenzene; Nickel; Thallium	None	0	29	0	0	0
MW-23	Dolomite	Assessment	No Change	Barium; Cadmium; Thallium; Zinc	None	0	19	10	0	0
MW-24	Dolomite	Corrective Action	No Change	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; Thallium	Arsenic	0	8	23	0	0
MW-26	Dolomite	Assessment	No Change	Barium	None	1	30	0	0	0
MW-28	Limestone	Assessment	No Change	Barium	None	3	26	0	0	0
MW-30	Dolomite	Corrective Action	No Change	1,1-Dichloroethane; Barium; Benzene; Chloroethane; cis-1,2-Dichloroethene; Vinyl Chloride; Zinc	Arsenic	0	6	23	0	0
MW-32	Dolomite	Corrective Action	No Change	1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene	Arsenic	0	7	25	0	0
MW-34	Alluvium - Sand/ Colluvium Silt	Corrective Action	No Change	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; Nickel; trans-1,2-Dichloroethene	Arsenic; Vinyl Chloride	0	8	22	0	0
MW-35	Dolomite	Corrective Action	No Change	Arsenic; Barium	None	0	12	16	0	0
VP-3	Limestone	Assessment	No Change	Arsenic; Barium	None	1	15	13	0	0
VP-4	Limestone	Assessment	No Change	Arsenic	None	3	26	0	0	0
Background Monitoring Locations										
MW-37	Limestone/Dolomite	Background	No Change	None	None	0	0	0	0	34
MW-101A	Glacial Drift Till - Silty Clay/ Alluvium - Sand	Background	No Change	None	None	0	0	0	0	23

Table 1
Monitoring Program Summary
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Permit No. 57-SDP-03-75C

Monitoring Well	Formation	Current Monitoring Program [1]	Change for Next Sampling Event	Constituents w/ SSI [2]	Constituents w/ SSL [2]	Total # of Samples in Each Monitoring Program				
						Detection	Assessment	Corrective Action	Delineation	Background
Upper Bedrock Monitoring Locations Continued										
Delineation Monitoring Locations										
MW-105A	Alluvium - Sand	Delineation	No Change	None	Cobalt	0	0	0	20	0
MW-106A	Alluvium - Silt/Sand	Delineation	No Change	None	Arsenic; Cobalt	0	0	0	20	0
MW-107A	Glacial Drift Till - Silty Clay/ Alluvium - Sand	Delineation	No Change	Barium	None	0	0	0	20	0
MW-109A	Alluvium - Sand/Lean Clay	Delineation	No Change	Barium	None	0	0	0	12	0
Deeper Bedrock Monitoring Locations										
Downgradient Monitoring Locations										
AW-6	Limestone	Corrective Action	No Change	1,1-Dichloroethane; Barium; Nickel	Cobalt	0	17	12	0	0
CRL-9	Limestone	Corrective Action	No Change	Barium; Benzene; Nickel	Arsenic; Cobalt	0	8	21	0	0
MW-11	Dolomite	Assessment	No Change	None	None	0	29	0	0	0
MW-14	Dolomite	Corrective Action	No Change	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; Nickel	Arsenic	0	8	24	0	0
MW-15	Dolomite	Assessment	No Change	Cobalt; Nickel	None	9	21	0	0	0
MW-18	Dolomite	Assessment	No Change	None	None	7	23	0	0	0
MW-19	Dolomite	Assessment	No Change	Nickel	None	5	25	0	0	0
MW-22	Dolomite	Corrective Action	No Change	1,1-Dichloroethane; Barium; Nickel; Thallium	Arsenic; Cobalt	0	8	21	0	0
MW-25	Dolomite	Assessment	No Change	Barium; Lead; Thallium	None	3	26	0	0	0
MW-31	Dolomite	Detection	No Change	None	None	18	11	0	0	0
MW-33	Dolomite	Corrective Action	No Change	1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; Cobalt; Nickel	Arsenic	0	8	24	0	0
MW-36	Limestone	Corrective Action	No Change	1,4-Dichlorobenzene; Barium; Chlorobenzene; Cobalt	Arsenic	0	8	21	0	0
Background Monitoring Locations										
MW-38	Limestone	Background	No Change	None	None	0	0	0	0	32
MW-101B	Limestone	Background	No Change	None	None	0	0	0	0	23
Delineation Monitoring Locations										
MW-102B	Limestone	Delineation	No Change	Cobalt	None	0	0	0	18	0
MW-104B	Dolomite	Delineation	No Change	None	None	0	0	0	20	0
MW-105B	Limestone	Delineation	No Change	1,1-Dichloroethane; Barium; Nickel	Cobalt	0	0	0	20	0
MW-107B	Limestone/Dolomite	Delineation	No Change	Barium; Cobalt; Nickel; Thallium	None	0	0	0	20	0
MW-108B	Limestone	Delineation	No Change	Barium	None	0	0	0	12	0
MW-109B	Limestone/Dolomite	Delineation	No Change	Barium; Chlorobenzene; Nickel	Arsenic; Cobalt; Thallium	0	0	0	15	0

Table 1
Monitoring Program Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Comments:

N/A= not applicable

(1) Current Monitoring Program is from the last event the location was sampled (i.e., Fall 2023 event).

(2) SSIs and SSLs are from the Fall 2023 statistical evaluation.

Table 2
Monitoring Program Implementation Schedule
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Monitoring Well	Monitoring Program	Sampling Date and Constituents [1,2]			Upcoming Sampling Dates and Constituents [2]		Full Appendix II Sample Dates	
		Jan. 2023	Mar. 2023	Aug. 2023	Spring 2024	Fall 2024	Previously Collected	Next Event
Upper Bedrock Monitoring Locations								
Downgradient Monitoring Locations								
AW-1	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
AW-2	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
AW-3	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2010, Mar. 2016, Jun. 2016, Aug. 2020	Fall 2025
AW-4	Assessment			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
AW-5	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2015, Aug. 2020	Fall 2025
MW-12	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-13	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-16	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-17	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-20	Corrective Action			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2015, Aug. 2020	Fall 2025
MW-21	Assessment			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-23	Assessment			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-24	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-26	Assessment [3]	Full Appendix II, TSS [3]	Full Appendix II, TSS [3]	Appendix II, TSS [3]		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2010, Sep. 2015, Aug. 2020, Jan. 2023, Mar. 2023	Fall 2028
MW-28	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2015, Aug. 2020	Fall 2025
MW-30	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-32	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-34	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-35	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
VP-3	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2015, Aug. 2020	Fall 2025
VP-4	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Jul. 2019, Sep. 2009, Sep. 2015, Aug. 2020	Fall 2025
Background Monitoring Locations								
MW-37	Background		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2015, Sep. 2015, Mar. 2016, Aug. 2020	Fall 2025
MW-101A	Background		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Oct. 2015, Mar. 2016, Aug. 2020	Fall 2025
Delineation Monitoring Locations								
MW-105A	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A
MW-106A	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A
MW-107A	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A
MW-109A	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A

Table 2
Monitoring Program Implementation Schedule
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Monitoring Well	Monitoring Program	Sampling Date and Constituents [1,2]			Upcoming Sampling Dates and Constituents [2]		Full Appendix II Sample Dates	
		Jan. 2023	Mar. 2023	Aug. 2023	Spring 2024	Fall 2024	Previously Collected	Next Event
Deeper Bedrock Monitoring Locations								
Downgradient Monitoring Locations								
AW-6	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
CRL-9	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-11	Assessment			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-14	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-15	Assessment			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-18	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Jul. 2015, Sep. 2015, Aug. 2020	Fall 2025
MW-19	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Jul. 2015, Sep. 2015, Aug. 2020	Fall 2025
MW-22	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
MW-25	Assessment			Appendix II, TSS		Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2015, Aug. 2020	Fall 2025
MW-31	Detection			Appendix I, TSS		Appendix I, TSS	Aug. 2008, Mar. 2009	N/A
MW-33	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2020	Fall 2025
MW-36	Corrective Action			Appendix II, TSS		Appendix II, TSS	2020	Fall 2025
Background Monitoring Locations								
MW-38	Background		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Aug. 2008, Mar. 2009, Sep. 2010, Sep. 2015, Mar. 2016, Aug. 2016, Aug. 2020	Fall 2025
MW-101B	Background		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Sep. 2015, Mar. 2016, Sep. 2016, Aug. 2020	Fall 2025
Delineation Monitoring Locations								
MW-102B	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A
MW-104B	Delineation			Arsenic, TSS [4]		Arsenic, TSS [4]	N/A - Delineation Monitoring	N/A
MW-105B	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A
MW-107B	Delineation			Appendix I, TSS		Appendix I, TSS	N/A - Delineation Monitoring	N/A
MW-108B	Delineation			Appendix I without Cobalt, TSS [5]		Appendix I without Cobalt, TSS [5]	N/A - Delineation Monitoring	N/A
MW-109B	Delineation		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A - Delineation Monitoring	N/A

Comments:

N/A = Not Applicable

[1] In Mar. and Aug. 2023, semiannual corrective action, background, and delineation monitoring were continued at upper bedrock wells MW-12, MW-13, MW-16, MW-17, MW-32, MW-37, and MW-101A and deeper bedrock wells MW-14, MW-33, MW-38, MW-101B, and MW-109B. In accordance with Permit Amendment #16, annual detection, assessment, corrective action, and delineation monitoring was also conducted in Aug. 2023 at upper bedrock wells AW-1, AW-2, AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-26, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A and deeper bedrock wells AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B.

Table 2
Monitoring Program Implementation Schedule
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Comments (Continued):

(2) Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Mar. and Aug. 2023, and will be sampled for the Appendix I and detected Appendix II constituents in Spring and Fall 2024. In accordance with Permit Amendment #6, resampling for the full Appendix II list at assessment, corrective action, and background monitoring wells is conducted every five years.

(3) In accordance with IAC 113.10(6)a, two rounds of quarterly re-triggered baseline assessment monitoring for the full Appendix II list were conducted at MW-26 in Jan. and Mar. 2023. Annual assessment monitoring for the Appendix I and detected Appendix II constituents was conducted at MW-26 in Aug. 2023.

(4) The Iowa Department of Natural Resources (IDNR) approved retaining MW-104B as an arsenic delineation monitoring well in the letter dated May 12, 2016 (IDNR, 2016).

(5) The IDNR approved the removal of cobalt from the list of analytes at MW-108B in the letter dated April 16, 2019 (IDNR, 2019).

Table 3
Monitoring Well Maintenance and Performance Reevaluation Schedule
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Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

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

Comments:

• In accordance with Permit Amendment #4 and the variance granted on March 26, 2010, monitoring well maintenance and performance is conducted in accordance with 567 IAC 113.10(2)"f" rather than the rules in effect at the time of closure.

• Groundwater elevations and measured well depths are shown on Table 4 and the field sampling forms in Appendix A.

• 567 IAC 113.6(2)"i" is not applicable. Site 1 is a closed, unlined landfill. The rules in effect at the time of closure were 567 IAC 113.26 (effective 1/15/03).

Table 4
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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Upper Bedrock Monitoring Locations											
Downgradient Monitoring Locations											
AW-1	739.51	711.84	47.67	Groundwater Level (feet bTOC)	35.03	34.43	---	33.56	35.91	-0.33	2.35
				Groundwater Elevation (feet amsl)	704.48	705.08	---	705.95	703.60		
				Measured Well Depth (feet bTOC)	48.00	48.00	---	48.00	48.00		
				Submerged Screen	N	N	---	N	N		
AW-2	788.18	710.60	97.58	Groundwater Level (feet bTOC)	77.57	77.47	---	77.54	77.58	0.08	0.11
				Groundwater Elevation (feet amsl)	710.61	710.71	---	710.64	710.60		
				Measured Well Depth (feet bTOC)	97.50	97.50	---	97.50	97.50		
				Submerged Screen	Y	Y	---	Y	N		
AW-3	799.31	711.70	107.61	Groundwater Level (feet bTOC)	91.45	90.47	---	91.07	91.07	-0.29	0.98
				Groundwater Elevation (feet amsl)	707.86	708.84	---	708.24	708.24		
				Measured Well Depth (feet bTOC)	107.90	107.90	---	107.90	107.90		
				Submerged Screen	N	N	---	N	N		
AW-4	725.76	712.44	33.32	Groundwater Level (feet bTOC)	22.92	22.03	---	21.82	24.54	0.22	2.72
				Groundwater Elevation (feet amsl)	702.84	703.73	---	703.94	701.22		
				Measured Well Depth (feet bTOC)	33.10	33.10	---	33.10	33.10		
				Submerged Screen	N	N	---	N	N		
AW-5	721.33	711.44	29.89	Groundwater Level (feet bTOC)	18.47	18.72	---	16.99	20.07	-0.36	3.08
				Groundwater Elevation (feet amsl)	702.86	702.61	---	704.34	701.26		
				Measured Well Depth (feet bTOC)	30.25	30.25	---	30.25	30.25		
				Submerged Screen	N	N	---	N	N		
MW-12	745.37	708.84	46.53	Groundwater Level (feet bTOC)	40.16	39.26	---	38.42	40.37	-0.27	1.95
				Groundwater Elevation (feet amsl)	705.21	706.11	---	706.95	705.00		
				Measured Well Depth (feet bTOC)	46.80	46.80	---	46.80	46.80		
				Submerged Screen	N	N	---	N	N		
MW-13	740.99	714.16	41.83	Groundwater Level (feet bTOC)	34.45	34.81	---	32.85	36.01	-0.32	3.16
				Groundwater Elevation (feet amsl)	706.54	706.18	---	708.14	704.98		
				Measured Well Depth (feet bTOC)	42.15	42.15	---	42.15	42.15		
				Submerged Screen	N	N	---	N	N		
MW-16	737.92	711.67	41.25	Groundwater Level (feet bTOC)	31.72	33.44	---	30.30	34.82	-0.25	4.52
				Groundwater Elevation (feet amsl)	706.20	704.48	---	707.62	703.10		
				Measured Well Depth (feet bTOC)	41.50	41.50	---	41.50	41.50		
				Submerged Screen	N	N	---	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Upper Bedrock Monitoring Locations Continued											
Downgradient Monitoring Locations Continued											
MW-17	736.68	709.99	36.69	Groundwater Level (feet bTOC)	26.46	28.29	---	23.29	30.26	-0.21	6.97
				Groundwater Elevation (feet amsl)	710.22	708.39	---	713.39	706.42		
				Measured Well Depth (feet bTOC)	36.90	36.90	---	36.90	36.90		
				Submerged Screen	Y	N	---	Y	N		
MW-20	723.48	706.73 (1)	26.75 (1)	Groundwater Level (feet bTOC)	19.89	21.01	---	18.77	22.11	0.25	3.34
				Groundwater Elevation (feet amsl)	703.59	702.47	---	704.71	701.37		
				Measured Well Depth (feet bTOC)	26.50	26.50	---	26.50	26.50		
				Submerged Screen	N	N	---	N	N		
MW-21	732.88	706.93 (2)	36.50 (2)	Groundwater Level (feet bTOC)	29.11	29.76	---	27.92	30.96	0.60	3.04
				Groundwater Elevation (feet amsl)	703.77	703.12	---	704.96	701.92		
				Measured Well Depth (feet bTOC)	35.90	35.90	---	35.90	35.90		
				Submerged Screen	N	N	---	N	N		
MW-23	736.74	712.29	39.45	Groundwater Level (feet bTOC)	32.71	32.99	---	31.48	34.27	-0.05	2.79
				Groundwater Elevation (feet amsl)	704.03	703.75	---	705.26	702.47		
				Measured Well Depth (feet bTOC)	39.50	39.50	---	39.50	39.50		
				Submerged Screen	N	N	---	N	N		
MW-24	785.70	707.00 (3)	88.70 (3)	Groundwater Level (feet bTOC)	79.90	79.13	---	78.63	80.23	-0.30	1.60
				Groundwater Elevation (feet amsl)	705.80	706.57	---	707.07	705.47		
				Measured Well Depth (feet bTOC)	89.00	89.00	---	89.00	89.00		
				Submerged Screen	N	N	---	Y	N		
MW-26	811.58	716.70	109.88	Groundwater Level (feet bTOC)	103.66	102.58	103.56	103.07	103.42	-1.47	1.08
				Groundwater Elevation (feet amsl)	707.92	709.00	708.02	708.51	708.16		
				Measured Well Depth (feet bTOC)	111.35	111.35	111.35	111.35	111.35		
				Submerged Screen	N	N	N	N	N		
MW-28	816.62	715.46	116.16	Groundwater Level (feet bTOC)	109.24	108.23	---	108.78	109.10	-0.99	1.01
				Groundwater Elevation (feet amsl)	707.38	708.39	---	707.84	707.52		
				Measured Well Depth (feet bTOC)	117.15	117.15	---	117.15	117.15		
				Submerged Screen	N	N	---	N	N		
MW-30	790.98	712.40	88.58	Groundwater Level (feet bTOC)	82.53	81.54	---	82.14	82.26	-1.02	0.99
				Groundwater Elevation (feet amsl)	708.45	709.44	---	708.84	708.72		
				Measured Well Depth (feet bTOC)	89.60	89.60	---	89.60	89.60		
				Submerged Screen	N	N	---	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Upper Bedrock Monitoring Locations Continued											
Downgradient Monitoring Locations Continued											
MW-32	749.01	713.62	55.62	Groundwater Level (feet bTOC)	45.73	45.61	---	44.24	46.68	-0.18	2.44
				Groundwater Elevation (feet amsl)	703.28	703.40	---	704.77	702.33		
				Measured Well Depth (feet bTOC)	55.80	55.80	---	55.80	55.80		
				Submerged Screen	N	N	---	N	N		
MW-34	748.72	708.91	49.81	Groundwater Level (feet bTOC)	44.39	43.76	---	42.81	45.00	0.31	2.19
				Groundwater Elevation (feet amsl)	704.33	704.96	---	705.91	703.72		
				Measured Well Depth (feet bTOC)	49.50	49.50	---	49.50	49.50		
				Submerged Screen	N	N	---	N	N		
MW-35	744.89	711.04	43.85	Groundwater Level (feet bTOC)	41.19	41.05	---	39.66	42.09	-1.55	2.43
				Groundwater Elevation (feet amsl)	703.70	703.84	---	705.23	702.80		
				Measured Well Depth (feet bTOC)	45.40	45.40	---	45.40	45.40		
				Submerged Screen	N	N	---	N	N		
VP-3	774.52	710.42	74.10	Groundwater Level (feet bTOC)	63.42	63.38	---	63.21	63.18	-0.20	0.24
				Groundwater Elevation (feet amsl)	711.10	711.14	---	711.31	711.34		
				Measured Well Depth (feet bTOC)	74.30	74.30	---	74.30	74.30		
				Submerged Screen	Y	Y	---	Y	Y		
VP-4	790.91	718.01	82.99	Groundwater Level (feet bTOC)	79.79	79.23	---	79.64	79.49	-0.26	0.56
				Groundwater Elevation (feet amsl)	711.12	711.68	---	711.27	711.42		
				Measured Well Depth (feet bTOC)	83.25	83.25	---	83.25	83.25		
				Submerged Screen	N	N	---	N	N		
Background Monitoring Locations											
MW-37	784.81	724.97	69.84	Groundwater Level (feet bTOC)	64.78	64.39	---	64.37	64.84	-0.11	0.47
				Groundwater Elevation (feet amsl)	720.03	720.42	---	720.44	719.97		
				Measured Well Depth (feet bTOC)	69.95	69.95	---	69.95	69.95		
				Submerged Screen	N	N	---	N	N		
MW-101A	720.47	706.36	29.55	Groundwater Level (feet bTOC)	16.86	17.30	---	15.67	18.52	0.10	2.85
				Groundwater Elevation (feet amsl)	703.61	703.17	---	704.80	701.95		
				Measured Well Depth (feet bTOC)	29.45	29.45	---	29.45	29.45		
				Submerged Screen	N	N	---	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Upper Bedrock Monitoring Locations Continued											
Delineation Monitoring Locations											
MW-102A	725.57	705.11	33.75	Groundwater Level (feet bTOC)	21.86	22.31	---	20.77	23.57	0.00	2.80
				Groundwater Elevation (feet amsl)	703.71	703.26	---	704.80	702.00		
				Measured Well Depth (feet bTOC)	33.75	33.75	---	33.75	33.75		
				Submerged Screen	N	N	---	N	N		
MW-103A	720.34	707.62	22.90	Groundwater Level (feet bTOC)	16.20	16.16	---	15.11	17.51	0.40	2.40
				Groundwater Elevation (feet amsl)	704.14	704.18	---	705.23	702.83		
				Measured Well Depth (feet bTOC)	22.50	22.50	---	22.50	22.50		
				Submerged Screen	N	N	---	N	N		
MW-105A	723.97	708.80	30.40	Groundwater Level (feet bTOC)	21.38	22.22	---	20.52	23.05	0.05	2.53
				Groundwater Elevation (feet amsl)	702.59	701.75	---	703.45	700.92		
				Measured Well Depth (feet bTOC)	30.35	30.35	---	30.35	30.35		
				Submerged Screen	N	N	---	N	N		
MW-106A	716.19	707.34	23.55	Groundwater Level (feet bTOC)	13.05	14.19	---	11.94	15.11	0.05	3.17
				Groundwater Elevation (feet amsl)	703.14	702.00	---	704.25	701.08		
				Measured Well Depth (feet bTOC)	23.50	23.50	---	23.50	23.50		
				Submerged Screen	N	N	---	N	N		
MW-107A	721.65	706.90	29.95	Groundwater Level (feet bTOC)	18.25	19.34	---	17.10	20.43	0.30	3.33
				Groundwater Elevation (feet amsl)	703.40	702.31	---	704.55	701.22		
				Measured Well Depth (feet bTOC)	29.65	29.65	---	29.65	29.65		
				Submerged Screen	N	N	---	N	N		
MW-108A	719.11	710.15	19.30	Groundwater Level (feet bTOC)	14.54	13.49	---	12.78	15.28	0.00	2.50
				Groundwater Elevation (feet amsl)	704.57	705.62	---	706.33	703.83		
				Measured Well Depth (feet bTOC)	19.30	19.30	---	19.30	19.30		
				Submerged Screen	N	N	---	N	N		
MW-109A	724.17	707.23	27.45	Groundwater Level (feet bTOC)	21.83	22.35	---	20.41	23.22	0.30	2.81
				Groundwater Elevation (feet amsl)	702.34	701.82	---	703.76	700.95		
				Measured Well Depth (feet bTOC)	27.15	27.15	---	27.15	27.15		
				Submerged Screen	N	N	---	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Deeper Bedrock Monitoring Locations											
Downgradient Monitoring Locations											
AW-6	721.13	651.44	79.69	Groundwater Level (feet bTOC)	18.64	19.43	---	17.58	20.43	0.19	2.85
				Groundwater Elevation (feet amsl)	702.49	701.70	---	703.55	700.70		
				Measured Well Depth (feet bTOC)	79.50	79.50	---	79.50	79.50		
				Submerged Screen	Y	Y	---	Y	Y		
CRL-9	736.59	672.89	73.70	Groundwater Level (feet bTOC)	32.56	32.83	---	31.32	34.10	0.05	2.78
				Groundwater Elevation (feet amsl)	704.03	703.76	---	705.27	702.49		
				Measured Well Depth (feet bTOC)	73.65	73.65	---	73.65	73.65		
				Submerged Screen	Y	Y	---	Y	Y		
MW-11	745.62	678.44	72.18	Groundwater Level (feet bTOC)	40.52	39.63	---	38.77	40.74	-0.42	1.97
				Groundwater Elevation (feet amsl)	705.10	705.99	---	706.85	704.88		
				Measured Well Depth (feet bTOC)	72.60	72.60	---	72.60	72.60		
				Submerged Screen	Y	Y	---	Y	Y		
MW-14	740.93	679.13	66.80	Groundwater Level (feet bTOC)	35.70	34.93	---	33.66	36.09	-0.35	2.43
				Groundwater Elevation (feet amsl)	705.23	706.00	---	707.27	704.84		
				Measured Well Depth (feet bTOC)	67.15	67.15	---	67.15	67.15		
				Submerged Screen	Y	Y	---	Y	Y		
MW-15	737.99	673.59	69.40	Groundwater Level (feet bTOC)	31.75	33.14	---	30.24	34.50	-0.25	4.26
				Groundwater Elevation (feet amsl)	706.24	704.85	---	707.75	703.49		
				Measured Well Depth (feet bTOC)	69.65	69.65	---	69.65	69.65		
				Submerged Screen	Y	Y	---	Y	Y		
MW-18	736.28	676.53	64.75	Groundwater Level (feet bTOC)	27.47	29.18	---	25.68	30.78	-0.35	5.10
				Groundwater Elevation (feet amsl)	708.81	707.10	---	710.60	705.50		
				Measured Well Depth (feet bTOC)	65.10	65.10	---	65.10	65.10		
				Submerged Screen	Y	Y	---	Y	Y		
MW-19	723.01	680.23	47.78	Groundwater Level (feet bTOC)	19.29	20.44	---	18.23	21.54	-0.02	3.31
				Groundwater Elevation (feet amsl)	703.72	702.57	---	704.78	701.47		
				Measured Well Depth (feet bTOC)	47.80	47.80	---	47.80	47.80		
				Submerged Screen	Y	Y	---	Y	Y		
MW-22	733.34	681.27	57.45	Groundwater Level (feet bTOC)	29.56	30.20	---	28.37	31.40	-0.05	3.03
				Groundwater Elevation (feet amsl)	703.78	703.14	---	704.97	701.94		
				Measured Well Depth (feet bTOC)	57.50	57.50	---	57.50	57.50		
				Submerged Screen	Y	Y	---	Y	Y		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Deeper Bedrock Monitoring Locations Continued											
Downgradient Monitoring Locations Continued											
MW-25	784.20	679.02	110.18	Groundwater Level (feet bTOC)	78.44	77.77	---	77.25	78.89	-0.02	1.64
				Groundwater Elevation (feet amsl)	705.76	706.43	---	706.95	705.31		
				Measured Well Depth (feet bTOC)	110.20	110.20	---	110.20	110.20		
				Submerged Screen	Y	Y	---	Y	Y		
MW-27	809.66	671.66	143.00	Groundwater Level (feet bTOC)	102.42	101.52	---	101.95	102.36	-0.35	0.90
				Groundwater Elevation (feet amsl)	707.24	708.14	---	707.71	707.30		
				Measured Well Depth (feet bTOC)	143.35	143.35	---	143.35	143.35		
				Submerged Screen	Y	Y	---	Y	Y		
MW-29	816.20	679.70	141.50	Groundwater Level (feet bTOC)	108.82	107.84	---	108.36	108.70	-0.25	0.98
				Groundwater Elevation (feet amsl)	707.38	708.36	---	707.84	707.50		
				Measured Well Depth (feet bTOC)	141.75	141.75	---	141.75	141.75		
				Submerged Screen	Y	Y	---	Y	Y		
MW-31	790.06	671.00	124.06	Groundwater Level (feet bTOC)	82.95	82.21	---	82.12	83.01	-0.14	0.89
				Groundwater Elevation (feet amsl)	707.11	707.85	---	707.94	707.05		
				Measured Well Depth (feet bTOC)	124.20	124.20	---	124.20	124.20		
				Submerged Screen	Y	Y	---	Y	Y		
MW-33	749.92	670.39	84.53	Groundwater Level (feet bTOC)	46.47	46.34	---	44.93	47.38	-0.17	2.45
				Groundwater Elevation (feet amsl)	703.45	703.58	---	704.99	702.54		
				Measured Well Depth (feet bTOC)	84.70	84.70	---	84.70	84.70		
				Submerged Screen	Y	Y	---	Y	Y		
MW-36	745.22	674.03	76.19	Groundwater Level (feet bTOC)	41.55	41.45	---	40.05	42.47	-0.01	2.42
				Groundwater Elevation (feet amsl)	703.67	703.77	---	705.17	702.75		
				Measured Well Depth (feet bTOC)	76.20	76.20	---	76.20	76.20		
				Submerged Screen	Y	Y	---	Y	Y		
Background Monitoring Locations											
MW-38	784.81	699.26	90.55	Groundwater Level (feet bTOC)	64.98	64.52	---	64.48	65.03	0.45	0.55
				Groundwater Elevation (feet amsl)	719.83	720.29	---	720.33	719.78		
				Measured Well Depth (feet bTOC)	90.10	90.10	---	90.10	90.10		
				Submerged Screen	Y	Y	---	Y	Y		
MW-101B	720.33	640.36	84.90	Groundwater Level (feet bTOC)	16.65	17.10	---	15.48	18.32	0.05	2.84
				Groundwater Elevation (feet amsl)	703.68	703.23	---	704.85	702.01		
				Measured Well Depth (feet bTOC)	84.85	84.85	---	84.85	84.85		
				Submerged Screen	Y	Y	---	Y	Y		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements					Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2022	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023		
Deeper Bedrock Monitoring Locations Continued											
Delineation Monitoring Locations											
MW-102B	726.21	651.28	88.00	Groundwater Level (feet bTOC)	22.57	23.05	---	21.46	24.29	0.00	2.83
				Groundwater Elevation (feet amsl)	703.64	703.16	---	704.75	701.92		
				Measured Well Depth (feet bTOC)	88.00	88.00	---	88.00	88.00		
				Submerged Screen	Y	Y	---	Y	Y		
MW-103C	719.90	649.32	75.85	Groundwater Level (feet bTOC)	15.80	15.74	---	14.68	17.09	0.35	2.41
				Groundwater Elevation (feet amsl)	704.10	704.16	---	705.22	702.81		
				Measured Well Depth (feet bTOC)	75.50	75.50	---	75.50	75.50		
				Submerged Screen	Y	Y	---	Y	Y		
MW-104B	773.35	686.09	98.10	Groundwater Level (feet bTOC)	64.83	64.28	---	64.09	64.84	-0.10	0.75
				Groundwater Elevation (feet amsl)	708.52	709.07	---	709.26	708.51		
				Measured Well Depth (feet bTOC)	98.20	98.20	---	98.20	98.20		
				Submerged Screen	Y	Y	---	Y	Y		
MW-105B	724.00	648.80	85.50	Groundwater Level (feet bTOC)	21.54	22.30	---	20.58	23.10	0.10	2.52
				Groundwater Elevation (feet amsl)	702.46	701.70	---	703.42	700.90		
				Measured Well Depth (feet bTOC)	85.40	85.40	---	85.40	85.40		
				Submerged Screen	Y	Y	---	Y	Y		
MW-107B	721.91	660.37	67.51	Groundwater Level (feet bTOC)	18.28	19.21	---	17.11	20.31	-0.09	3.20
				Groundwater Elevation (feet amsl)	703.63	702.70	---	704.80	701.60		
				Measured Well Depth (feet bTOC)	67.60	67.60	---	67.60	67.60		
				Submerged Screen	Y	Y	---	Y	Y		
MW-108B	719.00	646.77	76.70	Groundwater Level (feet bTOC)	14.47	14.67	---	13.03	14.54	-0.10	1.64
				Groundwater Elevation (feet amsl)	704.53	704.33	---	705.97	704.46		
				Measured Well Depth (feet bTOC)	76.80	76.80	---	76.80	76.80		
				Submerged Screen	Y	Y	---	Y	Y		
MW-109B	724.37	650.27	84.05	Groundwater Level (feet bTOC)	21.17	21.38	---	19.85	22.42	0.40	2.57
				Groundwater Elevation (feet amsl)	703.20	702.99	---	704.52	701.95		
				Measured Well Depth (feet bTOC)	83.65	83.65	---	83.65	83.65		
				Submerged Screen	Y	Y	---	Y	Y		

Comments:
amsl = above mean sea level
bTOC = below top of casing
N/A = Not applicable

Table 4
Monitoring Well Maintenance and Performance Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Comments Continued:

(1) MW-20 and MW-24 were replaced in 2005, but well construction forms could not be located on IDNR DocDNA. Constructed well depths were from the 2005 Annual Water Quality Report (AWQR) and Top of Screen (TOS) were estimated.

(2) MW-21 was replaced in 2005, but well construction form could not be located on IDNR DocDNA. Constructed well depth was from the 2005 AWQR and TOS was estimated. The constructed well depth was updated in Spring 2021 due to casing extension conducted as part of City of Cedar Rapids flood wall construction project.

Acceptability of Well Locations:

• In accordance with 567 IAC 113.10(2)f(1), a review of the horizontal and vertical acceptability of the approved monitoring points shall be conducted every two years. The horizontal placement of well locations remain acceptable. Site 1 is a closed landfill; therefore, the layout of the site has not changed since the last approval of the Hydrologic Monitoring System Plan (HMSP) in September 2006 (HRG, 2006). The horizontal placement of the existing monitoring wells, which are spaced roughly 400 to 600 feet apart around the entire landfill perimeter, continues to be acceptable. In addition, fourteen delineation monitoring wells (MW-102A through MW-109B) have been installed further downgradient of the HMSP wells in order to horizontally and vertically delineate SSIs and SSLs to background. Permit Amendment #16 approved the spatial and frequency optimizations detailed in "Site 1 Monitoring Optimization" (Foth, 2020). Spatial optimization recommendations were initiated in Fall 2020. The water table monitoring wells (i.e., upper bedrock monitoring wells) were not evaluated for removal due to their purpose of providing ongoing detection of releases from the closed landfill. As a result, horizontal acceptability of the groundwater monitoring network remained acceptable after spatial optimization. In addition, the purpose of the deeper bedrock monitoring wells was reviewed in "Site 1 Monitoring Optimization" (Foth, 2020). The review indicated that the upper bedrock wells are screened across or below the lowest elevation of the former quarry (and therefore, the lowest elevation of the unlined landfill), and any release from the landfill would be identified in the upper bedrock monitoring wells prior to horizontal or vertical migration. Therefore, the purpose of the deeper bedrock wells is for vertical delineation and not for identification of new releases. Based on this review, the deeper bedrock monitoring wells are not evaluated for horizontal acceptability.
• In 2022, AW-7 was inadvertently removed during the pavement removal activities for the Compost Facility Maintenance Shop project. AW-7 was an upper bedrock downgradient well used to delineate arsenic and cobalt. As detailed in the *2022 Annual Water Quality Report* (Foth, 2023), the removal of AW-7 does not significantly change the arsenic and cobalt plumes. As a result, removal of AW-7 from the HMSP was requested, and the IDNR approved the removal of AW-7 in Permit Amendment #19 (IDNR, 2023).
• In terms of vertical acceptability, the groundwater monitoring network includes wells completed within different intervals of the first water bearing zone. The water table is typically encountered in the surrounding alluvium and upper portion of the bedrock. Deeper bedrock wells monitor the same aquifer as the water table wells (upper bedrock), but at a depth that is 20 to 30 feet deeper.
• For the water table wells (upper bedrock), the 2022 and 2023 groundwater elevations were within the screened interval with the exception of AW-2, MW-17, MW-24, and VP-3. While AW-2, MW-17, MW-24, and VP-3 continually have submerged screens, these locations continue to provide representative information regarding local groundwater elevation and quality given that most elevations were only slightly above the screened interval, but within the filter pack interval, elevations were within the normal range of elevations at these locations (indicating no change in conditions), and/or proximity to the river attributed to the higher groundwater elevation.
• The remaining HMSP wells at the facility are deeper bedrock monitoring wells. These wells were originally installed as described under IAC 113.16(1) for the hydrogeologic study. The vertical placement of the deeper bedrock monitoring wells continues to be acceptable.
• The biennial evaluation indicates that the horizontal and vertical placement of the existing monitoring wells continues to be acceptable and no maintenance activities are recommended based on horizontal and vertical acceptability at this time.

Water Level Conditions:

• In accordance with IAC 113.10(2)f(2), a review of water level conditions must be conducted every two years to ensure that the effects of waste disposal or well operation have not resulted in changes in the hydrologic setting and resultant flow paths. The Mar. and Aug. 2022 water table contours are depicted in Figures 2 and 3 of the *2022 AWQR* (Foth, 2023), and the Mar. and Aug. 2023 water table contours are depicted in Figures 2 and 3 of the 2023 AWQR. These maps were prepared using water level measurements from the water table (upper bedrock) groundwater monitoring wells and liquid levels from the gas collection system wells. Examination of the water table configuration presented in Figures 2 and 3 of the *2022 AWQR* (Foth, 2023) and Figures 2 and 3 of the 2023 AWQR indicate that MW-37 and MW-38 remain upgradient and background wells MW-101A and MW-101B remain in an up- or cross-gradient direction. The groundwater flow direction is unchanged relative to previous reviews. Significant impacts or changes in groundwater hydrology or groundwater flow paths have not occurred.
• The groundwater fluctuations observed in 2022 and 2023 were similar to those observed during the 2021 water level condition evaluation. Locations that have historically had greater fluctuations have continued to have larger fluctuations due to their proximity to the Cedar River. On average, groundwater fluctuations were down due to consistent drought conditions in 2023.
• The biennial evaluation did not identify significant impacts or changes in groundwater hydrology or groundwater flow paths. No maintenance activities are recommended based on review of the 2022 and 2023 water level information.

Table 4
Monitoring Well Maintenance and Performance Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Comments Continued:

Well Depths:

• In accordance with IAC 113.10(2)f(3), well depth measurements were collected in 2022 and 2023 to ensure the wells are physically intact and not filling with sediment. The 2022 and 2023 well depths are within one foot of the original well depths, except at MW-26, MW-30, and MW-35. The well depth measurements at these locations were between 1-2 feet deeper than the original well depths, which does not indicate that these wells are filling up with sediment. The discrepancies between the measured well depths and the original depths at MW-26, MW-30, and MW-35 are attributed to an error in the original boring log records for these wells.

• The 2022 and 2023 measured well depths indicated that the wells are not filling with sediment and remain physically intact. No maintenance activities are recommended based on review of the 2022 and 2023 well depth information.

Well Deterioration:

• In accordance with IAC 113.10(2)f(4), a review of well recharge rates and chemistry must be conducted every two years to determine if well deterioration is occurring. Review of the water level measurements prior to and subsequent to sampling indicated that recharge rates are consistent with historically observed data. The 2022 and 2023 field parameter results measured during purging are consistent with previously observed measurements.

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

Exterior Well Maintenance:

• The exterior condition of the monitoring wells was evaluated in Aug. 2022 and Aug. 2023. This inspection included: the physical surrounding, condition of the bumper posts, condition of the surface seal, condition of the outer protective casing, verifying wells are locked, condition of the well cap, presence of water in the annular space or around the exterior of the well, and obstructions or kinks in the well casing. Well maintenance was not recommended in 2022. Additional tree clearing work around the perimter of Site 1 was completed by J. Pettiecord Inc. between Oct. and Dec. 2022. The Aug. 2023 well maintenance evaluation indicated a need for the following maintenance: painting bumper posts, replacing padlocks, and repairing/replacing hinges of the outer protective casing. The maintenance activities will be conducted in 2023.

Proposed Changes to the Monitoring Network

• Based on the biennial review of water levels, well depths, horizontal and vertical acceptability of well locations, well recharge rates, and field chemistry, no well maintenance activities or additional monitoring wells are recommended at this time.

Table 5
Background and GWPS Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Constituent [1]	CAS #	Units	Samples	Detections [2]	Min [3]	Max [3]	Mean [3]	Note	Background Level	Statistical Test	GWPS	Source [4]
Interwell Background/GWPS (Aug. 2008 - Aug. 2023) - Upper Bedrock Monitoring Locations												
4,4'-DDE	72-55-9	ug/L	15	1	0.00227 J	0.0348 (1/2 RL)	0.0178	J-Flagged Only	**0.064 (RL)**	DQR	**0.51**	SS
alpha-BHC	319-84-6	ug/L	41	3	0.00189 J	0.0356 (1/2 RL)	0.0182	J-Flagged Only	**0.0604 (RL)**	DQR	**0.028**	SS
Antimony	7440-36-0	mg/L	48	9	0.00021 J	0.00739	0.00118		**0.00739**	Non-Parametric (1-of-2)	**0.006**	MCL
Arsenic	7440-38-2	mg/L	49	10	0.0005 (1/2 RL)	0.00205	0.00096		**0.00205**	Non-Parametric (1-of-2)	**0.01**	MCL
Barium	7440-39-3	mg/L	45	45	0.0244	0.191	0.0496		**0.1166**	Parametric (Lognormal, 1-of-2)	**2**	MCL
Benzene	71-43-2	ug/L	50	1	0.25 (1/2 RL)	2.5 (1/2 RL)	0.31		**0.500 (RL)**	DQR	**5**	MCL
Benzo(ghi)perylene	191-24-2	ug/L	20	1	0.484 J	6.75 (1/2 RL)	5.07	J-Flagged Only	**10.0 (RL)**	DQR	**21**	SS
Beryllium	7440-41-7	mg/L	50	1	0.0000410 J	0.002 (1/2 RL)	0.00058	J-Flagged Only	**0.001 (RL)**	DQR	**0.004**	MCL
beta-BHC	319-85-7	ug/L	47	1	0.008 (1/2 RL)	0.04 (1/2 RL)	0.0204	J-Flagged Only	**0.0604 (RL)**	DQR	**0.042**	SS
Bis(2-ethylhexyl)phthalate	117-81-7	ug/L	49	3	0.409 J	6.85 (1/2 RL)	5.24	J-Flagged Only	**9.62 (RL)**	DQR	**6**	MCL
Butylbenzylphthalate	85-68-7	ug/L	20	1	0.341 J	6.75 (1/2 RL)	5.06	J-Flagged Only	**10.0 (RL)**	DQR	**140**	SS
Cadmium	7440-43-9	mg/L	48	6	0.000048 (1/2 RL)	0.0025 (1/2 RL)	0.0003	J-Flagged Only	**0.0002 (RL)**	DQR	**0.005**	MCL
Carbon Disulfide	75-15-0	ug/L	50	3	0.152 J	5.00 (1/2 RL)	0.69		**1.00 (RL)**	DQR	**700**	SS
Chloromethane	74-87-3	ug/L	49	1	0.311 J	15.0 (1/2 RL)	1.75	J-Flagged Only	**3.00 (RL)**	DQR	**N/A**	N/A
Chromium	7440-47-3	mg/L	50	7	0.000904 J	0.025 (1/2 RL)	0.0051	J-Flagged Only	**0.005 (RL)**	DQR	**0.1**	MCL
cis-1,2-Dichloroethene	156-59-2	ug/L	49	1	0.229 J	5.00 (1/2 RL)	0.59	J-Flagged Only	**1.00 (RL)**	DQR	**70**	MCL
Cobalt	7440-48-4	mg/L	36	23	0.000046 J	0.008	0.0011		**0.008**	Non-Parametric (1-of-2)	**0.008**	Background
Copper	7440-50-8	mg/L	48	3	0.000867 J	0.0225	0.0045		**0.0225**	Non-Parametric (1-of-2)	**1.3**	MCL
delta-BHC	319-86-8	ug/L	40	2	0.00415 J	0.03555 (1/2 RL)	0.0198	J-Flagged Only	**0.0604 (RL)**	DQR	**2.1**	SS
Di-n-butylphthalate	84-74-2	ug/L	45	2	0.600 J	6.85 (1/2 RL)	5.32	J-Flagged Only	**9.62 (RL)**	DQR	**700**	SS
Di-n-octylphthalate	117-84-0	ug/L	20	1	1.42 J	13.5 (1/2 RL)	7.6	J-Flagged Only	**20.0 (RL)**	DQR	**140**	SS
Endosulfan I	959-98-8	ug/L	15	1	0.00517 J	0.0348 (1/2 RL)	0.0180	J-Flagged Only	**0.064 (RL)**	DQR	**42**	SS
Ethylbenzene	100-41-4	ug/L	50	3	0.348 J	5.00 (1/2 RL)	0.60		**1.00 (RL)**	DQR	**700**	MCL
Heptachlor	76-44-8	ug/L	43	2	0.00799 J	0.03555 (1/2 RL)	0.0196	J-Flagged Only	**0.0604 (RL)**	DQR	**0.4**	MCL
Indeno(1,2,3-cd)pyrene	193-39-5	ug/L	20	1	0.299 J	6.75 (1/2 RL)	5.06	J-Flagged Only	**10.0 (RL)**	DQR	**0.24**	SS
Lead	7439-92-1	mg/L	47	11	0.00018 J	0.00695	0.00077		**0.00695**	Non-Parametric (1-of-2)	**0.015**	MCL
Lindane (BHC, Gamma-)	58-89-9	ug/L	15	1	0.00674 J	0.0348 (1/2 RL)	0.0181	J-Flagged Only	**0.064 (RL)**	DQR	**0.2**	MCL
m/p-Cresol	15831-10-4	ug/L	40	1	4.81 (1/2 RL)	404	15.5		**9.62 (RL)**	DQR	**70**	SS
Methoxychlor	72-43-5	ug/L	15	1	0.00279 J	0.0348 (1/2 RL)	0.0177	J-Flagged Only	**0.064 (RL)**	DQR	**40**	MCL
Methyl Parathion	298-00-0	ug/L	19	1	0.877 J	6.75 (1/2 RL)	5.05	J-Flagged Only	**10.0 (RL)**	DQR	**1**	SS
Nickel	7440-02-0	mg/L	48	20	0.000643 J	0.0522	0.0091		**0.0522**	Non-Parametric (1-of-2)	**0.1**	SS
Nitrobenzene	98-95-3	ug/L	20	1	0.226 J	6.75 (1/2 RL)	5.05	J-Flagged Only	**10.0 (RL)**	DQR	**14**	SS
Phenol	108-95-2	ug/L	37	1	4.81 (1/2 RL)	23.6	6.5		**9.62 (RL)**	DQR	**2,000**	SS
Selenium	7782-49-2	mg/L	48	26	0.000872 J	0.025 (1/2 RL)	0.003	J-Flagged Only	**0.005 (RL)**	DQR	**0.05**	MCL
Silver	7440-22-4	mg/L	50	3	0.0000720 J	0.025 (1/2 RL)	0.004	J-Flagged Only	**0.001 (RL)**	DQR	**0.1**	SS
Thallium	7440-28-0	mg/L	50	8	0.000046 J	0.001 (1/2 RL)	0.0006	J-Flagged Only	**0.001 (RL)**	DQR	**0.002**	MCL
Tin	7440-31-5	mg/L	50	4	0.0025 (1/2 RL)	0.152	0.020		**0.152**	Non-Parametric (1-of-2)	**4.2**	SS
Toluene	108-88-3	ug/L	51	6	0.179 J	6.56 (1/2 RL)	0.72		**1.00 (RL)**	DQR	**1,000**	MCL

Table 5
Background and GWPS Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Constituent [1]	CAS #	Units	Samples	Detections [2]	Min [3]	Max [3]	Mean [3]	Note	Background Level	Statistical Test	GWPS	Source [4]
Interwell Background/GWPS (Aug. 2008 - Aug. 2023) - Upper Bedrock Monitoring Locations (Continued)												
Total Suspended Solids	TSS	mg/L	37	24	0.875 J	25.7	2.91		**N/A**	N/A	**N/A**	N/A
Trichloroethene	79-01-6	ug/L	49	1	0.208 J	5.00 (1/2 RL)	0.59	J-Flagged Only	**1.00 (RL)**	DQR	**5**	MCL
Vanadium	7440-62-2	mg/L	48	19	0.000503 J	0.025 (1/2 RL)	0.0082	J-Flagged Only	**0.005 (RL)**	DQR	**0.035**	SS
Xylenes, Total	1330-20-7	ug/L	50	4	0.262 J	15.0 (1/2 RL)	1.89		**3.00 (RL)**	DQR	**10,000**	MCL
Zinc	7440-66-6	mg/L	50	7	0.005 (1/2 RL)	0.0805	0.0149		**0.0805**	Non-Parametric (1-of-2)	**2**	SS
Interwell Background/GWPS (Aug. 2008 - Aug. 2023) - Deeper Bedrock Monitoring Locations												
2,4,5-TP (Silvex)	93-72-1	ug/L	40	1	0.05 (1/2 RL)	2.14	0.5209	J-Flagged Only	**1.04**	DQR	**50**	MCL
4,4'-DDD	72-54-8	ug/L	11	1	0.00206 J	0.0195 (1/2 RL)	0.0152	J-Flagged Only	**0.0376 (RL)**	DQR	**0.73**	SS
Acetonitrile	75-05-8	ug/L	10	1	3.64 J	5.0 (1/2 RL)	4.86	J-Flagged Only	**10.0 (RL)**	DQR	**N/A**	N/A
Antimony	7440-36-0	mg/L	47	2	0.000185 J	0.0101	0.0013		**0.0101**	Non-Parametric (1-of-2)	**0.006**	MCL
Arsenic	7440-38-2	mg/L	49	30	0.0005 (1/2 RL)	0.00225	0.00105		**0.00225**	Non-Parametric (1-of-2)	**0.01**	MCL
Barium	7440-39-3	mg/L	45	45	0.0402	0.138	0.0698		**0.138**	Non-Parametric (1-of-2)	**2**	MCL
Bis(2-ethylhexyl)phthalate	117-81-7	ug/L	49	4	0.423 J	25.4	5.97		**25.4**	Non-Parametric (1-of-2)	**6**	MCL
Cadmium	7440-43-9	mg/L	46	1	0.00005 (1/2 RL)	0.000824	0.000186		**0.000824**	Non-Parametric (1-of-2)	**0.005**	MCL
Chromium	7440-47-3	mg/L	49	2	0.000468 J	0.025 (1/2 RL)	0.0053	J-Flagged Only	**0.005 (RL)**	DQR	**0.1**	MCL
Cobalt	7440-48-4	mg/L	36	31	0.000099 J	0.000948	0.000289		**0.0008831**	Parametric (Lognormal, 1-of-2)	**0.0021**	SS
Copper	7440-50-8	mg/L	48	1	0.001 (1/2 RL)	0.0108	0.004423		**0.0108**	Non-Parametric (1-of-2)	**1.3**	MCL
Dieldrin	60-57-1	ug/L	20	1	0.0029 J	0.0195 (1/2 RL)	0.0160	J-Flagged Only	**0.0376 (RL)**	DQR	**0.011**	SS
Di-n-butylphthalate	84-74-2	ug/L	27	4	0.618 J	5.9 (1/2 RL)	4.71	J-Flagged Only	**11.8 (RL)**	DQR	**700**	SS
Di-n-octylphthalate	117-84-0	ug/L	19	1	1.73 J	11.75 (1/2 RL)	7.32	J-Flagged Only	**23.5 (RL)**	DQR	**140**	SS
Disulfoton	298-04-4	ug/L	20	1	1.11 J	35.0 (1/2 RL)	9.52	J-Flagged Only	**11.8 (RL)**	DQR	**0.7**	SS
Isosafrole	120-58-1	ug/L	20	2	0.184 J	5.9 (1/2 RL)	4.73	J-Flagged Only	**11.8 (RL)**	DQR	**N/A**	N/A
Lead	7439-92-1	mg/L	46	1	0.000117 J	0.002 (1/2 RL)	0.000628	J-Flagged Only	**0.0005 (RL)**	DQR	**0.015**	MCL
m/p-Cresol	15831-10-4	ug/L	22	1	0.255 J	5.9 (1/2 RL)	5.03	J-Flagged Only	**11.8 (RL)**	DQR	**70**	SS
Methoxychlor	72-43-5	ug/L	11	1	0.00633 J	0.0195 (1/2 RL)	0.0156	J-Flagged Only	**0.0376 (RL)**	DQR	**40**	MCL
Nickel	7440-02-0	mg/L	36	16	0.000748 J	0.00735	0.00273		**0.00735**	Non-Parametric (1-of-2)	**0.1**	SS
Selenium	7782-49-2	mg/L	49	16	0.00101 J	0.025 (1/2 RL)	0.004	J-Flagged Only	**0.005 (RL)**	DQR	**0.05**	MCL
Silver	7440-22-4	mg/L	49	1	0.000111 J	0.025 (1/2 RL)	0.004	J-Flagged Only	**0.001 (RL)**	DQR	**0.1**	SS
Thallium	7440-28-0	mg/L	49	7	0.000033 J	0.001 (1/2 RL)	0.0006	J-Flagged Only	**0.001 (RL)**	DQR	**0.002**	MCL
Tin	7440-31-5	mg/L	49	2	0.0025 (1/2 RL)	0.109	0.0174		**0.109**	Non-Parametric (1-of-2)	**4.2**	SS
Toluene	108-88-3	ug/L	48	2	0.315 J	0.50 (1/2 RL)	0.49	J-Flagged Only	**1.00 (RL)**	DQR	**1,000**	MCL
Total Suspended Solids	TSS	mg/L	36	6	0.75 J	34.9	2.07		**N/A**	N/A	**N/A**	N/A
Vanadium	7440-62-2	mg/L	49	1	0.000489 J	0.025 (1/2 RL)	0.008	J-Flagged Only	**0.005 (RL)**	DQR	**0.035**	SS
Xylenes, Total	1330-20-7	ug/L	48	3	0.155 J	1.50 (1/2 RL)	1.45	J-Flagged Only	**3.00 (RL)**	DQR	**10,000**	MCL
Zinc	7440-66-6	mg/L	49	5	0.005 (1/2 RL)	0.0366	0.0114		**0.0366**	Non-Parametric (1-of-2)	**2**	SS

Table 5
Background and GWPS Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Comments:

N/A = not applicable

RL = reporting limit taken as the laboratory practical quantitation limit (PQL)

(1) List contains constituents detected above the laboratory minimum detection limit (MDL) in the background data sets after data set adjustments detailed in the Appendix B statistical reports were conducted (i.e., removal of background data based on turbidity and elevated PQLs). Background data set adjustments are listed as crossed-out concentrations in Table 14 and were removed from the background data set prior to conducting statistical analyses.

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

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

(4) Sources are either the Maximum Contaminant Level promulgated under Section 1412 of the Safe Drinking Water Act in 40 CFR Part 141 (MCL) or the 567 IAC Chapter 137 Statewide Standards for a Protected Groundwater Source (SS). If background is higher than the MCL or SS, the GWPS is background. Background as the GWPS is both the *two-sample* test prediction limit method and the *one-sample* test confidence limit method where the fixed GWPS is the background upper tolerance limit with 95% confidence and 95% coverage. N/A = not applicable; constituent does not have a MCL or SS and using background as the GWPS is not applicable due to limited detections.

• The background data sets consist of MW-37 and MW-101A for upper bedrock and MW-38 and MW-101B for deeper bedrock. The Mar. 2023 detected metals in MW-101A were removed from the background data set since the March 2023 metal concentrations were above the range of historic concentrations and/or some TSS correlation was evident. The previous background data set adjustments detailed in the statistical reports provided in Appendix B and listed as crossed-out concentrations in Table 14 were maintained in 2023.

• No new constituents were detected at the upper and deeper bedrock locations in 2023.

Table 6
Summary of Well/Detected Constituent Pairs With No Previous SSIs
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Well	Constituent [1]	Units	Most Recent Result (Aug. 2023)	Background Standard [2]
Deeper Bedrock Monitoring Locations				
Detection Monitoring Locations				
MW-31	Barium	mg/L	0.0999	0.138
	Total Suspended Solids	mg/L	3	N/A

* of-2 retesting plan for groundwater prediction limits and DQR constituents).

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

Comments:

[1] List contains constituents detected above the laboratory MDL and includes J-flagged concentrations.

[2] Source of background standards are provided in the Fall 2023 statistical evaluation memo, which will be submitted with the 2023 AWQR. N/A = not applicable.

• No SSIs were identified at deeper bedrock detection monitoring well MW-31. The future sampling schedule is provided in Table 2.

Summary of Prediction Limits and Health Standards
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

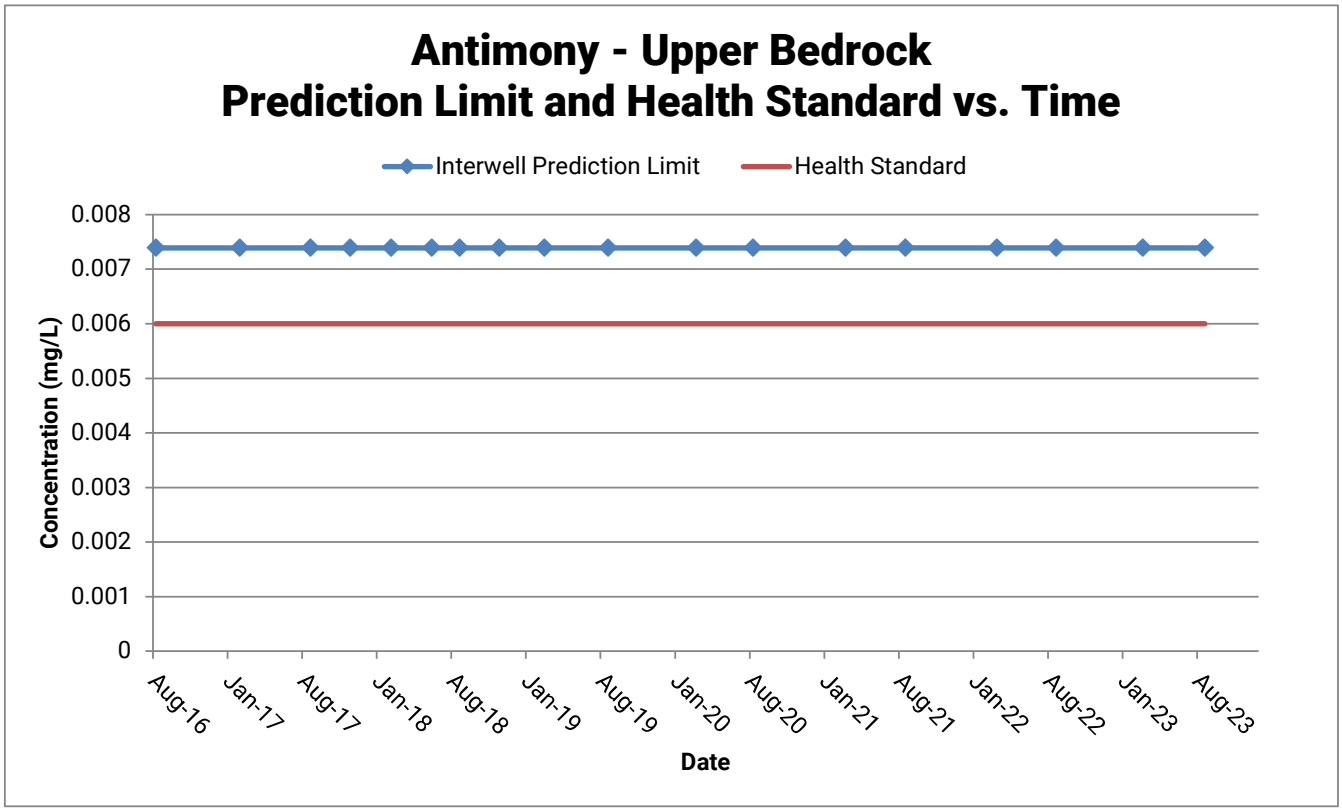
Comments:

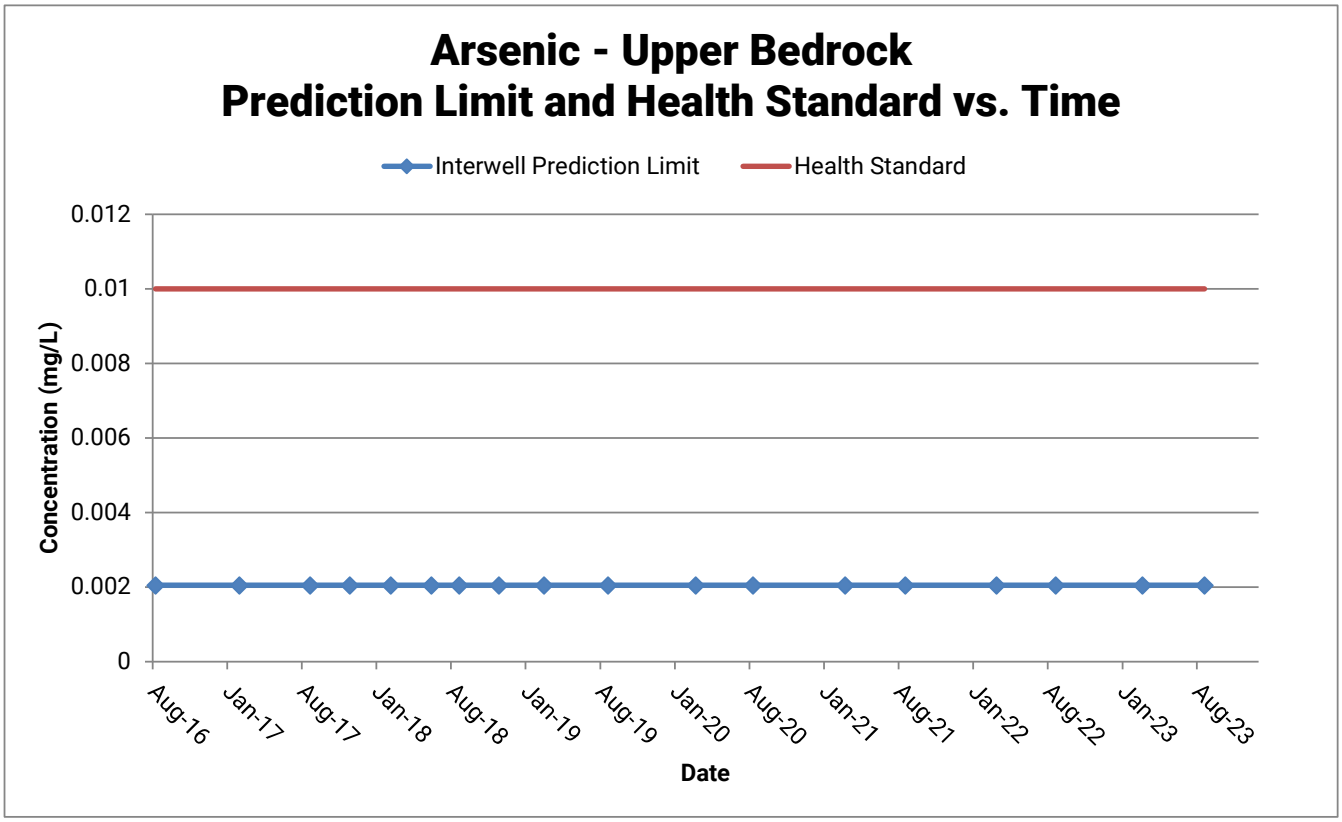
• The following graphs depict the interwell prediction limits for upper bedrock and deeper bedrock calculated for statistical analyses starting with the Fall 2016 statistical evaluation. Note that the Fall 2016 statistical evaluation was when data set adjustments due to sampling technique changes were implemented.

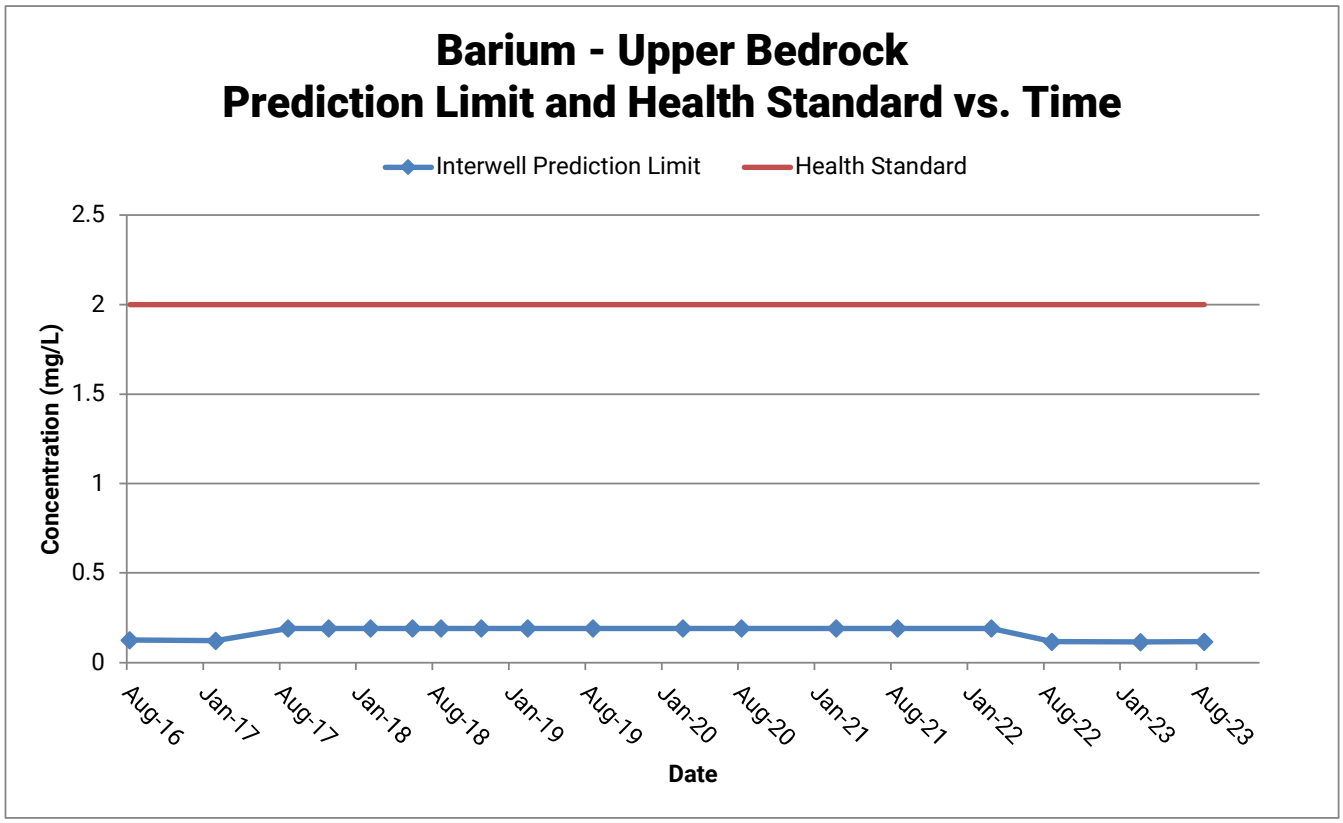
• Wells included in the background data sets and the sources of the background and health standards are presented in Table 5.

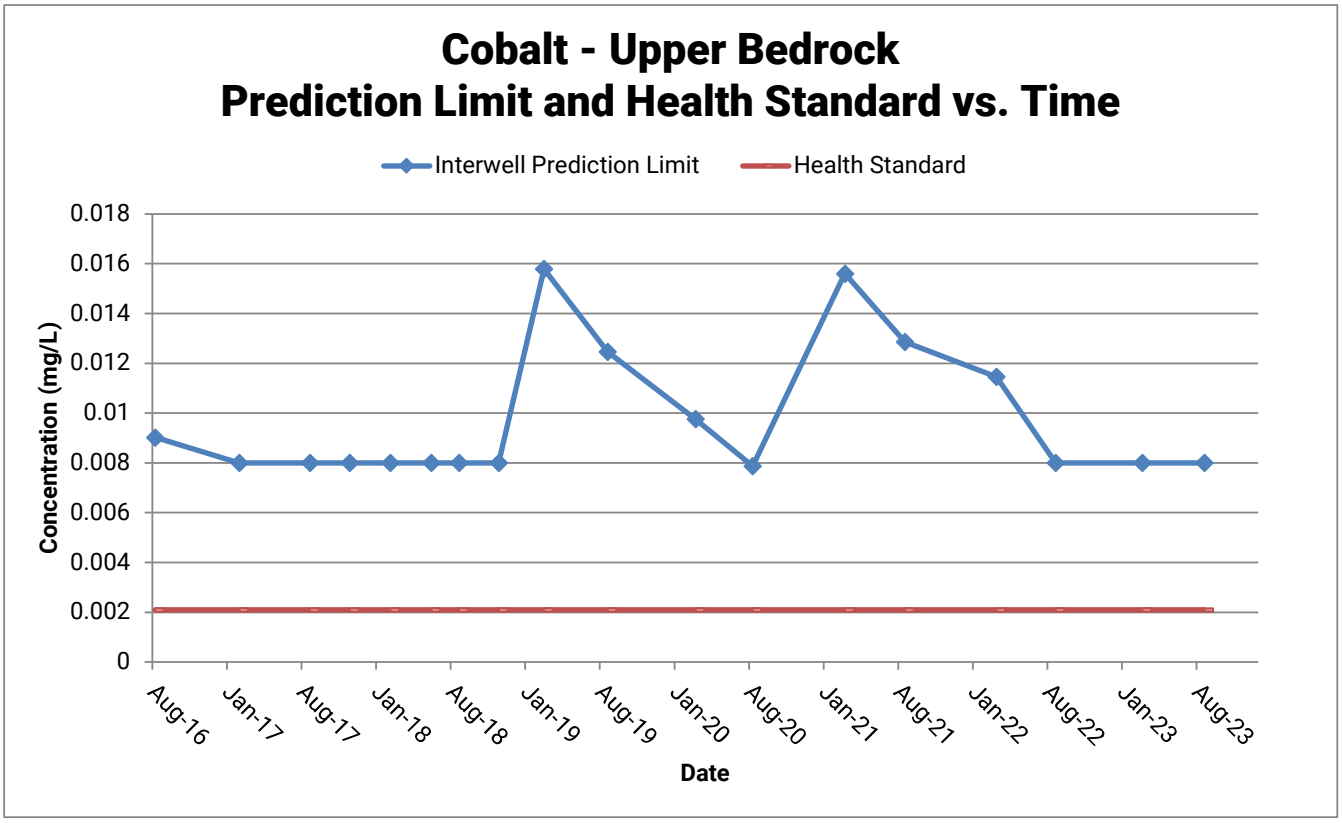
• For cobalt in upper bedrock, a notable increase in the prediction limit occurred with the Spring 2019 statistical evaluation due to a change from a non-parametric to a lognormal parametric method. A decreasing trend in the lognormal parametric prediction limit occurred between Spring 2019 and Fall 2020, with the Fall 2020 prediction limit nearly equal to the non-parametric limit utilized prior to Spring 2019. The decreasing trend occurred due to the increasing number of background samples utilized to calculate the lognormal parametric prediction limit and not due to decreasing trends in the background upper bedrock cobalt data. Another shift in the lognormal parametric prediction limit occurred between Fall 2020 and Spring 2021. The increased lognormal parametric prediction limit in Spring 2021 resulted from changes in the statistical configuration; specifically, changing from a 1-of-3 to a 1-of-2 retesting plan and changing the number of well/constituents pairs statistically evaluated with the implementation of the monitoring frequency optimizations. A decreasing trend in the lognormal prediction limit occurred between Spring 2021 and Spring 2022, which is again attributed to increasing background sample size for calculating the lognormal parametric prediction limit and not due to decreasing trends in the background upper bedrock cobalt data. In Fall 2022, the upper bedrock cobalt prediction limit changed from a lognormal parametric method to a non-parametric method again because normality could not be met. Cobalt continued to be analyzed using the non-parametric method through Fall 2023; therefore, the prediction limit has remained the same.

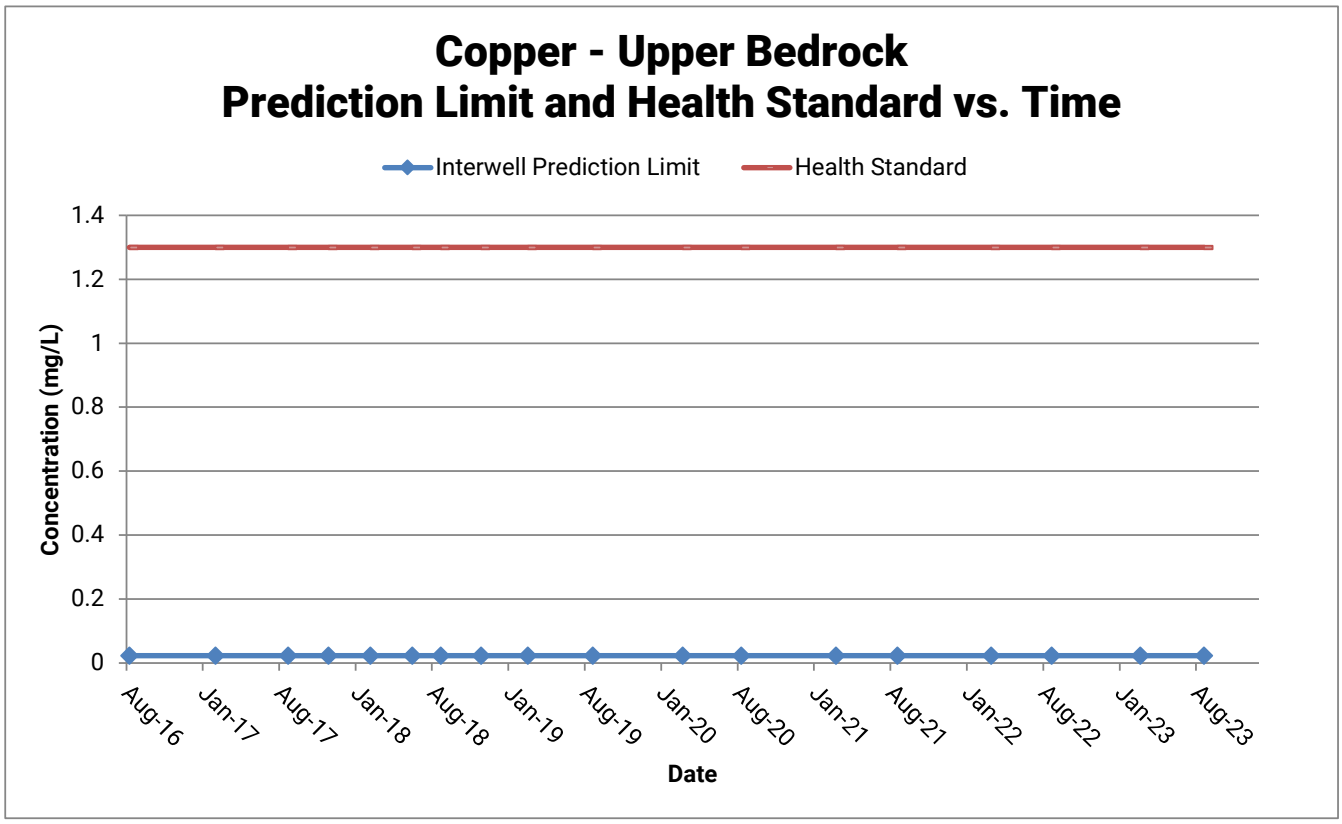
• The decreasing trend in the prediction limit for cobalt in deeper bedrock from Spring 2017 to Fall 2020 is attributed to the relatively small background sizes evaluated using lognormal parametric methods and not to decreasing trends in the individual well/analyte data. As occurred with the upper bedrock prediction limit for cobalt, an increase in the lognormal parametric prediction limit occurred in Spring 2021 as a result of changes in the statistical configuration; specifically, changing from a 1-of-3 to a 1-of-2 retesting plan and changing the number of well/constituents pairs statistically evaluated with the implementation of the monitoring frequency optimizations. The lognormal prediction limit remained fairly stable between Spring 2021 and Fall 2023.

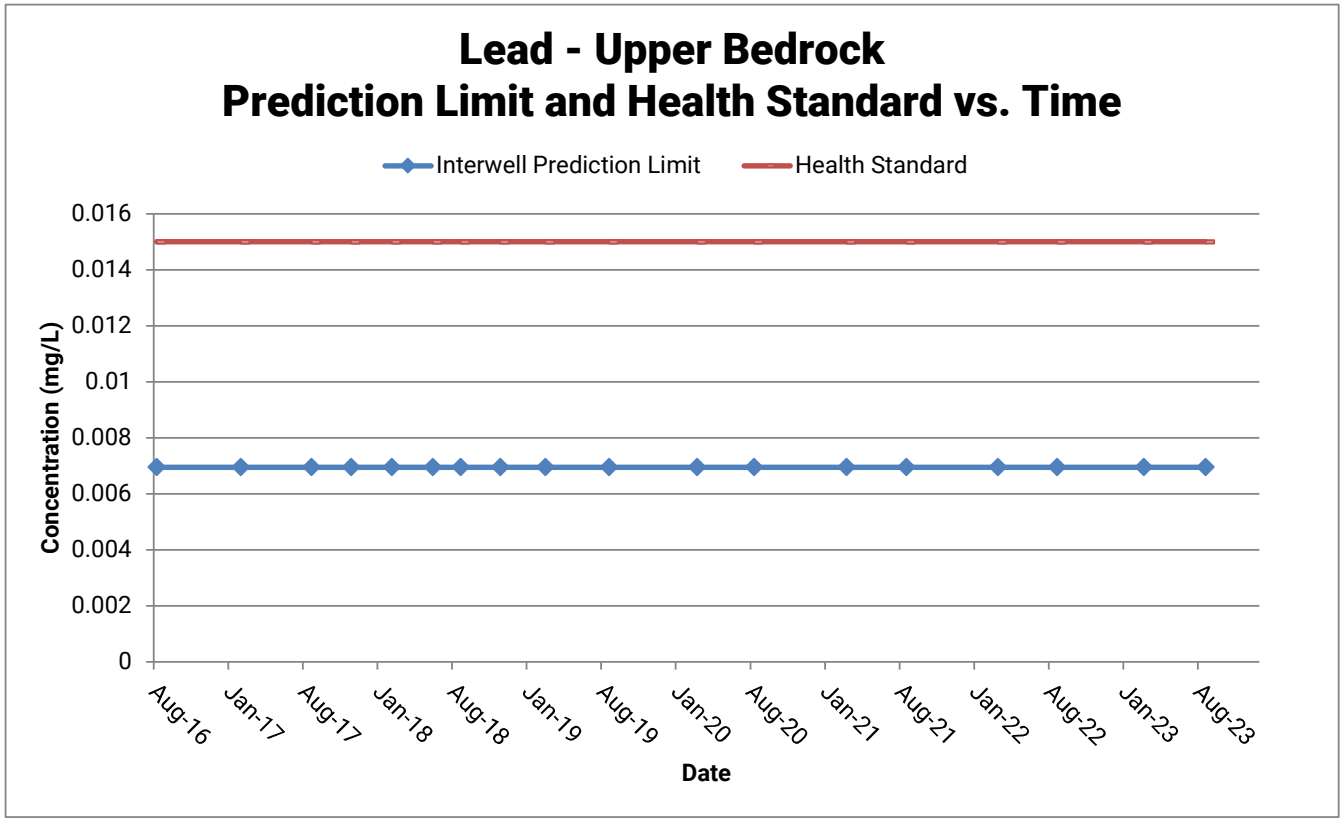

Antimony - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

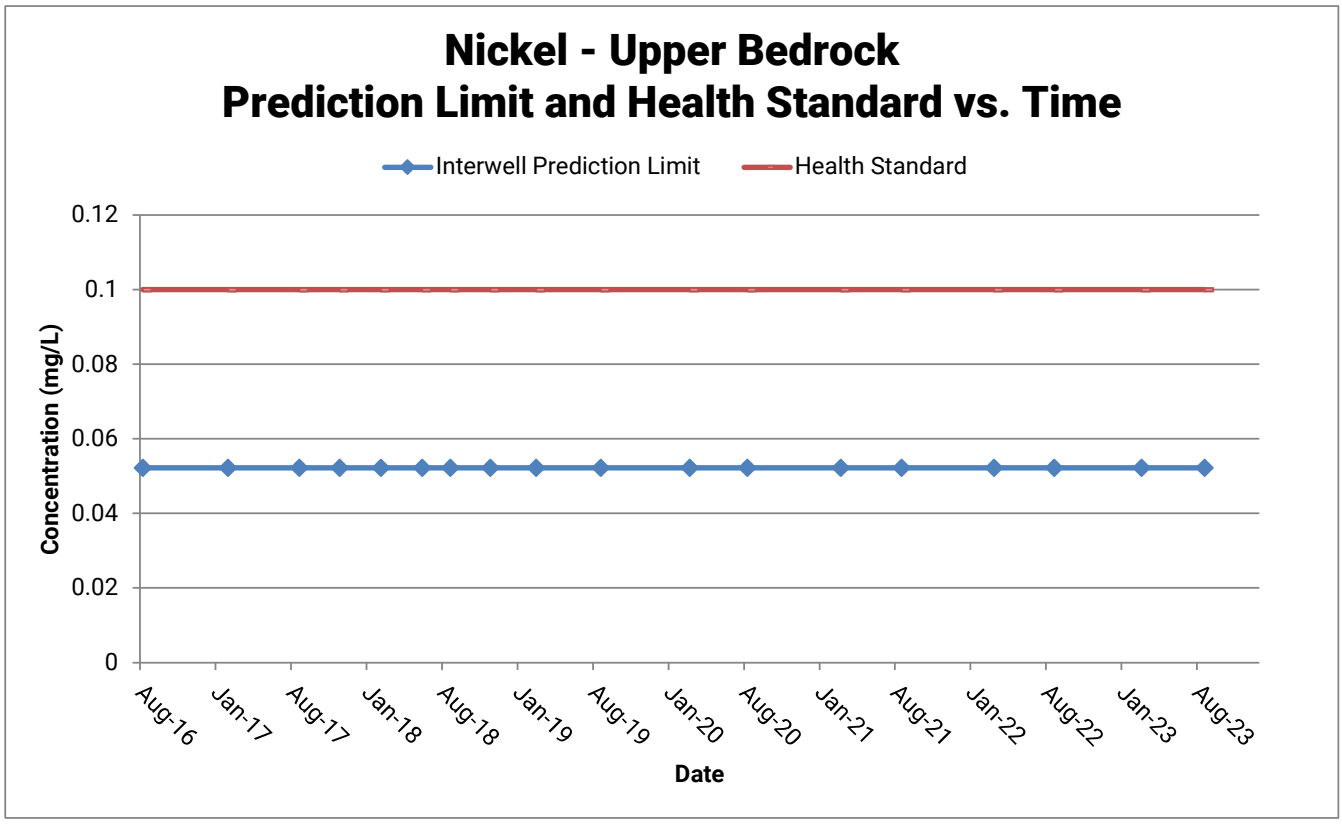

Arsenic - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
0.012
0.01
0.008
0.006
0.004
0.002
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

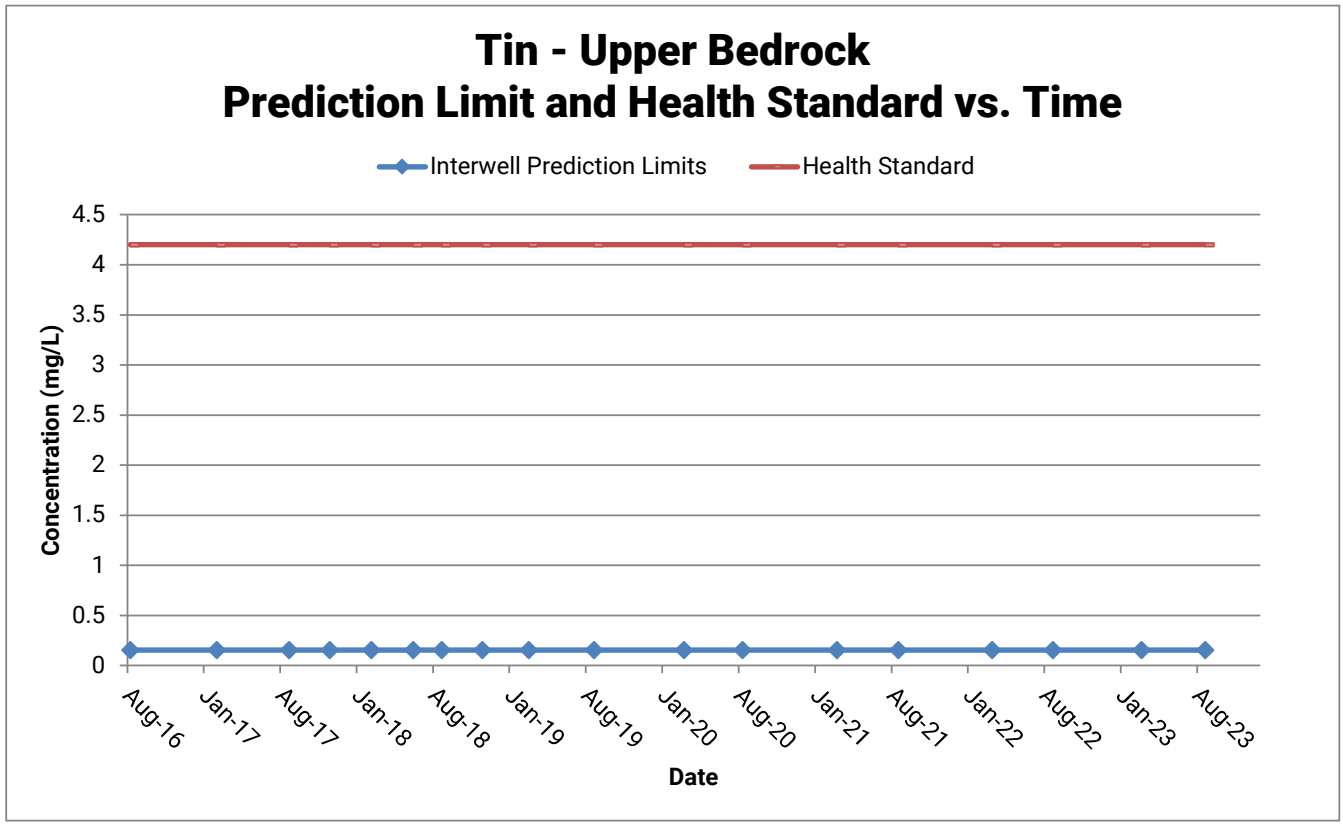

Barium - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
2.5
2
1.5
1
0.5
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

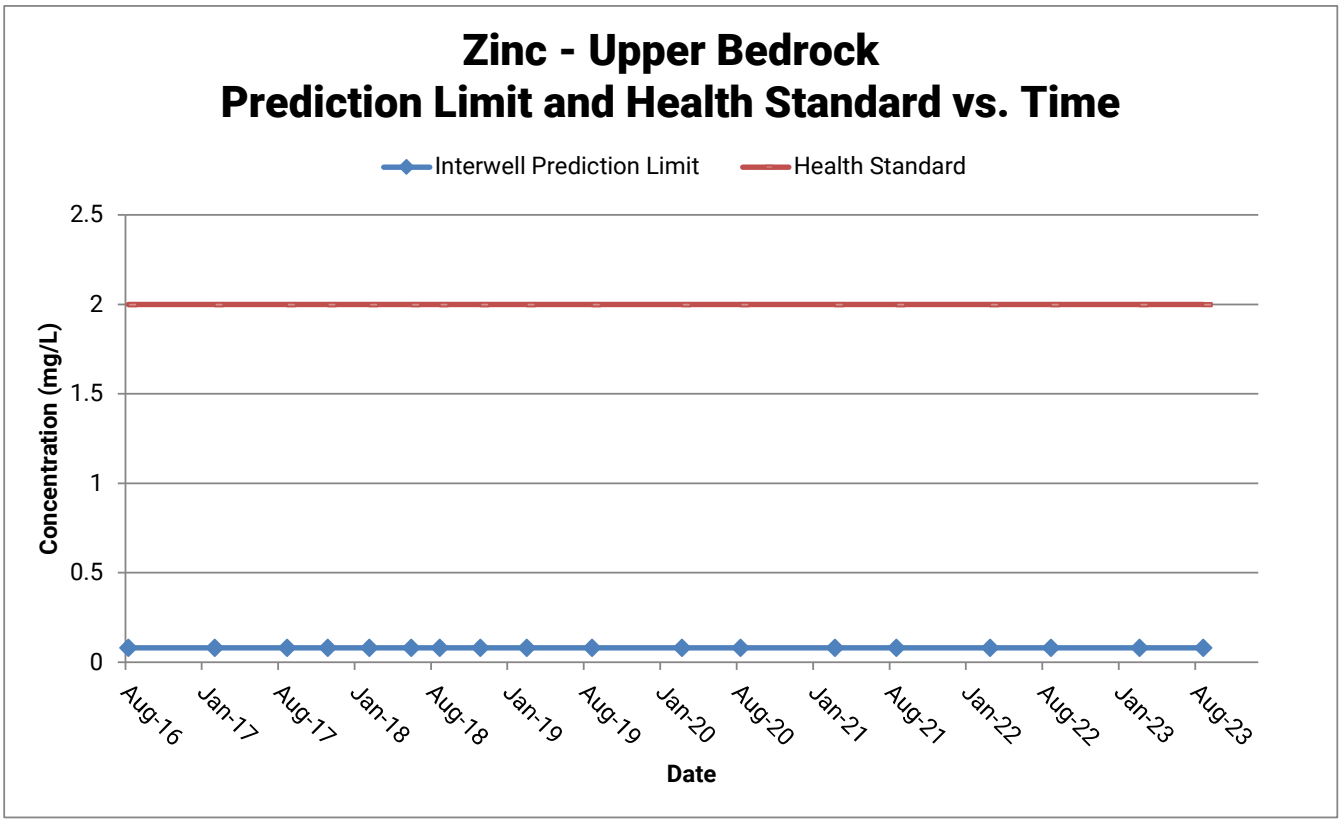

Cobalt - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

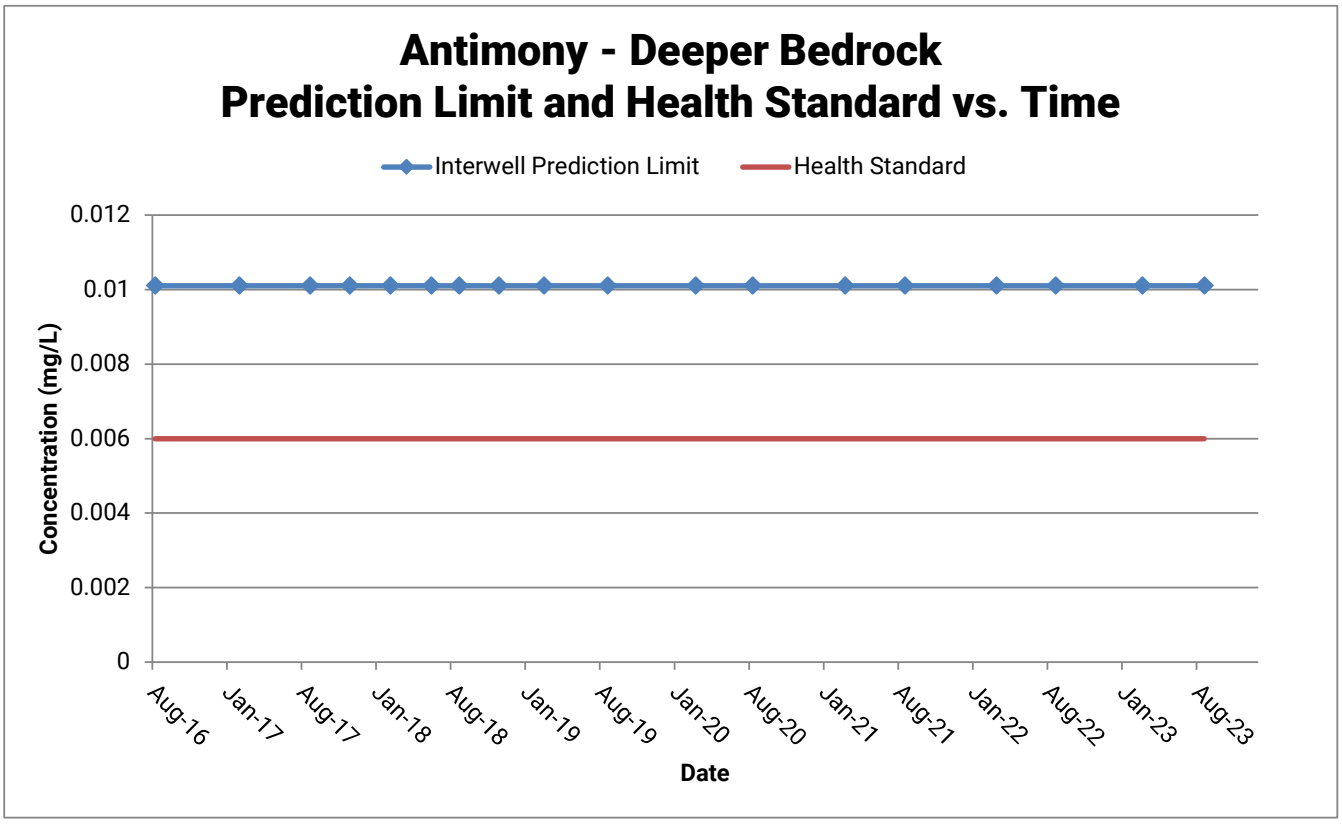

Copper - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

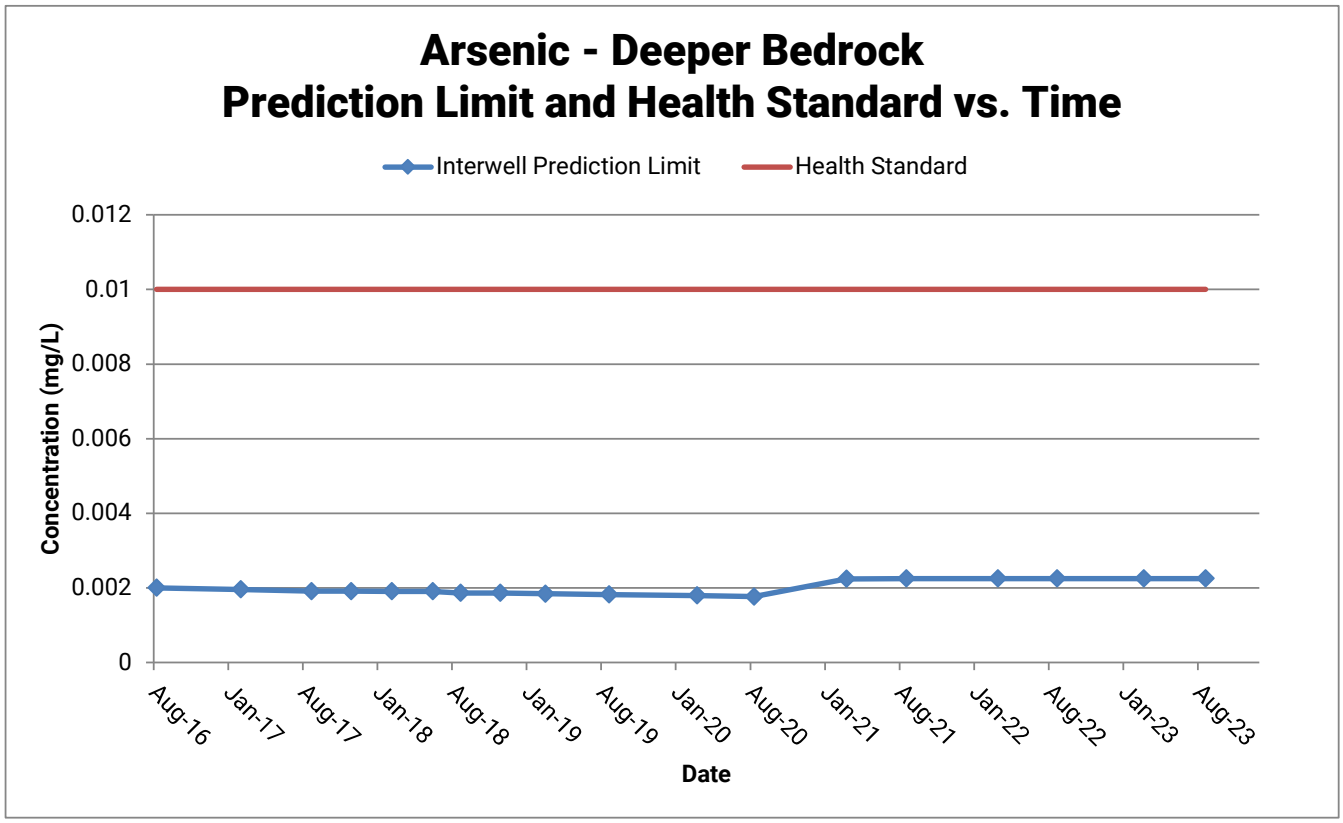

Lead - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

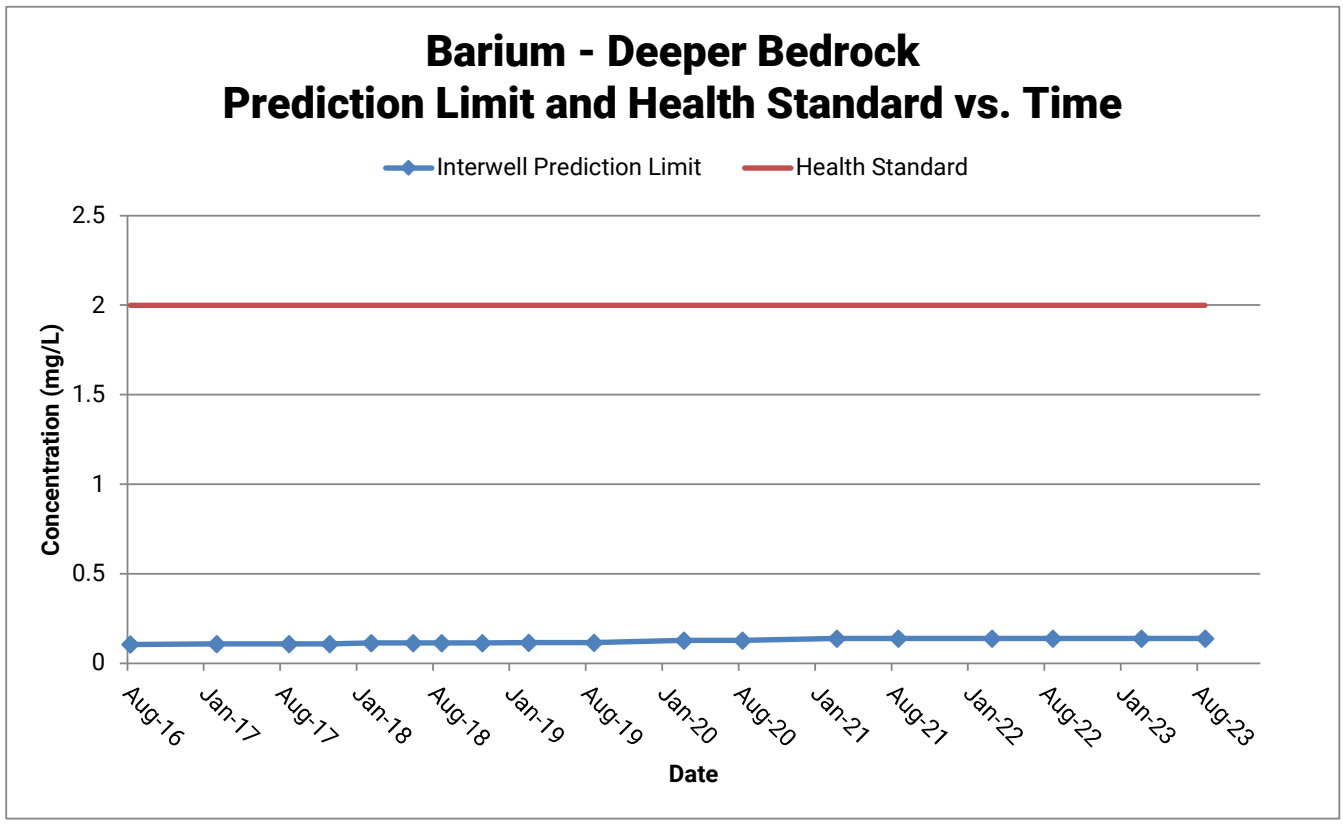

Nickel - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

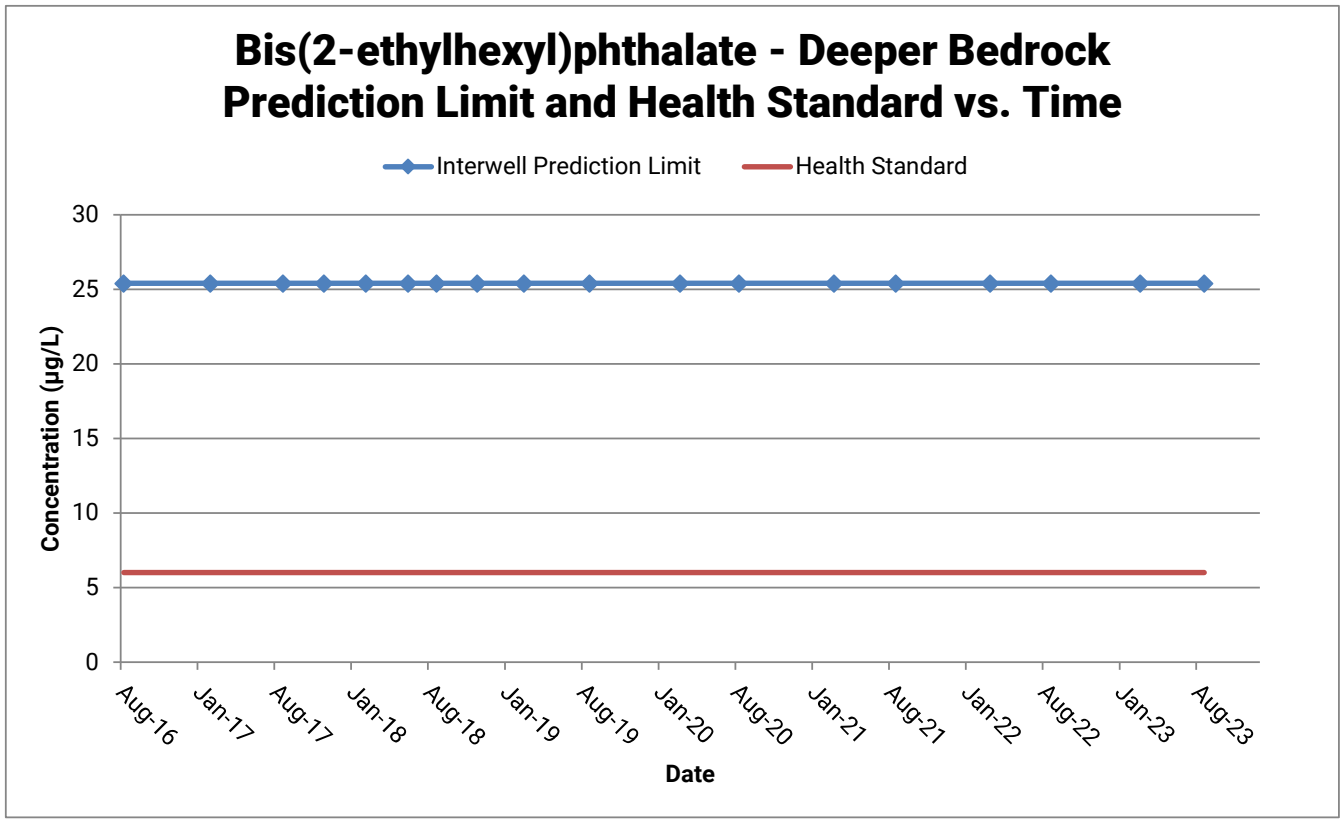

Tin - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limits
Health Standard
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

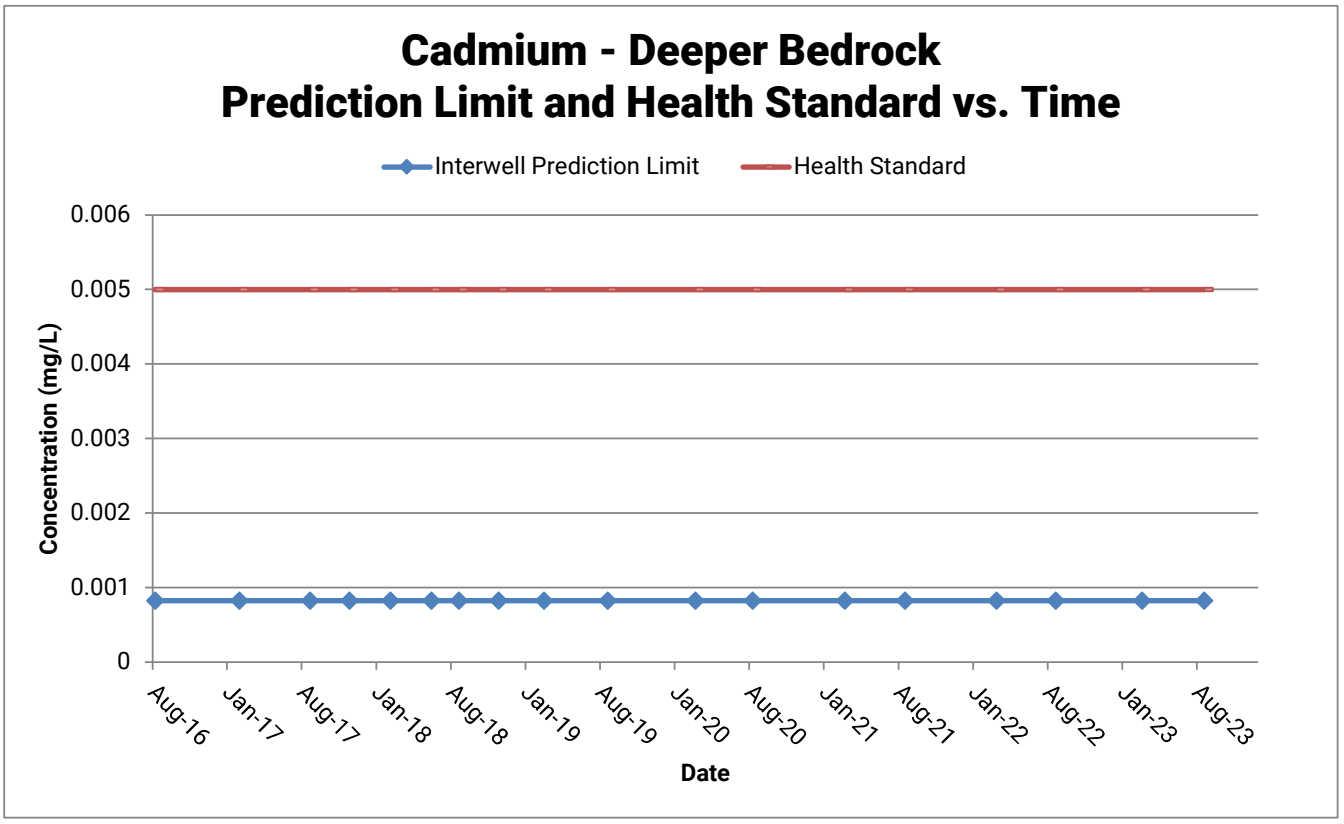

Zinc - Upper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

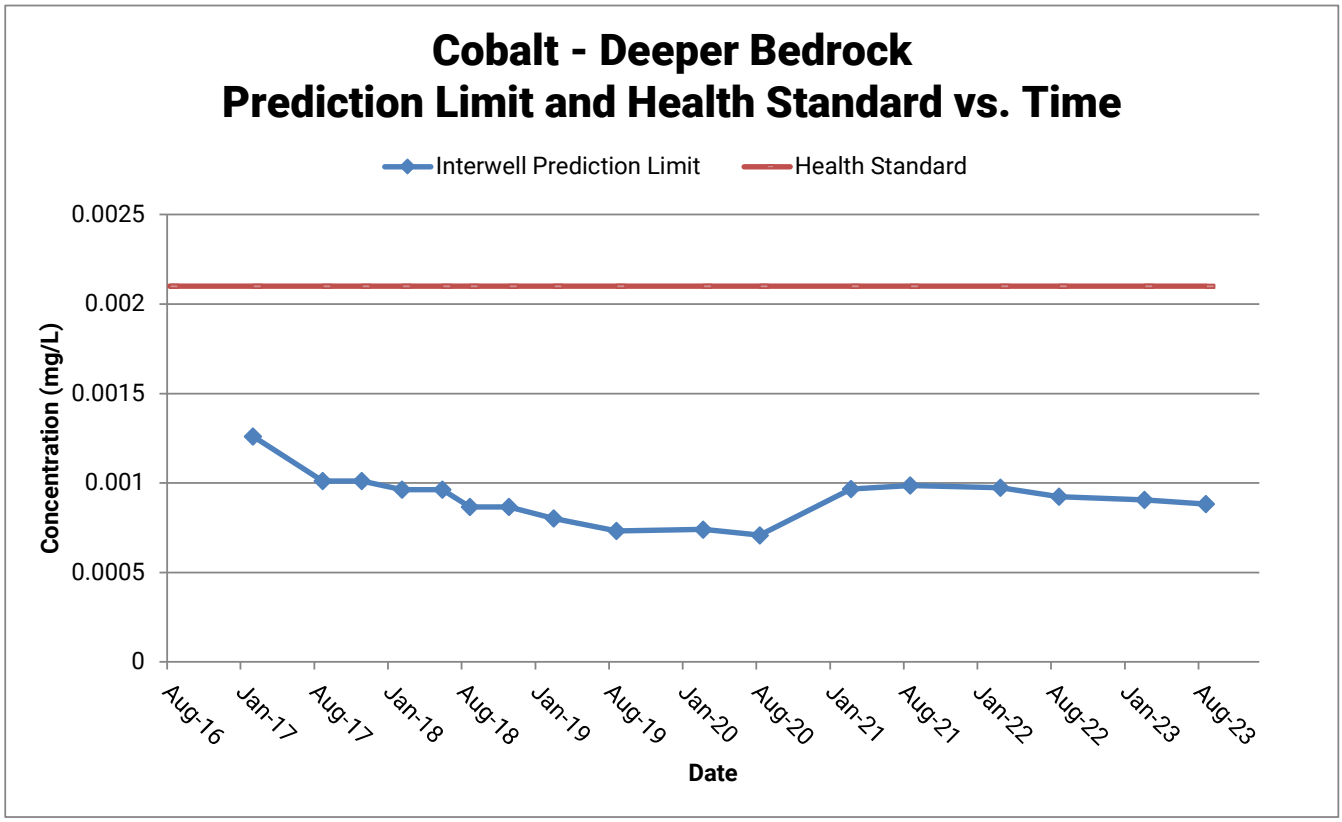

Antimony - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.012
0.01
0.008
0.006
0.004
0.002
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

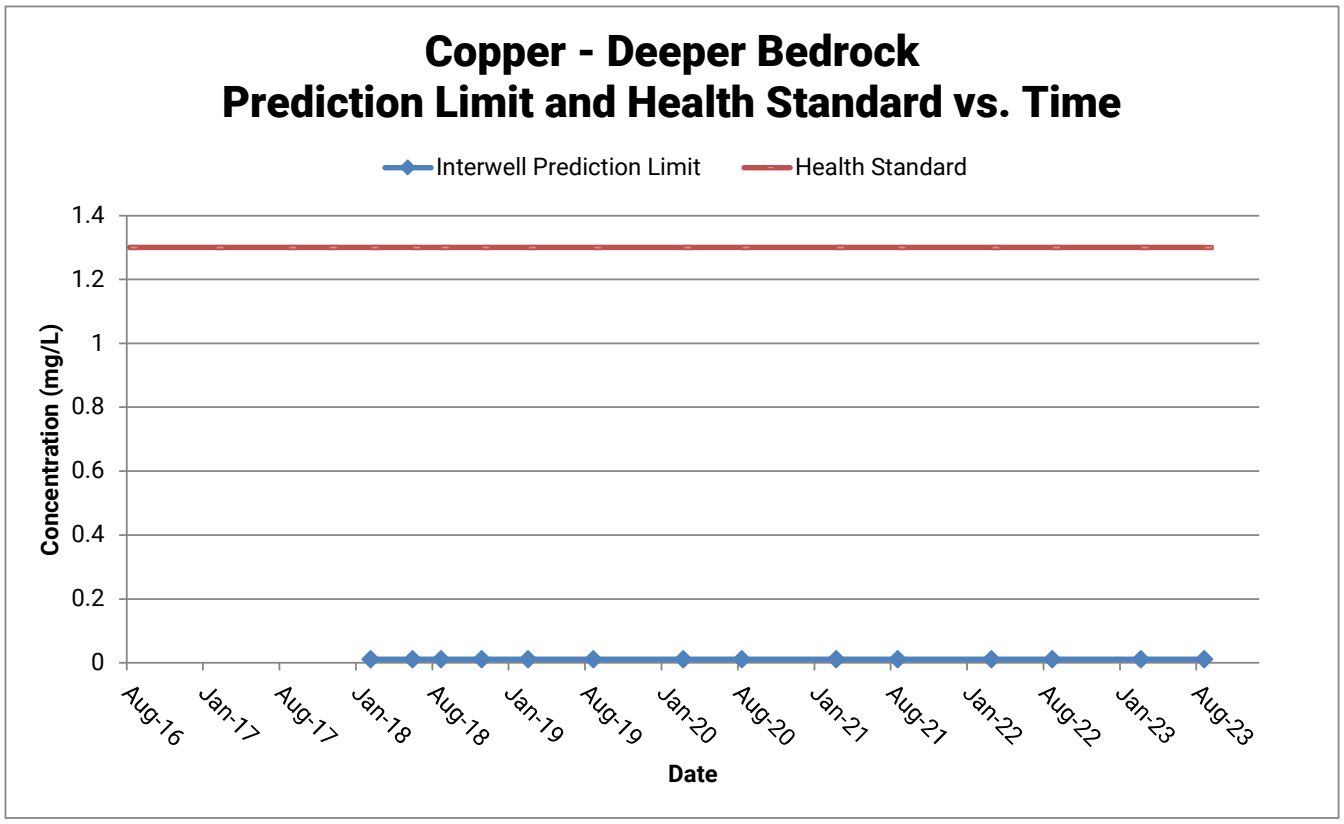

Arsenic - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.012
0.01
0.008
0.006
0.004
0.002
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

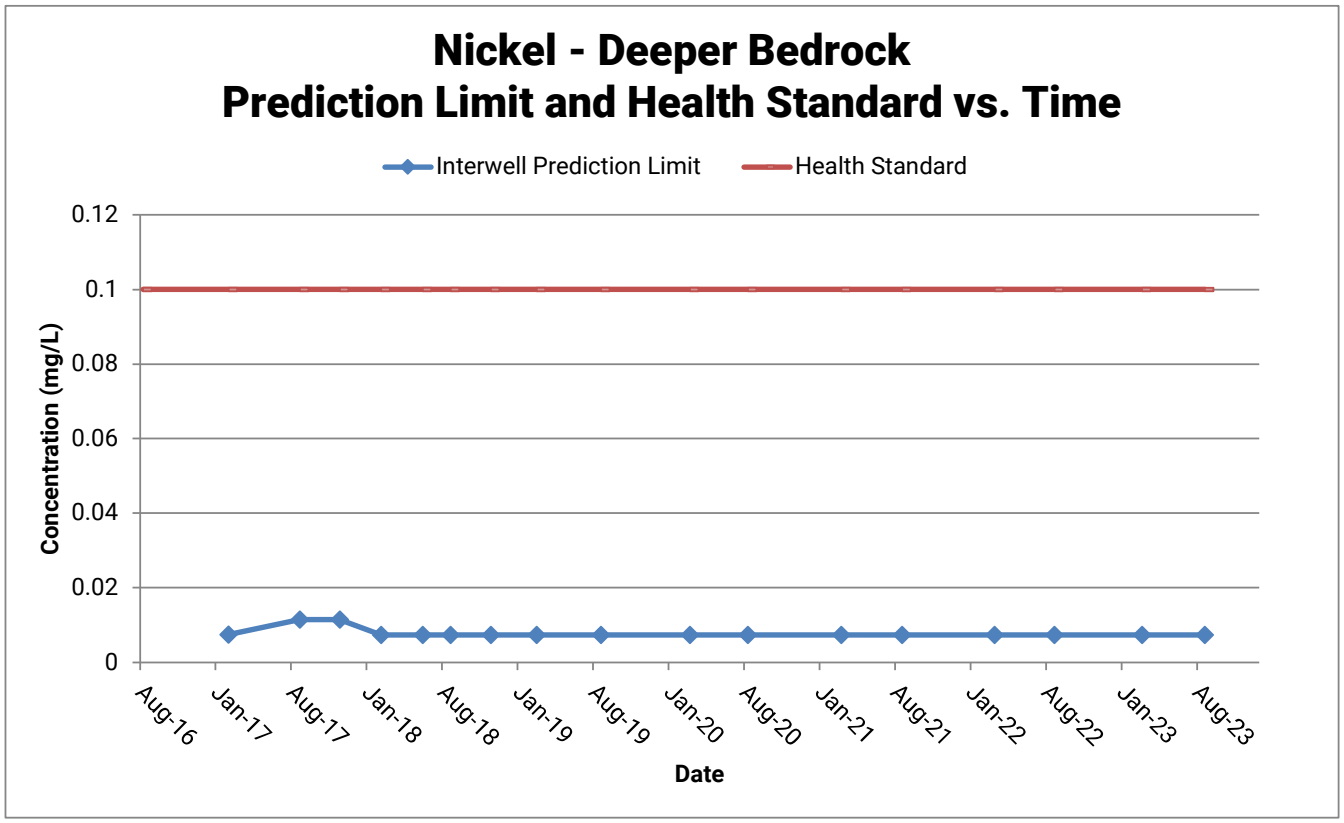

Barium - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

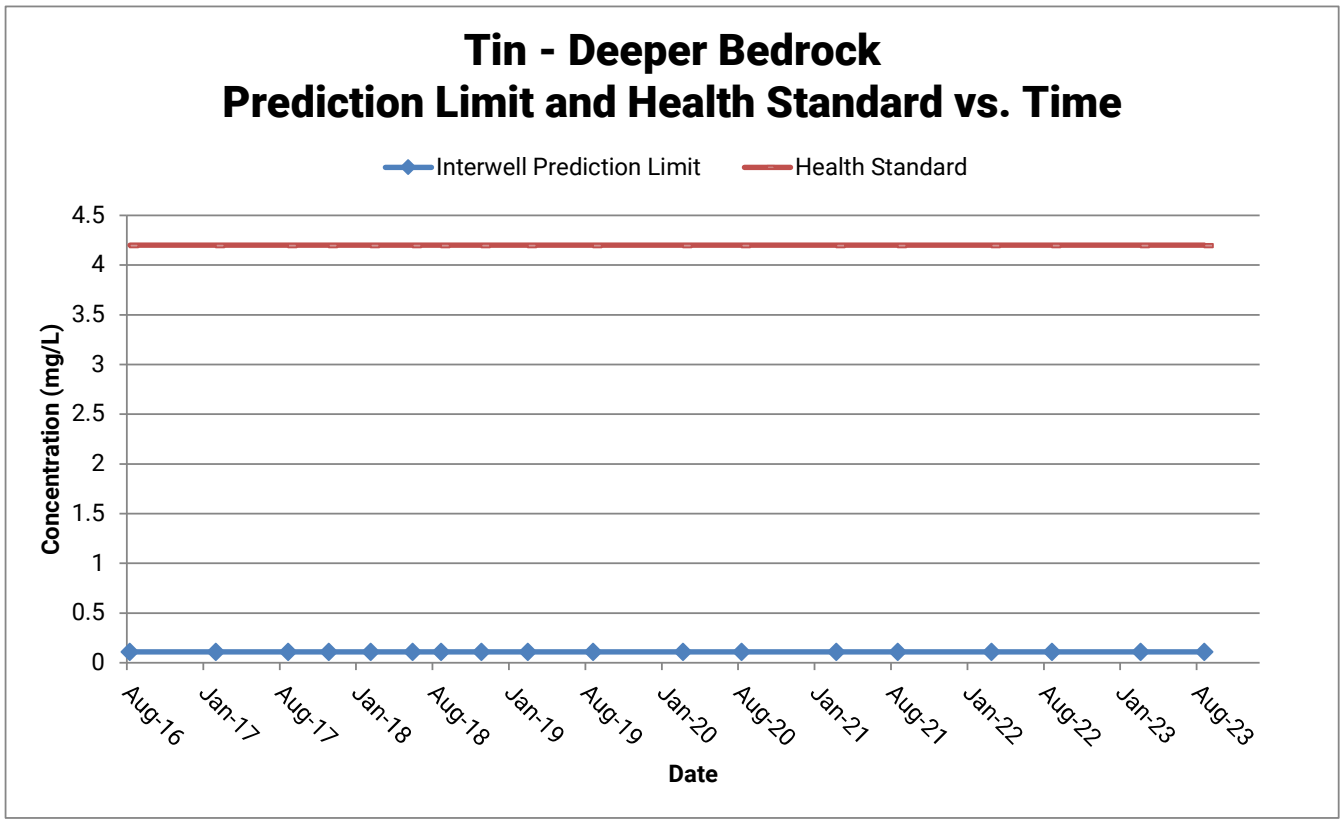

Bis(2-ethylhexyl)phthalate - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (µg/L)
30
25
20
15
10
5
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date


Cadmium - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
Concentration (mg/L)
0.006
0.005
0.004
0.003
0.002
0.001
0
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date


Cobalt - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.0025
0.002
0.0015
0.001
0.0005
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date


Copper - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date


Nickel - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date


Tin - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
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Aug-22
Jan-23
Aug-23
Date

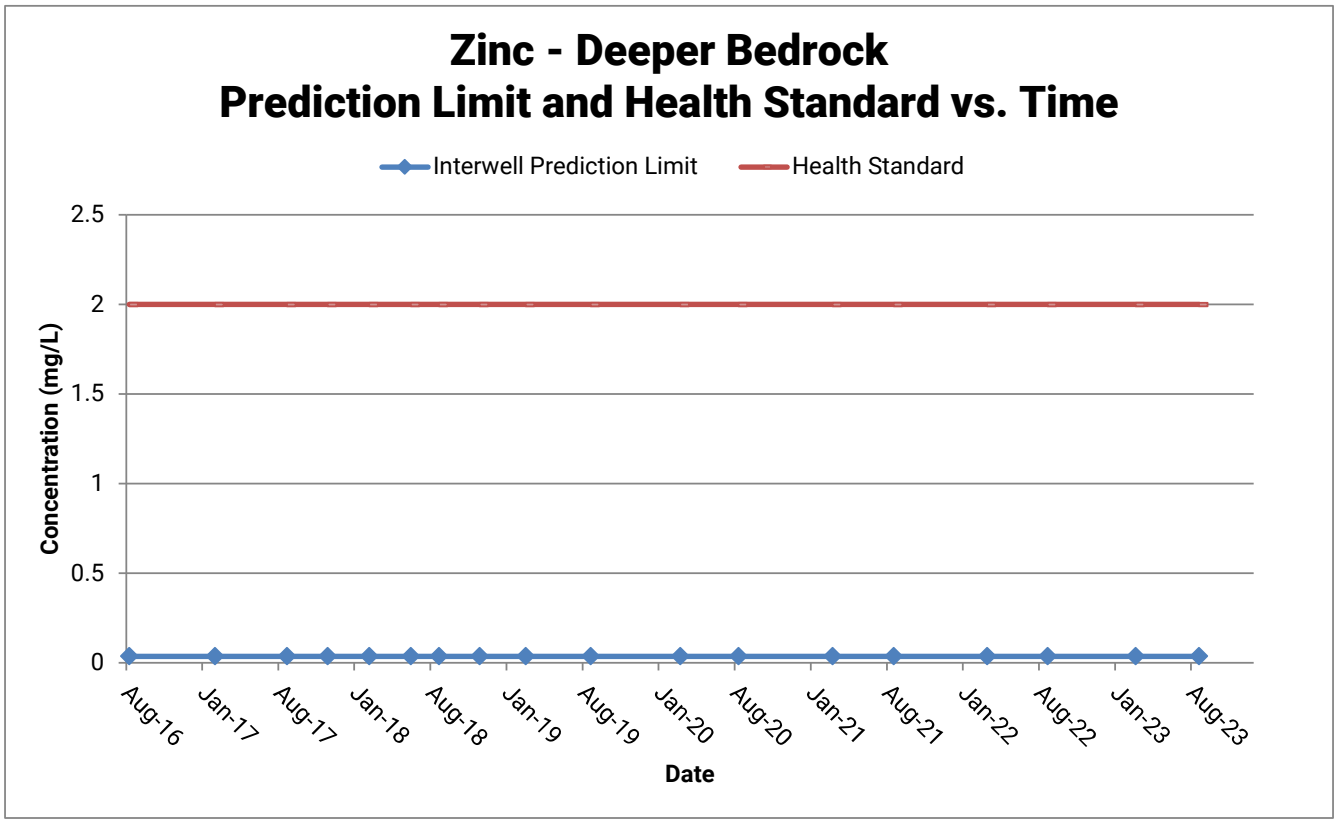
Zinc - Deeper Bedrock
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Aug-16
Jan-17
Aug-17
Jan-18
Aug-18
Jan-19
Aug-19
Jan-20
Aug-20
Jan-21
Aug-21
Jan-22
Aug-22
Jan-23
Aug-23
Date

Table 7
Summary of Ongoing and Newly Identified SSIs
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Well	Constituent [1]	Units	Most Recent Result [2]	Background Standard [3]	Lower Confidence Limit	GWPS [3]	Sample Dates		
							Initial Exceedance (above background)	Resample(s) [4]	5th Background Sample
Upper Bedrock Monitoring Locations									
Assessment Monitoring Locations									
AW-3	Arsenic	mg/L	0.00513	0.00205	0.0025	0.01	Fall 2011	N/S	Mar. 2010
AW-4	Copper	mg/L	0.0378	0.0225	0.01	1.3	Fall 2015	Jan. 2016	Mar. 2010
AW-5	Arsenic	mg/L	0.0133	0.00205	0.0065	0.01	Fall 2011	N/S	Mar. 2010
	Barium	mg/L	0.255	0.1166	0.12	2	Fall 2011	N/S	Mar. 2010
	Cadmium	mg/L	0.000219	0.0002	0.00015	0.005	Spring 2020	N/S	Mar. 2010
	Thallium	mg/L	0.00314	0.001	0.00020	0.002	Fall 2022	N/S	Mar. 2010
MW-21	Arsenic	mg/L	0.0371	0.0225	0.0015	0.01	Fall 2011	N/S	Mar. 2010
	Barium	mg/L	0.333	0.1166	0.25	2	Fall 2011	N/S	Mar. 2010
	Chlorobenzene	ug/L	2.14	1.00	1.2	100	Fall 2009	N/S	Mar. 2010
	Nickel	mg/L	0.0573	0.0522	0.034	0.1	Fall 2020	N/S	Mar. 2010
	Thallium	mg/L	0.00156	0.001	0.00100	0.002	Spring 2015	N/S	Mar. 2010
MW-23	Barium	mg/L	0.148	0.1166	0.13	2	Fall 2011	N/S	Mar. 2010
	Cadmium	mg/L	0.000228	0.0002	0.00015	0.005	Fall 2019	N/S	Mar. 2010
	Thallium	mg/L	0.00139	0.001	0.00100	0.002	Spring 2015	N/S	Mar. 2011
	Zinc	mg/L	0.1	0.0805	0.08	2	Fall 2011	N/S	Mar. 2010
MW-26	Barium	mg/L	0.139	0.1166	0.20	2	Fall 2011	N/S	Mar. 2010
MW-28	Barium	mg/L	0.155	0.1166	0.24	2	Fall 2011	N/S	Mar. 2010
VP-3	Arsenic	mg/L	0.0089	0.00205	0.0053	0.01	Fall 2010	N/S	Mar. 2010
	Barium	mg/L	0.682	0.1166	0.50	2	Fall 2011	N/S	Mar. 2010
VP-4	Arsenic	mg/L	0.00296	0.00205	0.0033	0.01	Fall 2011	N/S	Sep. 2010
Corrective Action Monitoring Locations - Assessment Constituents									
AW-1	1,4-Dichlorobenzene	ug/L	1.19	1.00	1.0	75	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.153	0.1166	0.32	2	Fall 2011	N/S	Mar. 2010
	Chlorobenzene	ug/L	4.09	1.00	4.8	100	Fall 2009	N/S	Mar. 2010
	Thallium	mg/L	0.0012 J-	0.001	0.00072	0.002	Spring 2017	N/S	Sep. 2010
AW-2	Barium	mg/L	0.438	0.1166	0.35	2	Fall 2011	N/S	Mar. 2010
	Chlorobenzene	ug/L	1.57	1.00	1.7	100	Fall 2009	N/S	Mar. 2010
	cis-1,2-Dichloroethene	ug/L	2.87	1.00	3.6	70	Fall 2009	N/S	Mar. 2010
MW-12	1,1-Dichloroethane	ug/L	3.58	1.00	13.4	140	Spring 2010	N/S	Mar. 2010
	1,4-Dichlorobenzene	ug/L	1.24	1.00	3.4	75	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.417	0.1166	0.16	2	Fall 2011	N/S	Mar. 2010
	Chlorobenzene	ug/L	2.23	1.00	2.5	100	Fall 2009	N/S	Mar. 2010
	cis-1,2-Dichloroethene	ug/L	3.55	1.00	4.2	70	Fall 2009	N/S	Mar. 2010
	Nickel	mg/L	0.0682	0.05	0.1	0.1	Fall 2009	N/S	Mar. 2010
	Thallium	mg/L	0.00211	0.00	0.0	0.002	Spring 2013	N/S	Mar. 2010

Table 7
Summary of Ongoing and Newly Identified SSIs
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Well	Constituent [1]	Units	Most Recent Result [2]	Background Standard [3]	Lower Confidence Limit	GWPS [3]	Sample Dates		
							Initial Exceedance (above background)	Resample(s) [4]	5th Background Sample
Upper Bedrock Monitoring Locations									
Corrective Action Monitoring Locations - Assessment Constituents Continued									
MW-13	1,2-Dichlorobenzene	ug/L	1.24	1.00	2.2	600	Fall 2010	N/S	Mar. 2010
	1,4-Dichlorobenzene	ug/L	12.9	1.00	11.8	75	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.794	0.1166	0.54	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	3.51	0.500	3.90	5	Fall 2009	N/S	Mar. 2010
	Chlorobenzene	ug/L	3.49	1.00	4.2	100	Fall 2009	N/S	Mar. 2010
MW-16	1,1-Dichloroethane	ug/L	1.77	1.00	2.1	140	Spring 2010	N/S	Mar. 2010
	Benzene	ug/L	0.534	0.500	1.74	5	Fall 2009	N/S	Mar. 2010
	Chlorobenzene	ug/L	2.02	1.00	1.4	100	Fall 2010	N/S	Mar. 2010
MW-17	Barium	mg/L	0.134	0.1166	0.13	2	Fall 2011	N/S	Mar. 2010
MW-20	Arsenic [5]	mg/L	0.00565	0.00205	0.0034	0.01	Spring 2012	N/S	Mar. 2010
	Barium	mg/L	0.150	0.1166	0.14	2	Fall 2011	N/S	Mar. 2010
	Zinc	mg/L	0.0820	0.0805	0.06	2	Fall 2011	N/S	Mar. 2010
MW-24	1,2-Dichlorobenzene	ug/L	5.07	1.00	3.9	600	Spring 2010	N/S	Mar. 2010
	1,4-Dichlorobenzene	ug/L	11.9	1.00	7.3	75	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.758	0.1166	0.76	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	7.69	0.500	4.41	5	Fall 2009	N/S	Mar. 2010
	Chlorobenzene	ug/L	68	1.00	27.4	100	Fall 2009	N/S	Mar. 2010
	Thallium	mg/L	0.0015 J-	0.001	0.00050	0.002	Fall 2016	N/S	Sep. 2010
MW-30	1,1-Dichloroethane	ug/L	7.97	1.00	8.3	140	Spring 2010	N/S	Mar. 2010
	Barium	mg/L	0.203	0.1166	0.18	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	1.29	0.500	1.70	5	Fall 2009	N/S	Mar. 2010
	Chloroethane	ug/L	8.67	4.00	9.7	2800	Fall 2009	N/S	Mar. 2010
	cis-1,2-Dichloroethene	ug/L	5.56	1.00	5.0	70	Fall 2009	N/S	Mar. 2010
	Vinyl Chloride	ug/L	1.65	1.00	1.03	2	Fall 2010	N/S	Mar. 2010
	Zinc	mg/L	0.0833	0.0805	0.07	2	Fall 2011	N/S	Mar. 2010
MW-32	1,4-Dichlorobenzene	ug/L	3.42	1.00	3.4	75	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.918	0.1166	0.70	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	0.647	0.500	1.54	5	Fall 2009	N/S	Mar. 2010
	Chlorobenzene	ug/L	8.06	1.00	8.7	100	Fall 2009	N/S	Mar. 2010
MW-34	1,1-Dichloroethane	ug/L	4.75	1.00	8.3	140	Spring 2010	N/S	Mar. 2010
	1,4-Dichlorobenzene	ug/L	2.17	1.00	3.0	75	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.373	0.1166	0.25	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	1.56	0.500	2.17	5	Fall 2009	N/S	Mar. 2010
	Chlorobenzene	ug/L	2.41	1.000	2.74	100	Fall 2009	N/S	Mar. 2010
	cis-1,2-Dichloroethene	ug/L	6.03	1.000	5.26	70	Fall 2009	N/S	Mar. 2010

Table 7
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Well	Constituent [1]	Units	Most Recent Result [2]	Background Standard [3]	Lower Confidence Limit	GWPS [3]	Sample Dates		
							Initial Exceedance (above background)	Resample(s) [4]	5th Background Sample
Upper Bedrock Monitoring Locations									
Corrective Action Monitoring Locations - Assessment Constituents Continued									
MW-34	Nickel	mg/L	0.0640	0.0522	0.047	0.1	Fall 2011	N/S	Mar. 2010
Cont.	trans-1,2-Dichloroethene	ug/L	1.02	1.00	1.3	100	Fall 2009	N/S	Mar. 2010
MW-35	Arsenic	mg/L	0.00536	0.00205	0.0042	0.01	Fall 2011	N/S	Mar. 2010
	Barium	mg/L	0.167	0.1166	0.14	2	Fall 2011	N/S	Mar. 2010
Delineation Monitoring Locations - Assessment Constituents									
MW-105A	No SSIs								
MW-106A	No SSIs								
MW-107A	Barium	mg/L	0.131	0.1166	0.10	2	Fall 2022	N/S	Sep. 2014
MW-109A	Barium	mg/L	0.196	0.1166	0.10	2	Nov. 2017	Mar. 2018	Nov. 2018
Deeper Bedrock Monitoring Locations									
Assessment Monitoring Locations									
MW-11	No SSIs								
MW-15	Cobalt	mg/L	0.0032	0.0008831	0.00142	0.0021	Fall 2016	N/S	Mar. 2011
	Nickel	mg/L	0.0104	0.00735	0.006	0.1	Spring 2016	N/S	Mar. 2011
MW-18	No SSIs								
MW-19	Nickel	mg/L	0.015	0.00735	0.008	0.1	Spring 2015	N/S	Mar. 2010
MW-25	Barium	mg/L	0.221	0.138	0.18	2	Fall 2011	N/S	Mar. 2010
	Lead	mg/L	0.0006	0.0005	0.0003	0.015	Fall 2023	N/S	Mar. 2010
	Thallium	mg/L	0.00307	0.001	0.00050	0.002	Fall 2023	N/S	Sep. 2010
Corrective Action Monitoring Locations - Assessment Constituents									
AW-6	1,1-Dichloroethane	ug/L	1.29	1.00	2.1	140	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.178	0.138	0.10	2	Fall 2011	N/S	Mar. 2010
	Nickel	mg/L	0.0318	0.00735	0.025	0.1	Spring 2015	N/S	Mar. 2010
CRL-9	Barium	mg/L	0.518	0.138	0.43	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	3.05	0.500	1.48	5	Fall 2009	N/S	Mar. 2010
	Nickel	mg/L	0.0217	0.00735	0.018	0.1	Spring 2015	N/S	Mar. 2010
MW-14	1,1-Dichloroethane	ug/L	1.7	1.00	1.8	140	Fall 2010	N/S	Mar. 2010
	1,4-Dichlorobenzene	ug/L	7.04	1.00	4.9	75	Spring 2011	N/S	Mar. 2010
	Barium	mg/L	0.373	0.138	0.13	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	0.943	0.500	2.30	5	Fall 2009	N/S	Mar. 2010
	Chlorobenzene	ug/L	2.06	1.00	2.8	100	Fall 2010	N/S	Mar. 2010
	Nickel	mg/L	0.0171	0.00735	0.013	0.1	Fall 2009	N/S	Mar. 2010

Table 7
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Well	Constituent [1]	Units	Most Recent Result [2]	Background Standard [3]	Lower Confidence Limit	GWPS [3]	Sample Dates		
							Initial Exceedance (above background)	Resample(s) [4]	5th Background Sample
Deeper Bedrock Monitoring Locations									
Corrective Action Monitoring Locations - Assessment Constituents Continued									
MW-22	1,1-Dichloroethane	ug/L	1.09	1.00	1.6	140	Fall 2009	N/S	Mar. 2010
	Barium	mg/L	0.653	0.138	0.62	2	Fall 2011	N/S	Mar. 2010
	Nickel	mg/L	0.0314	0.00735	0.029	0.1	Spring 2015	N/S	Mar. 2010
	Thallium	mg/L	0.00241	0.001	0.00050	0.002	Fall 2023	N/S	Sep. 2010
MW-33	1,4-Dichlorobenzene	ug/L	1.19	1.00	0.5	75	Fall 2023	N/S	Mar. 2010
	Barium	mg/L	0.819	0.138	0.44	2	Fall 2011	N/S	Mar. 2010
	Benzene	ug/L	0.56	0.500	0.25	5	Fall 2019	N/S	Mar. 2010
	Chlorobenzene	ug/L	7.1	1.00	3.5	100	Fall 2009	N/S	Mar. 2010
	Cobalt	mg/L	0.00147	0.0008831	0.00113	0.0021	Fall 2016	N/S	Mar. 2010
	Nickel	mg/L	0.00841	0.00735	0.006	0.1	Fall 2015	N/S	Mar. 2010
MW-36	1,4-Dichlorobenzene	ug/L	1.69	1.00	1.8	75	Spring 2011	N/S	Mar. 2010
	Barium	mg/L	0.735	0.138	0.60	2	Fall 2011	N/S	Mar. 2010
	Chlorobenzene	ug/L	6.29	1.00	6.5	100	Fall 2010	N/S	Mar. 2010
	Cobalt	mg/L	0.00126	0.0008831	0.00135	0.0021	Fall 2016	N/S	Mar. 2010
Delineation Monitoring Locations - Assessment Constituents									
MW-102B	Cobalt	mg/L	0.00105	0.0008831	0.00069	0.0021	Aug. 2016	N/S	Sep. 2014
MW-104B	No SSI for Arsenic								
MW-105B	1,1-Dichloroethane	ug/L	2.49	1.00	2.7	140	Sep. 2013	Nov. 2013	Sep. 2014
	Barium	mg/L	0.143	0.138	0.11	2	Sep. 2016	N/S	Sep. 2014
	Nickel	mg/L	0.0108	0.00735	0.010	0.1	Mar. 2015	N/S	Sep. 2014
MW-107B	Barium	mg/L	0.302	0.138	0.28	2	Sep. 2013	Nov. 2013	Sep. 2014
	Cobalt	mg/L	0.00275	0.0008831	0.00115	0.0021	Sep. 2016	N/S	Sep. 2014
	Nickel	mg/L	0.0126	0.00735	0.011	0.1	Mar. 2015	N/S	Sep. 2014
	Thallium	mg/L	0.002	0.001	0.00189	0.002	Mar. 2015	N/S	Sep. 2014
MW-108B	Barium	mg/L	0.183	0.138	0.17	2	Nov. 2017	Mar. 2018	Nov. 2018
MW-109B	Barium	mg/L	0.747	0.138	0.66	2	Nov. 2017	Mar. 2018	Nov. 2018
	Chlorobenzene	ug/L	6.68	1.00	6.3	100	Nov. 2017	Mar. 2018	Nov. 2018
	Nickel	mg/L	0.0347	0.00735	0.035	0.1	Nov. 2017	Mar. 2018	Nov. 2018

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

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

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

Table 7
Summary of Ongoing and Newly Identified SSIs
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Comments:

N/A = Not applicable.

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

GWPS = Groundwater Protection Standard

(1) List contains constituents which have been identified as SSIs in Fall 2023. Unless otherwise noted, all current results listed in this table are above background. SSIs were declared in lieu of conducting resample(s).

(2) Most recent results are from Aug. 2023.

(3) Source of background standards and GWPS values are presented in Table 5. If constituent isn't listed in Table 5 (indicating constituent hasn't been detected in background), then the background standard is the laboratory RL and the GWPS is the MCL or the SS if there's no MCL.

(4) Upper and deeper bedrock detection, assessment, and corrective action monitoring locations initiated the Appendix I/II monitoring required by the 2007 rule revisions with assessment monitoring for the full Appendix II list starting in Aug. 2008. Since locations were already in assessment monitoring, the initial statistical exceedances over background were declared as SSIs in lieu of conducting resample(s).

(5) During previous statistical evaluations, arsenic in MW-20 was evaluated as a corrective action constituent. Arsenic in MW-20 exited corrective action and returned to an assessment constituent in Fall 2023 in accordance with IAC 113.10(9)e(2) since compliance with the GWPS had been achieved for a duration of three consecutive years during the Fall 2022 statistical evaluation.

• No SSLs were identified for the upper and deeper bedrock assessment monitoring locations. None of the upper and deeper bedrock assessment monitoring locations have had all Appendix II constituents below background for three consecutive sampling events; therefore, the upper and deeper bedrock assessment monitoring locations will not exit assessment monitoring at this time. Details regarding the future sampling schedules are provided in Table 2.

• No SSLs were identified for the assessment constituents in the upper and deeper bedrock corrective action monitoring locations. These locations will continue corrective action monitoring in 2024 as listed in Table 2. A summary of the statistical comparisons for the corrective action constituents is provided in Table 8.

• No SSLs were identified for the assessment constituents in the upper and deeper bedrock delineation monitoring wells. These locations will continue delineation monitoring in 2024 as listed in Table 2. A summary of the statistical comparisons for the corrective action constituents is provided in Table 8.

Table 8
Summary of Ongoing and Newly Identified SSLs
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Well [1]	Constituent [1]	Units	Most Recent Result [1]	Upper Confidence Limit [2]	GWPS [3]	Initial Exceedance	Consecutive Compliance Dates		
							1st Occurrence	Most Recent	Duration
Upper Bedrock Monitoring Locations									
Corrective Action Monitoring Locations									
AW-1	Arsenic	mg/L	0.0678	0.0478	0.01	Fall 2011	N/A	N/A	N/A
AW-2	Arsenic	mg/L	0.0173	0.0173	0.01	Spring 2012	N/A	N/A	N/A
	Thallium	mg/L	0.00277	0.00375	0.002	Spring 2010	N/A	N/A	N/A
MW-12	Arsenic	mg/L	0.156	0.1367	0.01	Fall 2010	N/A	N/A	N/A
MW-13	Arsenic	mg/L	0.0549	0.0552	0.01	Fall 2010	N/A	N/A	N/A
MW-16	Arsenic	mg/L	0.0775	0.1295	0.01	Fall 2011	N/A	N/A	N/A
MW-17	Arsenic	mg/L	0.048	0.0687	0.01	Fall 2010	N/A	N/A	N/A
MW-20 [4]	Thallium	mg/L	0.00153	0.00210	0.002	Fall 2013	N/A	N/A	N/A
MW-24	Arsenic	mg/L	0.024	0.0273	0.01	Fall 2011	N/A	N/A	N/A
MW-30	Arsenic	mg/L	0.00927	0.0111	0.01	Fall 2010	N/A	N/A	N/A
MW-32	Arsenic	mg/L	0.207	0.0850	0.01	Fall 2011	N/A	N/A	N/A
MW-34	Arsenic	mg/L	0.0418	0.0339	0.01	Fall 2011	N/A	N/A	N/A
	Vinyl Chloride	ug/L	6.35	4.14	2	Spring 2010	N/A	N/A	N/A
MW-35	Cobalt	mg/L	0.00535	0.00701	0.008	Spring 2014	Fall 2022	Fall 2023	2 years
Delineation Monitoring Locations									
MW-105A	Cobalt	mg/L	0.00445	0.00851	0.008	Spring 2015	N/A	N/A	N/A
MW-106A	Arsenic	mg/L	0.0124	0.0135	0.01	Fall 2016	N/A	N/A	N/A
	Cobalt	mg/L	0.00913	0.01818	0.008	Fall 2015	N/A	N/A	N/A
Deeper Bedrock Monitoring Locations									
Corrective Action Monitoring Locations									
AW-6	Cobalt	mg/L	0.01	0.00913	0.0021	Fall 2016	N/A	N/A	N/A
CRL-9	Arsenic	mg/L	0.0335	0.0397	0.01	Fall 2011	N/A	N/A	N/A
	Cobalt	mg/L	0.00489	0.00503	0.0021	Fall 2016	N/A	N/A	N/A
MW-14	Arsenic	mg/L	0.0142	0.0273	0.01	Fall 2011	N/A	N/A	N/A
MW-22	Arsenic	mg/L	0.0566	0.0501	0.01	Fall 2011	N/A	N/A	N/A
	Cobalt	mg/L	0.00338	0.00318	0.0021	Spring 2019	N/A	N/A	N/A
MW-33	Arsenic	mg/L	0.0496	0.0380	0.01	Fall 2011	N/A	N/A	N/A
MW-36	Arsenic	mg/L	0.072	0.0694	0.01	Fall 2011	N/A	N/A	N/A
Delineation Monitoring Locations									
MW-105B	Cobalt	mg/L	0.00315	0.00333	0.0021	Spring 2019	N/A	N/A	N/A
MW-109B	Arsenic	mg/L	0.0192	0.0211	0.01	Winter 2018	N/A	N/A	N/A
	Cobalt	mg/L	0.0169	0.01818	0.0021	Fall 2018	N/A	N/A	N/A
	Thallium	mg/L	0.00342	0.00506	0.002	Fall 2018	N/A	N/A	N/A

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

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

Table 8
Summary of Ongoing and Newly Identified SSLs
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Comments:

GWPS = Groundwater Protection Standard

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

(1) The most recent results are from the Aug. 2023 event.

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

(3) Source of GWPS values are presented in Table 5. If constituent isn't listed in Table 5 (indicating constituent hasn't been detected in background), then the GWPS is the MCL or the SS if there's no MCL.

(4) Arsenic in MW-20 exited corrective action and returned to an assessment constituent in Fall 2023 in accordance with IAC 113.10(9)e(2) since compliance with the GWPS had been achieved for a duration of three consecutive years during the Fall 2022 statistical evaluation. As a result, arsenic in MW-20 was removed from this table. Note that MW-20 will remain in corrective action monitoring until all corrective action constituents are compliant with the GWPS for three consecutive years.

• For the corrective action constituents in the upper bedrock corrective action and delineation monitoring locations, SSLs over the GWPS remained for arsenic in AW-1, AW-2, MW-12, MW-13, MW-16, MW-17, MW-24, MW-30, MW-32, MW-34, and MW-106A; for cobalt in MW-105A and MW-106A; for thallium in AW-2 and MW-20; and for vinyl chloride in MW-34. While compliance with the GWPS was not achieved, statistically significant decreasing trends were identified for arsenic in AW-1, MW-12, MW-17, MW-24, MW-30, MW-34 and MW-106A; cobalt in MW-105A; thallium in AW-2 and MW-20; and vinyl chloride in MW-34.

• Compliance with the GWPS was achieved for cobalt in MW-35 starting with the Fall 2022 statistical evaluation. In accordance with IAC 113.10(9)e(2), cobalt in MW-35 will return to an assessment constituent in 2025 as long as concentrations remain statistically below the GWPS during interim statistical evaluations.

• For the corrective action constituents in the deeper bedrock corrective action and delineation monitoring locations, SSLs over the GWPS remained for arsenic in CRL-9, MW-14, MW-22, MW-33, MW-36, and MW-109B; for cobalt in AW-6, CRL-9, MW-22, MW-105B, and MW-109B; and for thallium in MW-109B. While compliance with the GWPS was not achieved, a statistically significant decreasing trend was identified for cobalt in MW-109B.

• No changes are recommended for the upper and deeper bedrock corrective action and delineation monitoring locations based on the corrective action statistical results conducted during the Fall 2023 statistical evaluation.

Table 9
Historic SSIs and SSLs
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Key:
gray = SSI
black = SSL
orange = SSL achieved compliance with the GWPS (1 event)

Well	Constituent	Spring 2017	Fall 2017	Spring 2018	Summer 2018	Fall 2018	Winter 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Winter 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Winter 2023	Spring 2023	Fall 2023
Upper Bedrock Monitoring Locations																			
Downgradient Monitoring Locations																			
AW-1	1,4-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Silver				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Zinc				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
AW-2	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Toluene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
AW-3	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Silver				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Toluene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
AW-4	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Copper				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Silver				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
AW-5	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chromium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	

Table 9
Historic SSIs and SSLs
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Cedar Rapids Linn County Solid Waste Agency Site 1
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Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring 2017	Fall 2017	Spring 2018	Summer 2018	Fall 2018	Winter 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Winter 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Winter 2023	Spring 2023	Fall 2023
Well	**Constituent**																		
Upper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
AW-5 Continued	Cobalt [1]				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Selenium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Silver				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.					N.S.	N.S.	
MW-12	1,1-Dichloroethane				N.S.		N.S.					N.S.					N.S.		
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Arsenic				N.S.		N.S.					N.S.					N.S.		
	Barium				N.S.		N.S.					N.S.					N.S.		
	Benzene				N.S.		N.S.					N.S.					N.S.		
	Chlorobenzene				N.S.		N.S.					N.S.					N.S.		
	cis-1,2 Dichloroethene				N.S.		N.S.					N.S.					N.S.		
	Nickel [2]				N.S.		N.S.					N.S.					N.S.		
	Thallium				N.S.		N.S.					N.S.					N.S.		
	Vinyl Chloride				N.S.		N.S.					N.S.					N.S.		
MW-13	1,1-Dichloroethane				N.S.		N.S.					N.S.					N.S.		
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Arsenic				N.S.		N.S.					N.S.					N.S.		
	Acetone				N.S.		N.S.					N.S.					N.S.		
	Barium				N.S.		N.S.					N.S.					N.S.		
	Benzene				N.S.		N.S.					N.S.					N.S.		
	Chlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Chloroethane				N.S.		N.S.					N.S.					N.S.		
	cis-1,2 Dichloroethene				N.S.		N.S.					N.S.					N.S.		
	Cobalt [2]				N.S.		N.S.					N.S.					N.S.		
	Nickel [2]				N.S.		N.S.					N.S.					N.S.		
	Vinyl Chloride [2]				N.S.		N.S.					N.S.					N.S.		
MW-16	1,1-Dichloroethane				N.S.		N.S.					N.S.					N.S.		
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		

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Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring	Fall	Spring	Summer	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall
Well	**Constituent**	**2017**	**2017**	**2018**	**2018**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2020**	**2021**	**2021**	**2022**	**2022**	**2023**	**2023**	**2023**
Upper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
MW-16	Arsenic				N.S.		N.S.					N.S.					N.S.		
Continued	Barium				N.S.		N.S.					N.S.					N.S.		
	Benzene				N.S.		N.S.					N.S.					N.S.		
	Cadmium				N.S.		N.S.					N.S.					N.S.		
	Chlorobenzene				N.S.		N.S.					N.S.					N.S.		
	cis-1,2 Dichloroethene				N.S.		N.S.					N.S.					N.S.		
	Ethylbenzene				N.S.		N.S.					N.S.					N.S.		
	Silver				N.S.		N.S.					N.S.					N.S.		
	Thallium				N.S.		N.S.					N.S.					N.S.		
	Nickel				N.S.		N.S.					N.S.					N.S.		
MW-17	Arsenic				N.S.		N.S.					N.S.					N.S.		
	Barium				N.S.		N.S.					N.S.					N.S.		
	Cobalt [1]				N.S.		N.S.					N.S.					N.S.		
MW-20	Arsenic [3]				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chromium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Zinc				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-21	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2 Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Zinc				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-23	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	

Table 9
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Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring	Fall	Spring	Summer	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall
Well	**Constituent**	**2017**	**2017**	**2018**	**2018**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2020**	**2021**	**2021**	**2022**	**2022**	**2023**	**2023**	**2023**
Upper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
MW-23	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
Continued	Zinc				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-24	1,2-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	2,4-D	N.S.	N.S.	N.S	N.S	N.S	N.S	N.S	N.S	N.S		N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-26	Acetone				N.S.		N.S.					N.S.	N.S.		N.S.				
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.				
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.				
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.				
	Heptachlor				N.S.		N.S.					N.S.	N.S.		N.S.	N.S.			
	Toluene				N.S.		N.S.					N.S.	N.S.		N.S.				
MW-28	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-30	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chromium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	trans-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	

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Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring 2017	Fall 2017	Spring 2018	Summer 2018	Fall 2018	Winter 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Winter 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Winter 2023	Spring 2023	Fall 2023
Well	**Constituent**	**2017**	**2017**	**2018**	**2018**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2020**	**2021**	**2021**	**2022**	**2022**	**2023**	**2023**	**2023**
Upper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
MW-30	Vinyl Chloride				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
Continued	Zinc				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-32	1,2-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Arsenic				N.S.		N.S.					N.S.					N.S.		
	Barium				N.S.		N.S.					N.S.					N.S.		
	Benzene				N.S.		N.S.					N.S.					N.S.		
	Cadmium				N.S.		N.S.					N.S.					N.S.		
	Cobalt				N.S.		N.S.					N.S.					N.S.		
	Chlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Nickel				N.S.		N.S.					N.S.					N.S.		
MW-34	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	alpha-BHC				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chromium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Toluene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	trans-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Vinyl Chloride				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-35	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Selenium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	

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Well	**Constituent**																		
Upper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
VP-3	Arsenic [2]				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
VP-4	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
Delineation Monitoring Locations																			
MW-105A	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-106A	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-107A	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cadmium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-109A	Barium	N.S.	N.S.									N.S.	N.S.		N.S.		N.S.	N.S.	
	Selenium	N.S.	N.S.									N.S.	N.S.		N.S.		N.S.	N.S.	
Deeper Bedrock Monitoring Locations																			
Downgradient Monitoring Locations																			
AW-6	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
CRL-9	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chromium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	

Table 9
Historic SSIs and SSLs
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Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring	Fall	Spring	Summer	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall
Well	**Constituent**	**2017**	**2017**	**2018**	**2018**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2020**	**2021**	**2021**	**2022**	**2022**	**2023**	**2023**	**2023**
Deeper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
CRL-9	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
Continued	Toluene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-11	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-14	1,1-Dichloroethane				N.S.		N.S.					N.S.					N.S.		
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Arsenic				N.S.		N.S.					N.S.					N.S.		
	Barium				N.S.		N.S.					N.S.					N.S.		
	Benzene				N.S.		N.S.					N.S.					N.S.		
	Chlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Chloroethane				N.S.		N.S.					N.S.					N.S.		
	Chromium				N.S.		N.S.					N.S.					N.S.		
	cis-1,2-Dichloroethene				N.S.		N.S.					N.S.					N.S.		
	Cobalt				N.S.		N.S.					N.S.					N.S.		
	Nickel				N.S.		N.S.					N.S.					N.S.		
	Silver				N.S.		N.S.					N.S.					N.S.		
	Toluene				N.S.		N.S.					N.S.					N.S.		
MW-15	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Silver				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-18	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-19	Carbon Disulfide				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-22	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	1,2-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	1,4-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	2-Butanone				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S		N.S					N.S.	N.S.		N.S.		N.S.	N.S.	

Table 9
Historic SSIs and SSLs
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Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring	Fall	Spring	Summer	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall
Well	**Constituent**	**2017**	**2017**	**2018**	**2018**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2020**	**2021**	**2021**	**2022**	**2022**	**2023**	**2023**	**2023**
Deeper Bedrock Monitoring Locations Continued																			
Downgradient Monitoring Locations Continued																			
MW-22 Continued	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-25	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S		N.S					N.S.	N.S.		N.S.		N.S.	N.S.	
	Lead				N.S		N.S					N.S	N.S		N.S		N.S	N.S	
	Thallium				N.S		N.S					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-31	No SSIs or SSLs																		
MW-33	1,4-Dichlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Arsenic				N.S.		N.S.					N.S.					N.S.		
	Barium				N.S.		N.S.					N.S.					N.S.		
	Benzene				N.S.		N.S.					N.S.					N.S.		
	Cadmium				N.S.		N.S.					N.S.					N.S.		
	Chlorobenzene				N.S.		N.S.					N.S.					N.S.		
	Cobalt				N.S.		N.S.					N.S.					N.S.		
	Lead				N.S.		N.S.					N.S.					N.S.		
	Nickel				N.S.		N.S.					N.S.					N.S.		
	Zinc				N.S.		N.S.					N.S.					N.S.		
MW-36	1,4-Dichlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Benzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chlorobenzene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Chromium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
Delineation Monitoring Locations																			
MW-102B	Barium				N.S.	N.S.	N.S.	N.S.				N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.	N.S.	N.S.	N.S.				N.S.	N.S.		N.S.		N.S.	N.S.	

Table 9
Historic SSIs and SSLs
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Key: gray = SSI black = SSL orange = SSL achieved compliance with the GWPS (1 event)		Spring	Fall	Spring	Summer	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall	Spring	Fall	Winter	Spring	Fall
Well	**Constituent**	**2017**	**2017**	**2018**	**2018**	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2020**	**2021**	**2021**	**2022**	**2022**	**2023**	**2023**	**2023**
Deeper Bedrock Monitoring Locations Continued																			
Delineation Monitoring Locations Continued																			
MW-104B [4]	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-105B	1,1-Dichloroethane				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Arsenic				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Beryllium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	cis-1,2-Dichloroethene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Selenium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Silver				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-107B	Barium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Cobalt				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Thallium				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
	Toluene				N.S.		N.S.					N.S.	N.S.		N.S.		N.S.	N.S.	
MW-108B [5]	Barium	N.S.	N.S.									N.S.	N.S.		N.S.		N.S.	N.S.	
	Nickel	N.S.	N.S.									N.S.	N.S.		N.S.		N.S.	N.S.	
MW-109B	1,1-Dichloroethane	N.S.	N.S.									N.S.					N.S.		
	1,4-Dichlorobenzene	N.S.	N.S.									N.S.					N.S.		
	Arsenic	N.S.	N.S.									N.S.					N.S.		
	Barium	N.S.	N.S.									N.S.					N.S.		
	Chlorobenzene	N.S.	N.S.									N.S.					N.S.		
	Cobalt	N.S.	N.S.									N.S.					N.S.		
	Nickel	N.S.	N.S.									N.S.					N.S.		
	Thallium	N.S.	N.S.									N.S.					N.S.		

Comments:

N.S. = Not sampled due to 1) well not installed yet; 2) location was dry or inaccessible; 3) location was not included in quarterly baseline/retesting/semiannual event; 4) only limited parameters analyzed during quarterly event; or 5) well returned to detection monitoring and Appendix II parameter is no longer sampled.

(1) After the Spring 2020 statistical evaluation, cobalt in AW-5 and MW-17 achieved compliance with the GWPS for a duration of three years. As a result, cobalt in AW-5 and MW-17 returned to assessment constituents starting with the Fall 2020 statistical evaluation in accordance with IAC 113.10(9)e(2).

Table 9
Historic SSIs and SSLs
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
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Comments Continued:

(2) After the Fall 2019 statistical evaluation, nickel in MW-12; cobalt, nickel, and vinyl chloride in MW-13; and arsenic in VP-3 had achieved compliance with the GWPS for durations of three or more years. As a result, these analyte/well pairs returned to assessment constituents starting with the Spring 2020 statistical evaluation in accordance with IAC 113.10(9)e(2).

(3) After the Fall 2022 statistical evaluation, arsenic in MW-20 had achieved compliance with the GWPS for a duration of three years. As a result, arsenic in MW-20 returned to an assessment constituent starting with the Fall 2023 statistical evaluation in accordance with IAC 113.10(9)e(2). Note: as indicated in Table 2, MW-20 is sampled annually in accordance with Permit Amendment #16.

(4) MW-104B is only analyzed for cobalt in accordance with the *Response to DNR Comments dated March 10, 2015* letter (Foth, 2015b). Note that in Spring 2019, MW-104B was inadvertently sampled for the Appendix I list and TSS. However, since analysis is intended to be limited to cobalt and TSS at MW-104B, only cobalt in MW-104B was evaluated for SSIs and SSLs during the Spring 2019 statistical evaluation. In Fall 2019, MW-104B resumed semiannual delineation monitoring for cobalt and TSS.

(5) IDNR approved the removal of cobalt from the list of analytes at MW-108B in the letter dated April 16, 2019 (IDNR, 2019). Cobalt was analyzed during the Mar. 2019 event since the event occurred prior to the IDNR approval letter; however, the Mar. 2019 result for cobalt in MW-108B was not included in the Spring 2019 statistical evaluation. Starting in Aug. 2019, cobalt was not included in the Appendix I analysis at MW-108B.

Table 11
Leachate Management Summary
2023 Leachate Collection System Performance Evaluation Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Month	Leachate Elevations (feet amsl)														Month	Leachate Collected (gal)	Volume Recirculated (gal)	Discharged to CRWPC (gal)	Precipitation (in)
	W-100	W-102	W-103	W-104	W-105	W-110	W-115	W-117	W-203	W-207	W-209	W-211	W-212	W-217	W-219					
January	753.10	751.42	736.37	745.74	734.04	827.83	814.02	782.27	851.18	809.99	799.81	842.63	763.88	N/A [2]	819.71	January	18,400	0	18,400	1.43
February	754.30	751.88	736.23	746.84	734.04	829.28	813.90	782.58	850.86	808.69	799.12	842.03	758.37	N/A [2]	819.40	February	14,370	0	14,370	2.47
March	755.25	752.12	736.44	745.14	734.03	827.53	815.77	783.83	851.19	810.29	799.99	842.23	766.79	N/A [2]	819.60	March	20,520	0	20,520	0.80
April	755.33	751.85	736.06	744.14	734.03	827.90	815.37	783.59	850.98	803.59	799.32	842.33	762.38	N/A [2]	819.48	April	16,360	0	16,360	1.23
May	754.86	751.38	735.95	745.20	734.03	827.71	815.15	782.98	851.27	804.99	798.93	842.93	760.53	N/A [2]	819.46	May	11,220	0	11,220	2.29
June	754.87	751.61	735.97	744.88	734.00	822.84	815.24	783.18	851.35	805.39	799.05	843.23	759.61	N/A [2]	819.48	June	2,700	0	2,700	2.25
July	753.74	748.57	734.34	744.48	732.76	821.78	811.65	782.67	851.26	800.89	793.80	840.93	759.39	N/A [2]	817.73	July	1,750	0	1,750	1.99
August	753.77	751.14	735.82	744.72	734.00	827.36	814.96	782.77	851.15	805.49	798.43	842.03	758.74	N/A [2]	819.72	August	330	0	330	1.95
September	753.37	750.81	735.69	744.82	733.99	825.15	814.83	782.37	850.74	809.29	798.55	840.73	766.45	N/A [2]	819.43	September	730	0	730	1.08
October	753.09	751.13	736.04	744.68	733.99	823.44	814.72	782.50	850.70	803.49	798.40	840.83	760.36	N/A [2]	819.50	October	1,010	0	1,010	2.96
November	751.40	750.78	735.95	744.97	734.00	825.54	814.38	782.09	850.66	806.19	797.97	839.63	757.84	N/A [2]	819.19	November	10,560	0	10,560	0.54
December	751.04	751.35	736.62	745.03	734.00	824.72	814.82	782.30	850.65	804.19	798.96	840.53	N/A [1]	N/A [2]	819.49	December	15,630	0	15,630	1.27
															2023 Annual Total		113,580	0	113,580	20.26

Comments:

amsl = above mean sea level

CRWPC = City of Cedar Rapids Water Pollution Control Facility

gal = gallons

in = inches

N/A = not applicable

TOC = top of casing

[1] At W-212, the elevation could not be measured in Dec. 2023 due to a restriction that was encountered at 72.2 feet below TOC (bTOC) in Dec. 2023.

[2] At W-217, a restriction was encountered at 63 feet bTOC starting in Jul./Sep. 2022 and remained throughout 2023; therefore, elevations could not be measured at this location in 2023. Field staff comments indicated hard refusal indicating the obstruction is due to well collapse.

- The contents of this report are intended to satisfy the requirements set forth in 567 IAC 113.26(8)d (effective 1/15/03).
- In 2023, there was no correlation between precipitation and leachate elevations or volumes.
- Limited maintenance is required for the leachate collection system because it consists of gravity draining side-slope laterals and a perimeter gravity toe drain. There are no pumps, tanks, or lagoons which require maintenance. In Jan. 2023, maintenance was performed on the associated gas collection system which consisted of installing new belts on the blower, cleaning the flame arrestor, and restoring vaccuum in the the gas wells.
- Leachate line cleaning and inspection was last conducted in Jul. 2022 by Roto-Rooter. The next line cleaning and inspection will be performed in 2025.
- Performance of the leachate collection is evaluated in Table 12.
- Laboratory analytical results for leachate testing, as submitted to CRWPC, are included in Appendix C.

Table 11
Leachate Management Summary
2023 Leachate Collection System Performance Evaluation Report
Cedar Rapids Linn County Solid Waste Agency Site 1
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Leachate Collection System Description:

• Construction of the existing leachate collection system was completed in Nov. 2007. A previous leachate pumping system, consisting of 13 low flow pumps in existing gas wells, was demonstrated to be ineffective, and the pumps were abandoned in 2005 as approved by IDNR.

• The existing leachate collection system consists of a gravity toe drain encompassing the perimeter of Site 1 (except for the south and southeast corner of the site) and laterals up the side slope (HRG, 2006). From Jun. 2008 through Spring 2013, Site 1 re-opened to receive disaster debris from the Jun. 2008 flood. Construction of the final landfill cover for Site 1 was completed in Aug. 2013. The final cover included an additional perforated liquid collection line surrounding the perimeter of the final cap.

• Leachate volumes collected in the toe drain are measured via a meter (LM-1) located in the northeast corner of the site, north-northeast of the Recreational Facility. Leachate is conveyed from LM-1 to the CRWPC via the sewer main. The Agency discharges leachate to CRWPC under an industrial discharge permit.

Table 12
Average Annual Leachate Elevations
2023 Leachate Collection System Performance Evaluation Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Monitoring Point	2013 (feet amsl)	2014 (feet amsl)	2015 (feet amsl)	2016 (feet amsl)	2017 (feet amsl)	2018 (feet amsl)	2019 (feet amsl)	2020 (feet amsl)	2021 (feet amsl)	2022 (feet amsl)	2023 (feet amsl)
W-100	755.13	755.85	754.96	755.43	754.82	754.93	757.66	757.40	756.22	754.27	753.68
W-102	744.47	746.14	747.48	748.62	748.48	748.03	750.24	750.70	751.35	750.67	751.17
W-103	731.90	731.44	733.28	734.32	734.09	733.77	734.56	735.07	735.77	735.29	735.95
W-104	744.73	744.48	745.14	745.14	744.97	744.67	745.59	745.56	745.53	745.33	745.05
W-105	733.12	734.13	734.80	735.13	734.99	734.81	733.59	734.06	733.87	734.02	733.91
W-110	822.71	820.58	821.62	823.89	823.64	821.15	829.69	830.00	829.42	826.93	825.92
W-115	815.92	817.34	818.52	819.67	819.60	817.85	819.71	819.93	817.60	815.38	814.57
W-117	780.09	781.31	782.66	783.24	782.95	780.47	782.08	782.83	783.26	783.02	782.76
W-203	857.07	855.90	855.59	853.90	853.04	851.69	851.73	851.88	851.76	851.18	851.00
W-207	800.74	810.71	808.29	806.59	805.58	809.09	806.17	808.74	805.82	805.34	806.04
W-209	800.11	802.60	802.71	802.33	801.63	800.57	800.18	799.96	799.95	798.63	798.52
W-211	858.11	855.13	857.52	859.15	859.00	858.35	857.32	854.12	849.61	843.27	841.67
W-212	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]	N/A [1]	763.98	761.30
W-217	N/A	889.50	886.06	884.81	885.46	879.54	879.11	879.06	878.74	878.64 [2]	N/A [2]
W-219	816.93	818.81	818.48	818.40	818.77	818.19	819.09	819.35	819.76	819.25	819.35

Comments:

amsl = above mean sea level

N/A = not applicable

[1] W-212 was added to the leachate elevation monitoring network starting in 2022.

[2] The 2022 annual average elevation at W-217 was calculated using the Feb. through Jun. 2022 and Aug. 2022 elevations. In 2023, the leachate elevation could not be measured due to a restriction that was encountered at 63 feet bTOC.

• Monthly leachate elevations measured between Jan. and Dec. 2023 are presented in Table 11. The average annual leachate elevations computed using measurements collected between Aug. 2013 and Dec. 2023 for each well are presented in this table (Table 12). Leachate contours are depicted with the groundwater contours in Figures 2 and 3.

• In accordance with Permit Special Provision X.10.c, effective control for an existing landfill is defined as achieving the lowest possible head as required in IAC 113.26(12)b(2) and maintaining surface and groundwater quality standards at compliance monitoring points.

• Leachate contours generally reflect the ground surface contours, with the highest leachate elevations near the top of the landfill where the greatest accumulation of waste is located, and the lowest leachate elevations located along the perimeters of the landfill. This leachate pattern is consistent with previous years and represents no significant change.

• Monthly fluctuation in the 2023 elevations was observed and did not correlate with precipitation. The leachate elevation fluctuations at Site 1 are likely attributable to differential settlement. During settlement, changes in leachate elevations are anticipated due to the physical characteristics of the waste and influence of less permeable layers within the landfill created during placement of daily soil cover. These layers can promote lateral movement of leachate and create perched leachate zones within the waste, which may not be representative of overall leachate head levels in the landfill. Landfill settlement and the resulting variations in leachate elevations are anticipated to continue as the waste degrades.

• Review of the average annual leachate elevations indicates stable or declining elevations at most of the leachate monitoring locations: W-100 (decreasing from 2020-2023), W-102 (stable since 2019), W-104 (stable to slightly decreasing since 2010), W-105 (stable since 2014), W-110 (stable 2019-2021 then decreasing), W-115 (stable 2015-2020 then decreasing), W-117 (stable since 2015), W-203 (decreasing to stable since 2014), W-207 (stable to slightly decreasing since 2014), W-209 (slightly decreasing/stable since 2014), W-211 (stable to decreasing since 2016), W-212 (decreasing in 2022-2023), and W-219 (stable since 2013). Discussions regarding W-103, W-212, and W-217 are provided below.

• At W-103, a slightly increasing trend was identified from 2010 to 2023 with elevations increasing by approximately 7.5 feet during this period. The slope of the increasing trend has been decreasing over time. From 2021-2023, elevations have remained approximately stable.

• At W-212, a casing restriction was encountered at 72.2 feet bTOC in Dec. 2023, which was identified once the liquid level decreased below this level (previous leachate levels were above than 72.2 feet bTOC). As depicted in Figure 4, W-214 is an existing leachate piezometer located approximately 400 feet east of W-212. Replacement of W-212 with W-214 is recommended for monitoring leachate elevations along the mid-central portion of the north side of Site 1.

• At W-217, a casing restriction was encountered at 63 feet bTOC starting in Jul./Sep. 2022 and remained throughout 2023. As reported in the *2022 AWQR* (Foth, 2023), repair or replacement of W-217 is not recommended. As detailed in *Response to DNR Comments dated March 10, 2015* (Foth, 2015b), several leachate wells cannot be repaired or replaced at the same location due to the presence of construction and demolition debris within the waste. W-217 is located near the top of the landfill in an area that was reopened and filled with disaster debris from the 2008 flood. Therefore, W-217 cannot be repaired or replaced at the same location. In addition, there are no suitable replacement locations to provide coverage near the top of the landfill due to the construction and demolition debris filled there. Surrounding W-217 at lower elevations, W-110, W-203, W-209, W-211, and W-219 provide good coverage below the top-central part of the landfill. Since leachate elevations remained below the restriction in 2023, removal of W-217 from the leachate monitoring network is recommended.

Table 12
Average Annual Leachate Elevations
2023 Leachate Collection System Performance Evaluation Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Conclusions:

• Site operations and management practices have been consistent with the regulatory intent to achieve the lowest possible leachate head levels. The leachate collection system continues to function as designed, and monthly elevations are collected to monitor short-term and long-term trends in the leachate elevation data. In 2023, no significant change to the leachate contour pattern occurred, and the variation in elevations was not correlated with precipitation. Steady to declining leachate elevations were generally observed, which, along with no apparent correlation with precipitation, supports that construction of the final cover and additional stormwater controls appears to have been effective in reducing infiltration.

• Groundwater and Surface Water Quality: Because the waste was deposited within an old rock quarry located adjacent to the river that had been mined into the water table, there is a component of natural groundwater flow through the waste that cannot be eliminated. This condition exacerbates some of the water quality issues presented in previous Annual Water Quality Reports and Leachate Control System Performance Evaluation Reports. During 1998-2001, groundwater quality assessments were conducted to address a leachate release into the groundwater surrounding the landfill (HRG, 1998, 1999, 2000, and 2001). In 2019, IDNR approved continued implementation of a monitored natural attenuation remedy (IDNR, 2019) in accordance with the Risk Management Plan in the *Phase II Groundwater Quality Assessment Report* (HRG, 2001) and the revised remedy implementation schedule outlined in the *2018 AWQR* (Foth, 2019a). Compliance with the conditions set forth in the Risk Management Plan was maintained in 2023. As detailed in Tables 1-11, the groundwater plumes are generally steady or declining. In accordance with Permit Amendment #16, surface water monitoring has been discontinued. Under current flow conditions, leachate impacts to surface water are not applicable.

Requests:

• On behalf of the Agency, Foth requests IDNR review and approval to amend the Permit Special Provision X.10 and the leachate monitoring network by replacing W-212 with W-214 and removing W-217. Replacement of W-212 with W-214 will maintain adequate coverage since W-214 is located 400 feet east of W-212 and will continue to monitor leachate elevations along the mid-central portion of the north side of Site 1. Removal of W-217 is recommended since it cannot be repaired or replaced at the same location, and there are no suitable replacement locations to provide coverage near the top of the landfill due to the construction and demolition debris filled there.

Table 10
Corrective Action Trend Analysis
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Well	Corrective Action Constituent	Trend	N	Analyte/Well Pair Achieved Compliance with GWPS?	Projected Year to Completion* [1,2]
Upper Bedrock Monitoring Locations					
Corrective Action Monitoring Locations					
AW-1	Arsenic	Decreasing (2008)	29	No	2042
AW-2	Arsenic	No Trend	29	No	2030
	Thallium	Decreasing (2013)	19	No	2033
MW-12	Arsenic	Decreasing (2008)	32	No	2150
MW-13	Arsenic	No Trend [3]	22	No	No Attenuation
MW-16	Arsenic	No Trend [4]	22	No	2060
MW-17	Arsenic	Decreasing (2018)	11	No	2039
MW-20	Thallium	Decreasing (2012)	20	No	2027 [5]
MW-24	Arsenic	Decreasing (2012)	20	No	2028
MW-30	Arsenic	Decreasing (2014)	17	No	2027 [5]
MW-32	Arsenic	No Trend [3]	22	No	No Attenuation
MW-34	Arsenic	Decreasing (2011)	23	No	2040
	Vinyl Chloride	Decreasing (2008)	29	No	2028
MW-35	Cobalt	Decreasing (2012)	19	Yes	Fall 2025
Delineation Monitoring Locations					
MW-105A	Cobalt	Decreasing (2013)	20	No	2025
MW-106A	Arsenic	Decreasing (2014)	16	No	2028
	Cobalt	No Trend	20	No	No Attenuation
Deeper Bedrock Monitoring Locations					
Corrective Action Monitoring Locations					
AW-6	Cobalt	No Trend [6]	21	No	No Attenuation
CRL-9	Arsenic	No Trend [4]	24	No	2155
	Cobalt	No Trend [6]	15	No	No Attenuation
MW-14	Arsenic	No Trend	32	No	2068
MW-22	Arsenic	No Trend [7]	15	No	No Attenuation
	Cobalt	No Trend	16	No	No Attenuation
MW-33	Arsenic	No Trend [7]	18	No	2574
MW-36	Arsenic	No Trend [3]	23	No	2372
Delineation Monitoring Locations					
MW-105B	Cobalt	No Trend	16	No	No Attenuation
MW-109B	Arsenic	No Trend [6]	11	No	2043
	Cobalt	Decreasing (2017)	15	No	2070
	Thallium	No Trend	15	No	2072

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

Comments:

N - Number of Samples

* For remedy completion [IAC 113.10(9)e(2)], compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS for a period of three consecutive years or an alternate length of time established by the IDNR.

[1] For corrective action constituents that have achieved compliance with the GWPS, the projected year to completion listed is 3 years after compliance was first achieved (i.e., 3 years after the First Occurrence listed in Table 8) and will remain as long as concentrations remain statistically below the GWPS during the interim statistical evaluations. Individual analyte/well pairs will return to assessment constituents once compliance with the GWPS has been achieved for a period of 3 years. In accordance with IAC 113.10(9)3(2), a well may not return to assessment monitoring until all detected constituents are below the GWPS.

Table 10
Corrective Action Trend Analysis
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
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Comments (Continued):

(2) For the remaining corrective constituents (i.e., those that have not achieved compliance with the GWPS), the projected year to completion is based on the estimated first order attenuation rates for individual analyte/well pairs evaluated as part of the Fall 2023 statistical evaluation (Appendix B). The projected years to completion are 3 years after the first order attenuation rates projected initial compliance with the GWPS.

(3) For arsenic in MW-13, the trend and first order attenuation rate was evaluated using the Mar. 2013 through current data. Time-series analysis indicated that earlier pre-2013 arsenic concentrations were notably different from the 2013-current data and that a maximum arsenic concentration was reached in Mar. 2014. As a result, the earlier data was not utilized in evaluating trends or calculating first order regression. Similarly, the trend and first order attenuation rates for arsenic in MW-32 and arsenic in MW-36 were evaluated using the Mar. 2013 through current data and the Mar. 2011 through current data, respectively. For arsenic in MW-32, time-series analysis indicated that earlier pre-2013 arsenic concentrations were notably different from the 2013-current data; therefore, the earlier data was not utilized in evaluating trends or calculating first order regression. For arsenic in MW-36, time-series analysis indicated that earlier pre-2011 arsenic concentrations were notably different from the 2011-current data; therefore, the earlier data was not utilized in evaluating trends or calculating first order regression.

(4) For arsenic in MW-16, the trend and first order attenuation rate was calculated using the Mar. 2013 to current data. For arsenic in CRL-9, the trend and first order attenuation rate was calculated using the Sep. 2010 to current data. While no trend was statistically identified using all data (Aug. 2008 to current), some attenuation was visually evident in the Mar. 2013 to current arsenic data at MW-16 and the Sep. 2010 to current data for arsenic in CRL-9.

(5) For thallium in MW-20 and arsenic in MW-30, the first order attenuation rates projected that compliance with the GWPS has already been achieved (i.e., Aug. 2018 for thallium in MW-20 and Feb. 2021 for arsenic in MW-30). However, the confidence bands placed around the linear trend line have not yet indicated compliance with the GWPS for these analyte/well pairs (although it is noted that thallium in MW-20 and arsenic in MW-30 are close to statistically achieving compliance with the GWPS and the Aug. 2022 and Aug. 2023 individual results were below the GWPS). For these analyte/well pairs, it has been assumed that compliance with the GWPS will be statistically achieved in 2024 and the projected year to completion for these analyte/well pairs will be 2027.

(6) For cobalt in AW-6, the trend and first order regression rate were calculated using the Mar. 2012 to current data. For cobalt in CRL-9, the trend and first order regression rate were calculated using the Mar. 2015 to current data. For arsenic in MW-109B, the trend and first order regression rate were calculated using the Nov. 2018 to current data. Time-series analysis revealed that the first three samples in AW-6, the first sample in CRL-9, and the first four samples in MW-109B were lower than the rest of the data and not representative for evaluation of trends.

(7) For arsenic in MW-22 and MW-33, trends were evaluated using the Mar./Sep. 2015 through current data. Time-series analysis identified a shift in the data that correlated with a change in sampling technique from high-volume to low-flow sampling. As a result, the high volume data was not utilized in evaluating trends or calculating first order regression.

Conclusions and Recommendations:

- In 2023, one corrective action constituent/well pair (i.e., arsenic in MW-20) returned to an assessment constituent. As a result, arsenic in MW-20 is no longer listed in this table. Statistical comparisons associated with this assessment constituent are included in Tables 7 and 8.
- Compliance with the GWPS was maintained for cobalt in MW-35 in 2023. Cobalt in MW-35 will return to an assessment constituent in 2025 as long as concentrations remain statistically below the GWPS during interim statistical evaluations.
- Stable or decreasing trends were identified for the corrective action constituents. In addition, first order attenuation was now able to be evaluated to project a year to completion for arsenic in MW-17, MW-14, and MW-109B and for thallium in MW-109B.
- Additional discussion regarding the status of corrective action activities, including an evaluation of the effectiveness of the progress being made, is provided in Section 4 of the 2023 AWQR.

Table 13
Methane Monitoring Summary
2023 Methane Monitoring Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Monitoring Points			Methane Results (% LEL)							
Name	Type	Description	3/1/2023 - S (Y/N)		6/5/2023 - S (Y/N)		9/1/2023 - S (Y/N)		12/5/2023 - S (Y/N)	
GMP-N	Surface Perimeter	5 ft N of MW-20	0		0		0		0	
GMP-S	Surface Perimeter	5 ft S of MW-32	0		0		0		0	
GMP-W	Surface Perimeter	5 ft W of MW-26	0		0		0		0	
GMP-E	Surface Perimeter	20 ft E of MW-14	0		0		0		0	
BLDG-2	Indoor	Recreational Facility/Office	0		0		0		0	
BLDG-6	Indoor	Maintenance Building & Office	0		0		0		0	
BLDG-12	Indoor	Scale House	0		0		0		0	

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

Comments:

% = percent

• The contents of this report are intended to satisfy the requirements set forth in 567 IAC 113.26(15)b (effective 1/15/03).

• As shown on Table 13, the quarterly methane monitoring results did not indicate concentrations in exceedance of 25% LEL for facility structures or 100% LEL for facility boundaries.

Table 14
Analytical Data Summary
2023 Annual Water Quality Report
Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Comments:

The following table presents the groundwater upper and deeper bedrock Appendix II analytical data collected since August 2008. In accordance with Permit Amendment #16, MW-27, MW-29, MW-102A, MW-103A, MW-103C, and MW-108A were removed from the groundwater monitoring network and surface water monitoring was discontinued starting with the Fall 2020 sampling event. Due to the removal of surface water monitoring in 2020, the surface water analytical results are no longer provided in this table.

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

DwnGrad = downgradient (compliance) monitoring location.

Bkgrnd = background monitoring location.

Delin = delineation monitoring location.

• Previously approved groundwater background data set adjustments were maintained and are listed as crossed-out concentrations in Table 14. This includes: removal of the high volume September 2009 through September 2014 metals data at MW-101A; removal of the high volume September 2009 through September 2014 and the initial low-flow March 2015 metals data at MW-101B; removal of the March 2019 barium concentration in MW-38 due to elevated TSS; removal of earlier non-detect data with elevated PQLs for barium, cobalt, copper, and lead in the upper bedrock; removal of earlier non-detect data with elevated PQLs for barium, beryllium, cadmium, cobalt, copper, lead, and nickel in the deeper bedrock; and removal of the August 2018 detected metals data at MW-37 due to potential impact indicated by benzene, toluene, ethylbenzene, and total xylenes detections.

• The following background data set adjustments were recommended in 2023 and are listed as crossed-out concentrations in Table 14.

  • Removal of the Mar. 2023 barium, cadmium, cobalt, copper, nickel, selenium, and vanadium data at MW-101A due to elevated TSS.

• Previously approved groundwater downgradient data set adjustments were maintained and are listed as crossed-out concentrations in Table 14:

  • Removal of earlier non-detect data with elevated PQLs for upper bedrock cobalt data at AW-5, MW-13, MW-17, MW-23, and MW-35; removal of earlier non-detect and J-flagged data with elevated PQLs for deeper bedrock cobalt data at AW-6, CRL-9, MW-11, MW-14, MW-15, MW-22, MW-33 MW-36, MW-102B, MW-105B, and MW-107B; removal of earlier non-detect and J-flagged data with elevated PQLs for the deeper bedrock nickel data at AW-6, CRL-9, MW-14, MW-15, MW-18, MW-19, MW-22, MW-33, and MW-36; removal of the high volume August 2008 through September 2014 zinc data at AW-7, MW-20, and MW-30; and removal of the high volume August 2008 through September 2014 nickel data at MW-13.

  • Removal of the historical data prior to when statistical compliance with the GWPS was first achieved for analyte/well pairs exiting corrective action and returning to assessment constituents. Compliance with the GWPS was first achieved in Spring 2015 for nickel in MW-12 and vinyl chloride in MW-13; in Fall 2016 for cobalt and nickel in MW-13 and cobalt in MW-23; in Spring 2017 for arsenic in VP-3; and in Fall 2017 for cobalt in AW-5 and MW-17. The historical data prior to these initial compliance dates have been removed. Section 5.1.3 of the Fall 2023 statistical evaluation provides a detailed listing of the historical data removed due to exiting corrective action.

• The following groundwater downgradient data set adjustments were recommended in 2023 and are listed as crossed-out concentrations in Table 14.

  • Removal of the historical data prior to when statistical compliance with the GWPS was first achieved for arsenic in MW-20 exiting corrective action and returning to an assessment constituent in Fall 2023. Compliance with the GWPS was first achieved in Spring 2020; therefore, the historical arsenic data prior to Spring 2020 have been removedfor MW-20. Section 5.1.3 of the Fall 2023 statistical evaluation provides a detailed listing of the historical data removed due to exiting corrective action.

• Previously rejected data resulting from data validation were maintained and are listed as crossed-out concentrations in Table 14:

  • Removal of the Aug. 2022 m,p-cresol and phenol results at MW-37 and MW-101A. As detailed in the data validation report for the Aug. 2022 event, these results were rejected due to surrogate recoveries that were below the expanded lower acceptance limit.

• The following data were rejected during data validation in 2023 and are listed as crossed-out concentrations in Table 14:

  • Removal of the Jan. 2023 1,4-phenylenediamine (i.e., p-phenylenediamine) result in MW-26. As detailed in the data validation report for the Jan. 2023 event, this result was rejected due to laboratory control sample/laboratory control sample duplicate recoveries that were below the acceptance limit.

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,1,1,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,1,1,2-Tetrachloroethane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,1,1,2-Tetrachloroethane	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,1,1,2-Tetrachloroethane	2013-05	ug/L			< 1.00			< 1.00										
1,1,1,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2013-11	ug/L																
1,1,1,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2014-06	ug/L																
1,1,1,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
1,1,1,2-Tetrachloroethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,1,1,2-Tetrachloroethane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
1,1,1,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2016-06	ug/L			< 1	< 1												
1,1,1,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2017-11	ug/L																
1,1,1,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-06	ug/L																
1,1,1,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-09	ug/L					< 1						< 1	< 1				
1,1,1,2-Tetrachloroethane	2018-11	ug/L																
1,1,1,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-04	ug/L				< 1	< 1		< 1									
1,1,1,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
1,1,1,2-Tetrachloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
1,1,1,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2023-01	ug/L															< 1	
1,1,1,2-Tetrachloroethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,1,1,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.93**	< 1	< 1	**1.31**	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	**1.59**	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,1,1-Trichloroethane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	**2.02**	< 1	< 1	**1.42**	< 1	< 1	< 1	
1,1,1-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.90**	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.21**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	**1.10**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.25**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.04**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	**1.36**	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,1,1-Trichloroethane	2013-05	ug/L			< 1.00			< 1.00										
1,1,1-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.892 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2013-11	ug/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,1,1,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,1,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,1,2-Tetrachloroethane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,1,1,2-Tetrachloroethane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,1,1,2-Tetrachloroethane	2010-03	ug/L	< 1.00	< 2.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1,1,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 2.00	< 2.00								
1,1,1,2-Tetrachloroethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,1,1,2-Tetrachloroethane	2013-05	ug/L															
1,1,1,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,1,1,2-Tetrachloroethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2016-06	ug/L															
1,1,1,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2017-11	ug/L														< 1	< 1
1,1,1,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-06	ug/L														< 1	< 1
1,1,1,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,1,1,2-Tetrachloroethane	2018-09	ug/L													< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-11	ug/L														< 1	< 1
1,1,1,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-04	ug/L			< 1									< 1			
1,1,1,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1,2-Tetrachloroethane	2021-03	ug/L		< 1			< 1			< 1							
1,1,1,2-Tetrachloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1,2-Tetrachloroethane	2022-03	ug/L		< 1			< 1			< 1							
1,1,1,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1,2-Tetrachloroethane	2023-01	ug/L															
1,1,1,2-Tetrachloroethane	2023-03	ug/L		< 1			< 1			< 1							
1,1,1,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,1-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,1-Trichloroethane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,1,1-Trichloroethane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,1,1-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,1,1-Trichloroethane	2013-05	ug/L															
1,1,1-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,1,1-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2014-06	ug/L																
1,1,1-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.382 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
1,1,1-Trichloroethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,1,1-Trichloroethane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
1,1,1-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.135 J**	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2016-06	ug/L			< 1	< 1												
1,1,1-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2017-11	ug/L																
1,1,1-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2018-06	ug/L																
1,1,1-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2018-09	ug/L					< 1						< 1	< 1				
1,1,1-Trichloroethane	2018-11	ug/L																
1,1,1-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-04	ug/L				< 1	< 1		< 1									
1,1,1-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
1,1,1-Trichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
1,1,1-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2023-01	ug/L															< 1	
1,1,1-Trichloroethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,1,1-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,1,2,2-Tetrachloroethane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,1,2,2-Tetrachloroethane	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,1,2,2-Tetrachloroethane	2013-05	ug/L			< 1.00			< 1.00										
1,1,2,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2013-11	ug/L																
1,1,2,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2014-06	ug/L																
1,1,2,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
1,1,2,2-Tetrachloroethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,1,2,2-Tetrachloroethane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
1,1,2,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2016-06	ug/L			< 1	< 1												
1,1,2,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2017-11	ug/L																
1,1,2,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-06	ug/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,1,1-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,1,1-Trichloroethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2016-06	ug/L															
1,1,1-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2017-11	ug/L														< 1	< 1
1,1,1-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2018-06	ug/L														< 1	< 1
1,1,1-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,1,1-Trichloroethane	2018-09	ug/L													< 1	< 1	< 1
1,1,1-Trichloroethane	2018-11	ug/L														< 1	< 1
1,1,1-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,1,1-Trichloroethane	2020-04	ug/L			< 1									< 1			
1,1,1-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1-Trichloroethane	2021-03	ug/L		< 1			< 1			< 1							
1,1,1-Trichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1-Trichloroethane	2022-03	ug/L		< 1			< 1			< 1							
1,1,1-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,1-Trichloroethane	2023-01	ug/L															
1,1,1-Trichloroethane	2023-03	ug/L		< 1			< 1			< 1							
1,1,1-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,2,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,2,2-Tetrachloroethane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,1,2,2-Tetrachloroethane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,1,2,2-Tetrachloroethane	2010-03	ug/L	< 1.00	< 2.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1,2,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,1,2,2-Tetrachloroethane	2013-05	ug/L															
1,1,2,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,1,2,2-Tetrachloroethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2016-06	ug/L															
1,1,2,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2017-11	ug/L														< 1	< 1
1,1,2,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-06	ug/L														< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,1,2,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-09	ug/L					< 1						< 1	< 1				
1,1,2,2-Tetrachloroethane	2018-11	ug/L																
1,1,2,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-04	ug/L				< 1	< 1		< 1									
1,1,2,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
1,1,2,2-Tetrachloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
1,1,2,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2023-01	ug/L															< 1	
1,1,2,2-Tetrachloroethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,1,2,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	**1.43**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,1,2-Trichloroethane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,1,2-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,1,2-Trichloroethane	2013-05	ug/L			< 1.00			< 1.00										
1,1,2-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2013-11	ug/L																
1,1,2-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2014-06	ug/L																
1,1,2-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
1,1,2-Trichloroethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,1,2-Trichloroethane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
1,1,2-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2016-06	ug/L			< 1	< 1												
1,1,2-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2017-11	ug/L																
1,1,2-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.199 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2018-06	ug/L																
1,1,2-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2018-09	ug/L					< 1						< 1	< 1				
1,1,2-Trichloroethane	2018-11	ug/L																
1,1,2-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-04	ug/L				< 1	< 1		< 1									
1,1,2-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
1,1,2-Trichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
1,1,2-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2023-01	ug/L															< 1	
1,1,2-Trichloroethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,1,2,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,1,2,2-Tetrachloroethane	2018-09	ug/L													< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-11	ug/L														< 1	< 1
1,1,2,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-04	ug/L			< 1									< 1			
1,1,2,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2,2-Tetrachloroethane	2021-03	ug/L		< 1			< 1			< 1							
1,1,2,2-Tetrachloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2,2-Tetrachloroethane	2022-03	ug/L		< 1			< 1			< 1							
1,1,2,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2,2-Tetrachloroethane	2023-01	ug/L															
1,1,2,2-Tetrachloroethane	2023-03	ug/L		< 1			< 1			< 1							
1,1,2,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,2-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1,2-Trichloroethane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,1,2-Trichloroethane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,1,2-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,1,2-Trichloroethane	2013-05	ug/L															
1,1,2-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,1,2-Trichloroethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2016-06	ug/L															
1,1,2-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2017-11	ug/L														< 1	< 1
1,1,2-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2018-06	ug/L														< 1	< 1
1,1,2-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,1,2-Trichloroethane	2018-09	ug/L													< 1	< 1	< 1
1,1,2-Trichloroethane	2018-11	ug/L														< 1	< 1
1,1,2-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,1,2-Trichloroethane	2020-04	ug/L			< 1									< 1			
1,1,2-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2-Trichloroethane	2021-03	ug/L		< 1			< 1			< 1							
1,1,2-Trichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2-Trichloroethane	2022-03	ug/L		< 1			< 1			< 1							
1,1,2-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1,2-Trichloroethane	2023-01	ug/L															
1,1,2-Trichloroethane	2023-03	ug/L		< 1			< 1			< 1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,1,2-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	2008-08	ug/L	< 1	2	< 1	< 1	< 1	4.99	24.2	25.3	32.2	2.34	< 1	10.3	1.16	1.17	< 1	< 1
1,1-Dichloroethane	2009-03	ug/L	< 1	2.26	< 1	< 1	< 1	8.88	37.7	18.6	36.8	3.53	1.43	5.65	1.73	1.33	< 1	< 1
1,1-Dichloroethane	2009-07	ug/L	< 1	1.84		< 1		5.1	31.4	22	35.1	3.22	2.00	5.40	1.03	< 1	< 1	
1,1-Dichloroethane	2009-09	ug/L	< 1	1.87		< 1.00		9.18	30.8	19.4	49.4	1.36	1.51	6.73	1.08	1.15	< 1	
1,1-Dichloroethane	2010-03	ug/L	< 1.00	2.04	< 1.00	< 1.00	< 1.00	3.78	38.1	20.5	26.8	3.11	1.46	5.60	1.29	1.23	< 1.00	< 1.00
1,1-Dichloroethane	2010-09	ug/L	< 1.00	1.79	< 1.00	< 1.00	< 1.00	6.34	24.0	19.7	29.1	2.18	< 1.00	6.81	< 1.00	1.03	< 1.00	< 1.00
1,1-Dichloroethane	2011-03	ug/L	< 1.00	1.29	< 1.00	< 1.00	< 10.0	2.07	28.6	20.2	25.1	1.06	3.07	4.61	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2011-09	ug/L	< 1.00	1.26	< 1.00	< 1.00	< 1.00	7.17	28.7	13.6	18.7	1.41	< 1.00	2.94	1.18	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2012-03	ug/L	< 1.00	1.62	< 1.00	< 1.00	< 1.00	7.33	28.7	13.4	16.7	< 1.00	< 1.00	2.99	1.35	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2012-09	ug/L	1.10	2.44	< 1.00	< 1.00	< 1.00	4.05	27.2	15.8	19.9	1.13	< 1.00	2.98	1.08	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2013-03	ug/L	1.72	2.1		< 1.00	< 1.00		28	9.95	14.9	1.97	0.803 J	3.81	1.26	< 1.00	< 1	< 1
1,1-Dichloroethane	2013-05	ug/L			< 1.00			2.98										
1,1-Dichloroethane	2013-09	ug/L	0.762 J	1.96	< 1.00	< 1.00	< 1.00	6.32	22.6	10.6	12.7	1.36	0.614 J	4.00	1.24	0.845 J	< 1.00	< 1.00
1,1-Dichloroethane	2013-11	ug/L																
1,1-Dichloroethane	2014-03	ug/L	< 1.00	1.35	0.221 J	< 1.00	< 1.00	10.4	19.2	1.43	17.0	0.856 J	0.782 J	2.49	2.01	0.617 J	< 1.00	< 1.00
1,1-Dichloroethane	2014-06	ug/L																
1,1-Dichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	5.27	18.2	8.28	11.5	1.13	0.451 J	2.58	0.878 J	1.39	< 1	< 1
1,1-Dichloroethane	2015-03	ug/L	0.723 J	1.82	< 1.00	< 1.00	< 1.00	1.71	22.5	11.4	15.8	0.565 J	0.472 J	1.59	1.16	0.898 J	< 1	0.286 J
1,1-Dichloroethane	2015-09	ug/L	0.652 J	1.48		< 1	< 1	3.95			11.4	< 1	0.581 J	1.72		0.947 J	< 1	
1,1-Dichloroethane	2015-10	ug/L			< 1				18.8	9.01					0.981 J			< 1
1,1-Dichloroethane	2016-03	ug/L	< 1	1.42	< 1	< 1	< 1	1.19	11.8	6.04	8.1	0.383 J	< 1	1.19	0.778 J	0.899 J	< 1	0.586 J
1,1-Dichloroethane	2016-06	ug/L			0.258 J	< 1												
1,1-Dichloroethane	2016-08	ug/L	0.643 J	1.19	< 1	< 1	< 1	1.96	13.2	6.13	4.01	< 1	1.36	1.28	0.504 J	0.777 J	< 1	0.446 J
1,1-Dichloroethane	2017-03	ug/L	0.703 J	0.945 J	< 1	< 1	< 1	2.14	13.3	3.89	1.15	< 1	0.337 J	1.43	0.764 J	0.536 J	< 1	< 1
1,1-Dichloroethane	2017-08	ug/L	< 1	0.896 J	0.285 J	< 1	< 1	2.37	12.3	3.33	2.08	0.295 J	0.297 J	1.53	0.443 J	0.668 J	< 1	0.35 J
1,1-Dichloroethane	2017-11	ug/L																
1,1-Dichloroethane	2018-03	ug/L	< 1	0.973 J	< 1	< 1	< 1	1.8	15.8	5.56	2.6	< 1	0.376 J	1.19	0.646 J	0.667 J	< 1	0.312 J
1,1-Dichloroethane	2018-06	ug/L																
1,1-Dichloroethane	2018-08	ug/L	0.382 J	1.16	< 1	< 1		1.75	13.4	1.66	3.4	< 1			0.491 J	0.744 J	< 1	0.523 J
1,1-Dichloroethane	2018-09	ug/L					< 1						0.586 J	1.29				
1,1-Dichloroethane	2018-11	ug/L																
1,1-Dichloroethane	2019-03	ug/L	< 1	0.841 J	0.555 J	< 1	< 1	1.78	9.03	3.56	0.712 J	< 1	< 1	0.37 J	0.415 J	0.336 J	< 1	0.267 J
1,1-Dichloroethane	2019-08	ug/L	0.476 J	0.557 J	0.367 J	< 1	< 1	2.57	7.35	2.36	3.28	< 1	< 1	2.1	0.525 J	0.576 J	< 1	0.426 J
1,1-Dichloroethane	2020-03	ug/L	0.289 J	0.491 J	0.284 J			1.09		2.43	1.07	< 1	< 1	1.31	0.477 J	0.539 J	< 1	0.247 J
1,1-Dichloroethane	2020-04	ug/L				< 1	< 1		7.29									
1,1-Dichloroethane	2020-08	ug/L	0.479 J	0.919 J	0.268 J	< 1	< 1	1.6	7.21	0.755 J	2.27	< 1	0.347 J	1.78	0.457 J	0.802 J	< 1	0.414 J
1,1-Dichloroethane	2021-03	ug/L							7.28	2.03	1.45	< 1						
1,1-Dichloroethane	2021-08	ug/L	0.548 J+	0.639 J	1.05 J+	< 1	< 10	0.565 J	6.22	0.602 J	2.84	< 1	< 1	1.23	0.429 J+	0.253 J	< 1	< 1
1,1-Dichloroethane	2022-03	ug/L							5.32	1.89	1.26	< 1						
1,1-Dichloroethane	2022-08	ug/L	< 1	1.44	< 1	< 1	< 1		5.04	1.48	1.9	< 1	< 1	1.19	0.301 J	0.566 J	< 1	< 1
1,1-Dichloroethane	2023-01	ug/L															< 1	
1,1-Dichloroethane	2023-03	ug/L							4.57	2.01	0.928 J	< 1					< 1	
1,1-Dichloroethane	2023-08	ug/L	< 1	0.842 J	< 1	< 1	< 1		3.58	0.644 J	1.77	< 1	< 1	0.844 J	< 1	< 1	< 1	< 1
1,1-Dichloroethene	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2009-07	ug/L	< 2	< 2.00		< 2		< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	
1,1-Dichloroethene	2009-09	ug/L	< 2	< 2.00		< 2.00		< 2.00	< 2.00	< 10.0	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	
1,1-Dichloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2012-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2012-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2013-03	ug/L	< 2.00	< 2		< 2.00	< 2.00		< 2	< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2
1,1-Dichloroethene	2013-05	ug/L			< 2.00			< 2.00										
1,1-Dichloroethene	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,1,2-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1-Dichloroethane	2008-08	ug/L	**11.1**	**4.62**	**16.9**	**1.3**	< 1	< 1	< 1								
1,1-Dichloroethane	2009-03	ug/L	**12.8**	**3.48**	**24.4**	**2.93**	< 1	< 1	< 1								
1,1-Dichloroethane	2009-07	ug/L	**11.5**	**3.67**	**20.1**	**3.4**	< 1.00										
1,1-Dichloroethane	2009-09	ug/L	**13.1**	**5.10**	**16.7**	**2.76**	< 1.00										
1,1-Dichloroethane	2010-03	ug/L	**16.6**	**2.96**	**13.2**	**4.21**	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2010-09	ug/L	**15.8**	**3.09**	**22.6**	**3.71**	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2011-03	ug/L	**10.2**	**1.94**	**13.3**	**3.22**	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2011-09	ug/L	**11.4**	**2.33**	**17.0**	**3.58**	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2012-03	ug/L	**10.5**	< 1.00	**16.6**	**1.48**	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2012-09	ug/L	**13.6**	< 1.00	**12.0**	**2.66**	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2013-03	ug/L	**11**	< 1	< 25.0		< 1.00	**0.79 J**	< 1								
1,1-Dichloroethane	2013-05	ug/L															
1,1-Dichloroethane	2013-09	ug/L	**10.2**	**0.348 J**	**9.41**	**0.984 J**	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	**0.883 J**	< 1.00		
1,1-Dichloroethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2014-03	ug/L	**8.13**	**0.375 J**	**10.0**	**1.13**	< 1.00	**0.249 J**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2014-09	ug/L	**9.29**	**0.73 J**	**6.33**	**0.404 J**	< 1	< 1	< 1		< 1	< 1	< 1	**0.277 J**	< 1		
1,1-Dichloroethane	2015-03	ug/L	**10.1**	< 1.00	**11.4**	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2015-09	ug/L		**1.03**		< 1	< 1	< 1	< 1								
1,1-Dichloroethane	2015-10	ug/L	**14.2**		**13.2**					< 1	< 1	< 1	< 1	< 1	< 1		
1,1-Dichloroethane	2016-03	ug/L	**12.6**	**0.564 J**	**8.34**	**0.279 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1-Dichloroethane	2016-06	ug/L															
1,1-Dichloroethane	2016-08	ug/L	**9.29**	< 1	**8.5**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1-Dichloroethane	2017-03	ug/L	**10.9**	< 1	**6.92**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,1-Dichloroethane	2017-08	ug/L	**6.22**	**0.417 J**	**8.08**	< 1	< 1	**0.325 J**	< 1	< 1	< 1	< 1	< 1	**0.403 J**	< 1		
1,1-Dichloroethane	2017-11	ug/L														< 1	< 1
1,1-Dichloroethane	2018-03	ug/L	**11.4**	**0.364 J**	**7.85**	< 1	< 1	**0.324 J**	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	2018-06	ug/L														< 1	< 1
1,1-Dichloroethane	2018-08	ug/L	**6.81**	< 1	**9.2**	< 1	< 1	**0.363 J**	< 1	< 1		< 1	< 1	< 1			
1,1-Dichloroethane	2018-09	ug/L													< 1	< 1	< 1
1,1-Dichloroethane	2018-11	ug/L														< 1	< 1
1,1-Dichloroethane	2019-03	ug/L	**15.1**	< 1	**2.31**	< 1	< 1	**0.334 J**	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	2019-08	ug/L	**2.04**	**0.353 J**	**6.73**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.524 J**	< 1	< 1	< 1
1,1-Dichloroethane	2020-03	ug/L	**3.48**	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,1-Dichloroethane	2020-04	ug/L			**2.25**									< 1			
1,1-Dichloroethane	2020-08	ug/L	**1.67**	< 1	**5.62**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1-Dichloroethane	2021-03	ug/L		< 1			< 1			< 1							
1,1-Dichloroethane	2021-08	ug/L	**11 J+**	< 1	**5.37**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1-Dichloroethane	2022-03	ug/L		< 1			< 1			< 1							
1,1-Dichloroethane	2022-08	ug/L	**4.44**	< 1	**4.98**	< 1	< 1	**0.398 J**	< 1	< 1			< 1	< 1	< 1		< 1
1,1-Dichloroethane	2023-01	ug/L															
1,1-Dichloroethane	2023-03	ug/L		< 1			< 1			< 1							
1,1-Dichloroethane	2023-08	ug/L	**7.97**	< 1	**4.75**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,1-Dichloroethene	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
1,1-Dichloroethene	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
1,1-Dichloroethene	2009-07	ug/L	< 2.00	< 2	< 2	< 2	< 2.00										
1,1-Dichloroethene	2009-09	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00										
1,1-Dichloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2012-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2012-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2013-03	ug/L	< 2	< 2	< 50.0		< 2.00	< 2	< 2								
1,1-Dichloroethene	2013-05	ug/L															
1,1-Dichloroethene	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,1-Dichloroethene	2013-11	ug/L																
1,1-Dichloroethene	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2014-06	ug/L																
1,1-Dichloroethene	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2015-03	ug/L	< 2	< 2	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	< 2.00
1,1-Dichloroethene	2015-09	ug/L	< 2	< 2		< 2	< 2	< 2			< 2	< 2	< 2	< 2		< 2	< 2	
1,1-Dichloroethene	2015-10	ug/L			< 2				< 2	< 2					< 2			< 2
1,1-Dichloroethene	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2016-06	ug/L			< 2	< 2												
1,1-Dichloroethene	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2017-11	ug/L																
1,1-Dichloroethene	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2018-06	ug/L																
1,1-Dichloroethene	2018-08	ug/L	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
1,1-Dichloroethene	2018-09	ug/L					< 2						< 2	< 2				
1,1-Dichloroethene	2018-11	ug/L																
1,1-Dichloroethene	2019-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-03	ug/L	< 2	< 2	< 2			< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-04	ug/L				< 2	< 2		< 2									
1,1-Dichloroethene	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2021-03	ug/L							< 2	< 2	< 2	< 2						
1,1-Dichloroethene	2021-08	ug/L	< 2	< 2	< 2	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2022-03	ug/L							< 2	< 2	< 2	< 2						
1,1-Dichloroethene	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2023-01	ug/L															< 2	
1,1-Dichloroethene	2023-03	ug/L							< 2	< 2	< 2	< 2					< 2	
1,1-Dichloroethene	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,1-Dichloropropene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,1-Dichloropropene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloropropene	2010-09	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	
1,1-Dichloropropene	2011-03	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,1-Dichloropropene	2012-09	ug/L														< 4.00		
1,1-Dichloropropene	2015-09	ug/L	< 1	< 1			< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,1-Dichloropropene	2015-10	ug/L							< 1	< 1					< 1			< 1
1,1-Dichloropropene	2016-03	ug/L			< 1	< 1												
1,1-Dichloropropene	2016-06	ug/L			< 1	< 1												
1,1-Dichloropropene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	2023-01	ug/L															< 1	
1,1-Dichloropropene	2023-03	ug/L															< 1	
1,2,3-Trichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,2,3-Trichloropropane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,2,3-Trichloropropane	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,2,3-Trichloropropane	2013-05	ug/L			< 1.00			< 1.00										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,1-Dichloroethene	2013-11	ug/L									< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2014-06	ug/L									< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2015-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2	< 2	< 2		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2015-09	ug/L		< 2		< 2	< 2	< 2	< 2								
1,1-Dichloroethene	2015-10	ug/L	< 2		< 2					< 2	< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2016-06	ug/L															
1,1-Dichloroethene	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2017-11	ug/L														< 2	< 2
1,1-Dichloroethene	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2018-06	ug/L														< 2	< 2
1,1-Dichloroethene	2018-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2			
1,1-Dichloroethene	2018-09	ug/L													< 2	< 2	< 2
1,1-Dichloroethene	2018-11	ug/L														< 2	< 2
1,1-Dichloroethene	2019-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-03	ug/L	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2
1,1-Dichloroethene	2020-04	ug/L			< 2									< 2			
1,1-Dichloroethene	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
1,1-Dichloroethene	2021-03	ug/L		< 2			< 2			< 2							
1,1-Dichloroethene	2021-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
1,1-Dichloroethene	2022-03	ug/L		< 2			< 2			< 2							
1,1-Dichloroethene	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
1,1-Dichloroethene	2023-01	ug/L															
1,1-Dichloroethene	2023-03	ug/L		< 2			< 2			< 2							
1,1-Dichloroethene	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
1,1-Dichloropropene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1-Dichloropropene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,1-Dichloropropene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,1-Dichloropropene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,1-Dichloropropene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1-Dichloropropene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00										
1,1-Dichloropropene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00									
1,1-Dichloropropene	2012-09	ug/L				< 4.00											
1,1-Dichloropropene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,1-Dichloropropene	2015-10	ug/L	< 1		< 1					< 1							
1,1-Dichloropropene	2016-03	ug/L					< 1			< 1							
1,1-Dichloropropene	2016-06	ug/L															
1,1-Dichloropropene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1							
1,1-Dichloropropene	2023-01	ug/L															
1,1-Dichloropropene	2023-03	ug/L					< 1			< 1							
1,2,3-Trichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,2,3-Trichloropropane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,2,3-Trichloropropane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,2,3-Trichloropropane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,2,3-Trichloropropane	2010-03	ug/L	< 1.00	< 2.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,2,3-Trichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,2,3-Trichloropropane	2013-05	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,2,3-Trichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2013-11	ug/L																
1,2,3-Trichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2014-06	ug/L																
1,2,3-Trichloropropane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
1,2,3-Trichloropropane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,2,3-Trichloropropane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
1,2,3-Trichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2016-06	ug/L			< 1	< 1												
1,2,3-Trichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2017-11	ug/L																
1,2,3-Trichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2018-06	ug/L																
1,2,3-Trichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2018-09	ug/L					< 1						< 1	< 1				
1,2,3-Trichloropropane	2018-11	ug/L																
1,2,3-Trichloropropane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-04	ug/L				< 1	< 1		< 1									
1,2,3-Trichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2021-03	ug/L							< 1	< 1	< 1	< 1						
1,2,3-Trichloropropane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2022-03	ug/L							< 1	< 1	< 1	< 1						
1,2,3-Trichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2023-01	ug/L															< 1	
1,2,3-Trichloropropane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,2,3-Trichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4,5-Tetrachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
1,2,4,5-Tetrachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2,4,5-Tetrachlorobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
1,2,4,5-Tetrachlorobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
1,2,4,5-Tetrachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
1,2,4,5-Tetrachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
1,2,4,5-Tetrachlorobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
1,2,4,5-Tetrachlorobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
1,2,4,5-Tetrachlorobenzene	2016-03	ug/L			< 11.1	< 11.2												
1,2,4,5-Tetrachlorobenzene	2016-06	ug/L			< 11.4	< 11.4												
1,2,4,5-Tetrachlorobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
1,2,4,5-Tetrachlorobenzene	2023-01	ug/L															< 10.9	
1,2,4,5-Tetrachlorobenzene	2023-03	ug/L															< 10.4	
1,2,4-Trichlorobenzene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
1,2,4-Trichlorobenzene	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
1,2,4-Trichlorobenzene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2,4-Trichlorobenzene	2010-09	ug/L	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	
1,2,4-Trichlorobenzene	2011-03	ug/L	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
1,2,4-Trichlorobenzene	2012-09	ug/L														< 5.00		
1,2,4-Trichlorobenzene	2015-09	ug/L	< 5	< 5			< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
1,2,4-Trichlorobenzene	2015-10	ug/L							< 5	< 5					< 5			< 5
1,2,4-Trichlorobenzene	2016-03	ug/L			< 5	< 5												
1,2,4-Trichlorobenzene	2016-06	ug/L			< 5	< 5												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,2,3-Trichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,2,3-Trichloropropane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2016-06	ug/L															
1,2,3-Trichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2017-11	ug/L														< 1	< 1
1,2,3-Trichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2018-06	ug/L														< 1	< 1
1,2,3-Trichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,2,3-Trichloropropane	2018-09	ug/L													< 1	< 1	< 1
1,2,3-Trichloropropane	2018-11	ug/L														< 1	< 1
1,2,3-Trichloropropane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,2,3-Trichloropropane	2020-04	ug/L			< 1									< 1			
1,2,3-Trichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2,3-Trichloropropane	2021-03	ug/L		< 1			< 1			< 1							
1,2,3-Trichloropropane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2,3-Trichloropropane	2022-03	ug/L		< 1			< 1			< 1							
1,2,3-Trichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2,3-Trichloropropane	2023-01	ug/L															
1,2,3-Trichloropropane	2023-03	ug/L		< 1			< 1			< 1							
1,2,3-Trichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2,4,5-Tetrachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
1,2,4,5-Tetrachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,2,4,5-Tetrachlorobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
1,2,4,5-Tetrachlorobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2,4,5-Tetrachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2,4,5-Tetrachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
1,2,4,5-Tetrachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
1,2,4,5-Tetrachlorobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
1,2,4,5-Tetrachlorobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
1,2,4,5-Tetrachlorobenzene	2016-03	ug/L					< 10.9			< 11.2							
1,2,4,5-Tetrachlorobenzene	2016-06	ug/L															
1,2,4,5-Tetrachlorobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
1,2,4,5-Tetrachlorobenzene	2023-01	ug/L															
1,2,4,5-Tetrachlorobenzene	2023-03	ug/L					< 10			< 10							
1,2,4-Trichlorobenzene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
1,2,4-Trichlorobenzene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
1,2,4-Trichlorobenzene	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
1,2,4-Trichlorobenzene	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
1,2,4-Trichlorobenzene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
1,2,4-Trichlorobenzene	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00										
1,2,4-Trichlorobenzene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00									
1,2,4-Trichlorobenzene	2012-09	ug/L				< 5.00											
1,2,4-Trichlorobenzene	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
1,2,4-Trichlorobenzene	2015-10	ug/L	< 5		< 5					< 5							
1,2,4-Trichlorobenzene	2016-03	ug/L					< 5			< 5							
1,2,4-Trichlorobenzene	2016-06	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

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2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,2,4-Trichlorobenzene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	2023-01	ug/L															< 5	
1,2,4-Trichlorobenzene	2023-03	ug/L															< 5	
1,2-Dibromo-3-chloropropane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
1,2-Dibromo-3-chloropropane	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
1,2-Dibromo-3-chloropropane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 10.0	< 10.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 10.0	< 20.0	< 20.0	< 20.0	< 20.0	< 10.0
1,2-Dibromo-3-chloropropane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10
1,2-Dibromo-3-chloropropane	2013-05	ug/L			< 10.0			< 10.0										
1,2-Dibromo-3-chloropropane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2013-11	ug/L																
1,2-Dibromo-3-chloropropane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2014-06	ug/L																
1,2-Dibromo-3-chloropropane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1,2-Dibromo-3-chloropropane	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
1,2-Dibromo-3-chloropropane	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
1,2-Dibromo-3-chloropropane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2016-06	ug/L			< 10	< 10												
1,2-Dibromo-3-chloropropane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2017-11	ug/L																
1,2-Dibromo-3-chloropropane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-06	ug/L																
1,2-Dibromo-3-chloropropane	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-09	ug/L					< 5						< 5	< 5				
1,2-Dibromo-3-chloropropane	2018-11	ug/L																
1,2-Dibromo-3-chloropropane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-04	ug/L				< 5	< 5		< 5									
1,2-Dibromo-3-chloropropane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2021-03	ug/L							< 5	< 5	< 5	< 5						
1,2-Dibromo-3-chloropropane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2022-03	ug/L							< 5	< 5	< 5	< 5						
1,2-Dibromo-3-chloropropane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2023-01	ug/L															< 5	
1,2-Dibromo-3-chloropropane	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
1,2-Dibromo-3-chloropropane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
1,2-Dibromoethane	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
1,2-Dibromoethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,2,4-Trichlorobenzene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5							
1,2,4-Trichlorobenzene	2023-01	ug/L															
1,2,4-Trichlorobenzene	2023-03	ug/L					< 5			< 5							
1,2-Dibromo-3-chloropropane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,2-Dibromo-3-chloropropane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,2-Dibromo-3-chloropropane	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
1,2-Dibromo-3-chloropropane	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
1,2-Dibromo-3-chloropropane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								
1,2-Dibromo-3-chloropropane	2013-05	ug/L															
1,2-Dibromo-3-chloropropane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
1,2-Dibromo-3-chloropropane	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
1,2-Dibromo-3-chloropropane	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
1,2-Dibromo-3-chloropropane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
1,2-Dibromo-3-chloropropane	2016-06	ug/L															
1,2-Dibromo-3-chloropropane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dibromo-3-chloropropane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dibromo-3-chloropropane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dibromo-3-chloropropane	2017-11	ug/L														< 5	< 5
1,2-Dibromo-3-chloropropane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-06	ug/L														< 5	< 5
1,2-Dibromo-3-chloropropane	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
1,2-Dibromo-3-chloropropane	2018-09	ug/L													< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-11	ug/L														< 5	< 5
1,2-Dibromo-3-chloropropane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-04	ug/L			< 5									< 5			
1,2-Dibromo-3-chloropropane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
1,2-Dibromo-3-chloropropane	2021-03	ug/L		< 5			< 5			< 5							
1,2-Dibromo-3-chloropropane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
1,2-Dibromo-3-chloropropane	2022-03	ug/L		< 5			< 5			< 5							
1,2-Dibromo-3-chloropropane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
1,2-Dibromo-3-chloropropane	2023-01	ug/L															
1,2-Dibromo-3-chloropropane	2023-03	ug/L		< 5			< 5			< 5							
1,2-Dibromo-3-chloropropane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
1,2-Dibromoethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,2-Dibromoethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,2-Dibromoethane	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
1,2-Dibromoethane	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
1,2-Dibromoethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,2-Dibromoethane	2013-05	ug/L			< 10.0			< 10.0										
1,2-Dibromoethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2013-11	ug/L																
1,2-Dibromoethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2014-06	ug/L																
1,2-Dibromoethane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1,2-Dibromoethane	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
1,2-Dibromoethane	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
1,2-Dibromoethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2016-06	ug/L			< 10	< 10												
1,2-Dibromoethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2017-11	ug/L																
1,2-Dibromoethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2018-06	ug/L																
1,2-Dibromoethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dibromoethane	2018-09	ug/L					< 1						< 1	< 1				
1,2-Dibromoethane	2018-11	ug/L																
1,2-Dibromoethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-04	ug/L				< 1	< 1		< 1									
1,2-Dibromoethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
1,2-Dibromoethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
1,2-Dibromoethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2023-01	ug/L															< 1	
1,2-Dibromoethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,2-Dibromoethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**3.71**	**2.22**	< 1	< 1	< 1	< 1	< 1	**6.78**	< 1	< 1
1,2-Dichlorobenzene	2009-03	ug/L	**1.22**	< 1	< 1	< 1	< 1	< 1	< 1	**2.25**	< 1	< 1	< 1	< 1	< 1	**5.7**	< 1	< 1
1,2-Dichlorobenzene	2009-07	ug/L	**1.11**	< 1.00		< 1		< 1	**2.34**	**2.34**	< 1	< 1	< 1.00	< 1.00	< 1	**4.94**	< 1	
1,2-Dichlorobenzene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	**3.34**	< 5.00	< 1.00	< 1	< 1	< 1	< 1	**4.52**	< 1	
1,2-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.49**	**3.34**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**5.93**	< 1.00	< 1.00
1,2-Dichlorobenzene	2010-09	ug/L	**1.16**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.57**	**3.90**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.90**	< 1.00	< 1.00
1,2-Dichlorobenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	**1.09**	**2.99**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.87**	< 1.00	< 1.00
1,2-Dichlorobenzene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.65**	**4.51**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.53**	< 1.00	< 1.00
1,2-Dichlorobenzene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.47**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.45**	< 1.00	< 1.00
1,2-Dichlorobenzene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**3.39**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**6.04**	< 1.00	< 1.00
1,2-Dichlorobenzene	2013-03	ug/L	**0.577 J**	**0.359 J**		< 1.00	< 1.00		**0.833 J**	**4.57**	**1.07**	< 1	< 1	**0.156 J**	< 1.00	**5.20**	< 1	< 1
1,2-Dichlorobenzene	2013-05	ug/L			< 1.00			< 1.00										
1,2-Dichlorobenzene	2013-09	ug/L	**0.981 J**	**0.325 J**	< 1.00	< 1.00	< 1.00	< 1.00	**3.64**	**3.65**	**0.741 J**	< 1.00	< 1.00	**0.559 J**	< 1.00	**4.11**	< 1.00	< 1.00
1,2-Dichlorobenzene	2013-11	ug/L																
1,2-Dichlorobenzene	2014-03	ug/L	**0.913 J**	< 1.00	< 1.00	< 1.00	< 1.00	**0.910 J**	**1.05**	**0.932 J**	**0.399 J**	< 1.00	< 1.00	**0.674 J**	**0.253 J**	**6.03**	< 1.00	< 1.00
1,2-Dichlorobenzene	2014-06	ug/L																
1,2-Dichlorobenzene	2014-09	ug/L	**1.07**	< 1	< 1	< 1	< 1	< 1	**3.56**	**3.17**	**0.721 J**	< 1	< 1	< 1	< 1	**4.02**	< 1	< 1
1,2-Dichlorobenzene	2015-03	ug/L	**0.765 J**	**0.234 J**	< 1.00	< 1.00	< 1.00	< 1.00	**0.610 J**	**2.47**	**0.337 J**	< 1	< 1.00	**0.337 J**	< 1	**3.36**	< 1	< 1.00
1,2-Dichlorobenzene	2015-09	ug/L	**0.534 J**	< 1		< 1	< 1	< 1			**1.07**	< 1	< 1	**0.288 J**		**2.66**	< 1	
1,2-Dichlorobenzene	2015-10	ug/L			< 1				**1.43**	**2.03**					< 1			< 1
1,2-Dichlorobenzene	2016-03	ug/L	**0.708 J**	< 1	< 1	< 1	< 1	< 1	**4.74**	**2.32**	**1.26**	< 1	< 1	< 1	< 1	**1.72**	< 1	< 1
1,2-Dichlorobenzene	2016-06	ug/L			< 1	< 1												
1,2-Dichlorobenzene	2016-08	ug/L	**0.363 J**	< 1	< 1	< 1	< 1	< 1	**4.72**	**2.08**	**1.34**	< 1	< 1	< 1	< 1	**2.33**	< 1	< 1
1,2-Dichlorobenzene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**4.24**	**2.64**	**1.82**	< 1	< 1	< 1	< 1	**6.2**	< 1	< 1
1,2-Dichlorobenzene	2017-08	ug/L	**0.51 J**	< 1	< 1	< 1	< 1	< 1	**1.63**	**1.99**	**1.23**	< 1	< 1	**0.241 J**	< 1	**4.32**	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,2-Dibromoethane	2013-05	ug/L															
1,2-Dibromoethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
1,2-Dibromoethane	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
1,2-Dibromoethane	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
1,2-Dibromoethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
1,2-Dibromoethane	2016-06	ug/L															
1,2-Dibromoethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dibromoethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dibromoethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dibromoethane	2017-11	ug/L														< 1	< 1
1,2-Dibromoethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2018-06	ug/L														< 1	< 1
1,2-Dibromoethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,2-Dibromoethane	2018-09	ug/L													< 1	< 1	< 1
1,2-Dibromoethane	2018-11	ug/L														< 1	< 1
1,2-Dibromoethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,2-Dibromoethane	2020-04	ug/L			< 1									< 1			
1,2-Dibromoethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dibromoethane	2021-03	ug/L		< 1			< 1			< 1							
1,2-Dibromoethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dibromoethane	2022-03	ug/L		< 1			< 1			< 1							
1,2-Dibromoethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dibromoethane	2023-01	ug/L															
1,2-Dibromoethane	2023-03	ug/L		< 1			< 1			< 1							
1,2-Dibromoethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichlorobenzene	2008-08	ug/L	< 1	**1.53**	**2.57**	< 1	< 1	< 1	< 1								
1,2-Dichlorobenzene	2009-03	ug/L	< 1	**1.24**	**1.82**	< 1	< 1	< 1	< 1								
1,2-Dichlorobenzene	2009-07	ug/L	< 1.00	**1.1**	**2.03**	< 1	< 1.00										
1,2-Dichlorobenzene	2009-09	ug/L	< 1.00	< 5.00	**3.30**	< 1.00	< 1.00										
1,2-Dichlorobenzene	2010-03	ug/L	< 1.00	**2.22**	**4.95**	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2010-09	ug/L	< 1.00	**1.16**	**2.25**	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2011-03	ug/L	< 1.00	**1.21**	**2.21**	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2011-09	ug/L	< 1.00	**1.01**	**1.38**	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2012-03	ug/L	< 1.00	< 1.00	**2.48**	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2012-09	ug/L	< 1.00	< 1.00	**3.12**	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2013-03	ug/L	< 1	**0.537 J**	< 25.0		< 1.00	< 1	< 1								
1,2-Dichlorobenzene	2013-05	ug/L															
1,2-Dichlorobenzene	2013-09	ug/L	< 1.00	**1.15**	**2.87**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2014-03	ug/L	< 1.00	< 1.00	**4.30**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2014-09	ug/L	< 1	**1.62**	**2.59**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2-Dichlorobenzene	2015-03	ug/L	< 1.00	**0.819 J**	**2.48**	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2015-09	ug/L		**1.24**		< 1	< 1	< 1	< 1								
1,2-Dichlorobenzene	2015-10	ug/L	< 1		**1.33**					< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichlorobenzene	2016-03	ug/L	< 1	**1.17**	**2.22**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichlorobenzene	2016-06	ug/L															
1,2-Dichlorobenzene	2016-08	ug/L	< 1	**0.877 J**	**1.25**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichlorobenzene	2017-03	ug/L	< 1	**1.01**	**1.36**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichlorobenzene	2017-08	ug/L	< 1	**0.784 J**	**0.96 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,2-Dichlorobenzene	2017-11	ug/L																
1,2-Dichlorobenzene	2018-03	ug/L	**0.183 J**	< 1	< 1	< 1	< 1	< 1	**0.925 J**	**2.4**	**1.75**	< 1	< 1	< 1	< 1	**4.98**	< 1	< 1
1,2-Dichlorobenzene	2018-06	ug/L																
1,2-Dichlorobenzene	2018-08	ug/L	**0.387 J**	< 1	< 1	< 1		< 1	**1.66**	**2.75**	**1.43**	< 1			< 1	**1.44**	< 1	< 1
1,2-Dichlorobenzene	2018-09	ug/L					< 1						< 1	< 1				
1,2-Dichlorobenzene	2018-11	ug/L																
1,2-Dichlorobenzene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**2.99**	**2.32**	**1.89**	< 1	< 1	< 1	< 1	**4.02**	< 1	< 1
1,2-Dichlorobenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**4.3**	**1.6**	< 1	< 1	< 1	< 1	< 1	**3.54**	< 1	< 1
1,2-Dichlorobenzene	2020-03	ug/L	< 1	< 1	< 1			< 1		**3.2**	**1.43**	< 1	< 1	< 1	< 1	**5.68**	< 1	< 1
1,2-Dichlorobenzene	2020-04	ug/L				< 1	< 1		**4**									
1,2-Dichlorobenzene	2020-08	ug/L	**0.672 J**	< 1	< 1	< 1	< 1	< 1	**4.05**	**2.57**	**1.04**	< 1	< 1	< 1	< 1	**4.65**	< 1	< 1
1,2-Dichlorobenzene	2021-03	ug/L							**1.86**	**1.91**	**1.27**	< 1						
1,2-Dichlorobenzene	2021-08	ug/L	**0.416 J+**	< 1	< 1	< 1	< 10	< 1	**0.79 J**	**1.99**	**0.725 J**	< 1	< 1	< 1	< 1	**3.41**	< 1	< 1
1,2-Dichlorobenzene	2022-03	ug/L							**0.525 J**	**1.91**	**1.45**	< 1						
1,2-Dichlorobenzene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		**1.04**	**1.89**	**0.711 J**	< 1	< 1	< 1	< 1	**3.95**	< 1	< 1
1,2-Dichlorobenzene	2023-01	ug/L															< 1	
1,2-Dichlorobenzene	2023-03	ug/L							**2.28**	**2.2**	**1.21**	< 1					< 1	
1,2-Dichlorobenzene	2023-08	ug/L	**0.539 J**	< 1	< 1	< 1	< 1		< 1	**1.24**	< 1	< 1	< 1	< 1	< 1	**5.07**	< 1	< 1
1,2-Dichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**1.47**	**1.95**	**7.41**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2009-03	ug/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.6 J**	**0.61 J**	**1.53**	**9.24**	< 0.2	< 0.2	< 0.2	< 0.2	**0.65 J**	< 0.2	< 0.2
1,2-Dichloroethane	2009-07	ug/L	< 0.2	< 0.200		< 1		**0.43 J**	< 1 J	**1.38**	**8.47**	< 0.2	< 0.200	< 0.200	< 0.2	< 1 J	< 0.2	
1,2-Dichloroethane	2009-09	ug/L	< 0.315	< 0.315		< 1.00		< 1.00	**1.19**	< 5.00	**11.5**	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315	
1,2-Dichloroethane	2010-03	ug/L	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315	**0.870 J**	**1.45**	**4.49**	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315	< 0.315
1,2-Dichloroethane	2010-09	ug/L	< 0.315	< 0.315	< 0.315	< 1.00	< 1.00	**0.410 J**	**0.770 J**	**2.28**	**5.91**	< 0.315	< 1.00	**0.320 J**	< 0.315	< 0.315	< 0.315	< 1.00
1,2-Dichloroethane	2011-03	ug/L	< 0.180	< 0.180	< 0.180	< 1.00	< 10.0	< 0.180	< 1.00	**1.74**	**5.39**	< 0.180	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2011-09	ug/L	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	**0.490 J**	**0.450 J**	**1.35**	**3.79**	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180
1,2-Dichloroethane	2012-03	ug/L	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	**0.470**	**0.310**	**1.52**	**2.96**	< 0.180	< 0.180	< 0.180	< 0.180	**0.190**	< 0.180	< 0.180
1,2-Dichloroethane	2012-09	ug/L	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	**0.270**	**0.450**	**1.49**	**3.96**	< 0.180	< 0.180	**0.210**	< 0.180	< 1.00	< 0.180	< 0.180
1,2-Dichloroethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		**0.243 J**	**1.12**	**2.57**	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,2-Dichloroethane	2013-05	ug/L			< 1.00			**0.181 J**										
1,2-Dichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.441 J**	**0.650 J**	**1.02**	**2.22**	< 1.00	< 1.00	**0.221 J**	< 1.00	**0.370 J**	< 1.00	< 1.00
1,2-Dichloroethane	2013-11	ug/L																
1,2-Dichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.290 J**	< 1.00	**2.99**	< 1.00	< 1.00	< 1.00	< 1.00	**0.399 J**	< 1.00	< 1.00
1,2-Dichloroethane	2014-06	ug/L																
1,2-Dichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	**0.421 J**	**0.5 J**	**0.91 J**	**2.3**	< 1	< 1	< 1	< 1	**0.549 J**	< 1	< 1
1,2-Dichloroethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.960 J**	**2.99**	< 1	< 1.00	< 1.00	< 1	**0.422 J**	< 1	< 1.00
1,2-Dichloroethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1.93	< 1	< 1	< 1		< 1	< 1	
1,2-Dichloroethane	2015-10	ug/L			< 1				< 1	**0.755 J**					< 1			< 1
1,2-Dichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.451 J**	**0.756 J**	**1.29**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2016-06	ug/L			< 1	< 1												
1,2-Dichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.468 J**	**0.762 J**	**0.606 J**	< 1	< 1	< 1	< 1	**0.418 J**	< 1	< 1
1,2-Dichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	**0.245 J**	**0.611 J**	**0.707 J**	< 1	< 1	< 1	< 1	< 1	**0.425 J**	< 1	< 1
1,2-Dichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	**0.276 J**	**0.309 J**	**0.671 J**	**0.422 J**	< 1	< 1	< 1	< 1	**0.528 J**	< 1	< 1
1,2-Dichloroethane	2017-11	ug/L																
1,2-Dichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	**0.225 J**	**0.279 J**	**0.724 J**	**0.352 J**	< 1	< 1	< 1	< 1	**0.358 J**	< 1	< 1
1,2-Dichloroethane	2018-06	ug/L																
1,2-Dichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	**0.817 J**	**0.575 J**	< 1			< 1	< 1	< 1	< 1
1,2-Dichloroethane	2018-09	ug/L					< 1						< 1	< 1				
1,2-Dichloroethane	2018-11	ug/L																
1,2-Dichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.534 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.481 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-03	ug/L	< 1	< 1	< 1			< 1		**0.514 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-04	ug/L				< 1	< 1		< 1									
1,2-Dichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.452 J**	**0.548 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2021-03	ug/L							< 1	**0.449 J**	< 1	< 1						
1,2-Dichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	**0.45 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2022-03	ug/L							< 1	< 1	< 1	< 1						

Table 14

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,2-Dichlorobenzene	2017-11	ug/L														< 1	< 1
1,2-Dichlorobenzene	2018-03	ug/L	< 1	**0.785 J**	**0.638 J**	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2018-06	ug/L														< 1	< 1
1,2-Dichlorobenzene	2018-08	ug/L	< 1	**1.23**	**1.32**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,2-Dichlorobenzene	2018-09	ug/L													< 1	< 1	< 1
1,2-Dichlorobenzene	2018-11	ug/L														< 1	< 1
1,2-Dichlorobenzene	2019-03	ug/L	< 1	**0.813 J**	**1.41**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2019-08	ug/L	< 1	**0.495 J**	**1.16**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2020-03	ug/L	< 1	**1.06**		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,2-Dichlorobenzene	2020-04	ug/L			**0.985 J**									< 1			
1,2-Dichlorobenzene	2020-08	ug/L	< 1	**0.972 J**	**1.31**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichlorobenzene	2021-03	ug/L		**0.617 J**			< 1			< 1							
1,2-Dichlorobenzene	2021-08	ug/L	< 1	**0.846 J**	**0.694 J**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichlorobenzene	2022-03	ug/L		< 1			< 1			< 1							
1,2-Dichlorobenzene	2022-08	ug/L	< 1	**0.564 J**	**1.17**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichlorobenzene	2023-01	ug/L															
1,2-Dichlorobenzene	2023-03	ug/L		**0.481 J**			< 1			< 1							
1,2-Dichlorobenzene	2023-08	ug/L	< 1	**0.739 J**	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,2-Dichloroethane	2009-03	ug/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2								
1,2-Dichloroethane	2009-07	ug/L	< 0.200	< 1 J	< 1 J	< 1	< 0.200										
1,2-Dichloroethane	2009-09	ug/L	< 0.315	< 5.00	< 1.00	< 1.00	< 0.315										
1,2-Dichloroethane	2010-03	ug/L	< 0.315	< 0.315	**0.570 J**	< 0.315	< 0.315	< 0.315	< 0.315								
1,2-Dichloroethane	2010-09	ug/L	< 0.315	< 0.315	**0.560 J**	< 0.315	< 0.315	< 1.00	< 1.00								
1,2-Dichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 0.180	< 1.00								
1,2-Dichloroethane	2011-09	ug/L	< 0.180	**0.230 J**	**0.300 J**	< 0.180	< 0.180	< 0.180	< 0.180								
1,2-Dichloroethane	2012-03	ug/L	< 0.180	< 0.180	**0.320**	< 0.180	< 0.180	< 0.180	< 0.180								
1,2-Dichloroethane	2012-09	ug/L	< 0.180	< 0.180	**0.380**	< 1.00	< 0.180	< 0.180	< 0.180								
1,2-Dichloroethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,2-Dichloroethane	2013-05	ug/L															
1,2-Dichloroethane	2013-09	ug/L	< 1.00	< 1.00	**0.185 J**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2015-03	ug/L	< 1.00	< 1.00	**0.231 J**	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,2-Dichloroethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2016-06	ug/L															
1,2-Dichloroethane	2016-08	ug/L	< 1	< 1	**0.354 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2017-08	ug/L	< 1	**0.221 J**	**0.324 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2017-11	ug/L														< 1	< 1
1,2-Dichloroethane	2018-03	ug/L	**0.225 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	**0.19 J**	< 1
1,2-Dichloroethane	2018-06	ug/L														< 1	< 1
1,2-Dichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,2-Dichloroethane	2018-09	ug/L													< 1	< 1	< 1
1,2-Dichloroethane	2018-11	ug/L														< 1	< 1
1,2-Dichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,2-Dichloroethane	2020-04	ug/L			< 1									< 1			
1,2-Dichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloroethane	2021-03	ug/L		< 1			< 1			< 1							
1,2-Dichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloroethane	2022-03	ug/L		< 1			< 1			< 1							

Table 14

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,2-Dichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2023-01	ug/L															< 1	
1,2-Dichloroethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,2-Dichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.54**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2009-03	ug/L	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	**0.76 J**	**1.84**	**0.7 J**	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
1,2-Dichloropropane	2009-07	ug/L	< 0.4	< 0.400		< 0.4		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 1.00	< 1.00	< 0.4	< 0.4	< 0.4	
1,2-Dichloropropane	2009-09	ug/L	< 0.195	< 0.195		< 1.00		< 1.00	**1.04**	< 5.00	< 1.00	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195	
1,2-Dichloropropane	2010-03	ug/L	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195	**1.12**	**1.10**	**0.470 J**	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195	< 0.195
1,2-Dichloropropane	2010-09	ug/L	< 0.195	< 0.195	< 0.195	< 1.00	< 1.00	< 0.195	**0.950 J**	**1.41**	< 0.195	< 0.195	< 1.00	< 0.195	< 0.195	< 0.195	< 0.195	< 1.00
1,2-Dichloropropane	2011-03	ug/L	< 0.110	< 0.110	< 0.110	< 1.00	< 10.0	< 0.110	< 1.00	**1.38**	< 0.110	< 0.110	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2011-09	ug/L	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	**0.600 J**	**1.06**	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110
1,2-Dichloropropane	2012-03	ug/L	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	**1.00**	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110
1,2-Dichloropropane	2012-09	ug/L	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	**1.14**	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 1.00	< 0.110	< 0.110
1,2-Dichloropropane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	**0.871 J**	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
1,2-Dichloropropane	2013-05	ug/L			< 1.00			< 1.00										
1,2-Dichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2013-11	ug/L																
1,2-Dichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2014-06	ug/L																
1,2-Dichloropropane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
1,2-Dichloropropane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,2-Dichloropropane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
1,2-Dichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2016-06	ug/L			< 1	< 1												
1,2-Dichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2017-11	ug/L																
1,2-Dichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2018-06	ug/L																
1,2-Dichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	**0.428 J**	**0.393 J**	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloropropane	2018-09	ug/L					< 1						< 1	< 1				
1,2-Dichloropropane	2018-11	ug/L																
1,2-Dichloropropane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.448 J**	**0.27 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.586 J**	**0.344 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2020-03	ug/L	< 1	< 1	< 1			< 1		**0.379 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2020-04	ug/L				< 1	< 1		< 1									
1,2-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.433 J**	**0.327 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2021-03	ug/L							**0.399 J**	**0.368 J**	< 1	< 1						
1,2-Dichloropropane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	**0.361 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2022-03	ug/L							**0.308 J**	< 1	< 1	< 1						
1,2-Dichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		**0.489 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2023-01	ug/L															< 1	
1,2-Dichloropropane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
1,2-Dichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trinitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
1,3,5-Trinitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3,5-Trinitrobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
1,3,5-Trinitrobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
1,3,5-Trinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
1,3,5-Trinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
1,3,5-Trinitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
1,3,5-Trinitrobenzene	2011-09	ug/L																
1,3,5-Trinitrobenzene	2012-03	ug/L																
1,3,5-Trinitrobenzene	2012-09	ug/L																

Table 14

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,2-Dichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloroethane	2023-01	ug/L															
1,2-Dichloroethane	2023-03	ug/L		< 1			< 1			< 1							
1,2-Dichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,2-Dichloropropane	2009-03	ug/L	**0.44 J**	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4								
1,2-Dichloropropane	2009-07	ug/L	< 0.400	< 0.4	< 0.4	< 0.4	< 0.400										
1,2-Dichloropropane	2009-09	ug/L	< 0.195	< 5.00	< 1.00	< 1.00	< 0.195										
1,2-Dichloropropane	2010-03	ug/L	**0.400 J**	**0.470 J**	**0.780 J**	< 0.195	< 0.195	< 0.195	< 0.195								
1,2-Dichloropropane	2010-09	ug/L	< 0.195	< 0.195	**0.810 J**	< 0.195	< 0.195	< 1.00	< 1.00								
1,2-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 0.110	< 1.00								
1,2-Dichloropropane	2011-09	ug/L	**0.420 J**	< 0.110	**0.650 J**	< 0.110	< 0.110	< 0.110	< 0.110								
1,2-Dichloropropane	2012-03	ug/L	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110								
1,2-Dichloropropane	2012-09	ug/L	< 0.110	< 0.110	**0.610**	< 1.00	< 0.110	< 0.110	< 0.110								
1,2-Dichloropropane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
1,2-Dichloropropane	2013-05	ug/L															
1,2-Dichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,2-Dichloropropane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2016-06	ug/L															
1,2-Dichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2017-11	ug/L														< 1	< 1
1,2-Dichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2018-06	ug/L														< 1	< 1
1,2-Dichloropropane	2018-08	ug/L	**0.436 J**	< 1	**0.453 J**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,2-Dichloropropane	2018-09	ug/L													< 1	< 1	< 1
1,2-Dichloropropane	2018-11	ug/L														< 1	< 1
1,2-Dichloropropane	2019-03	ug/L	**0.341 J**	< 1	**0.466 J**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2019-08	ug/L	**0.492 J**	< 1	**0.352 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2020-03	ug/L	**0.278 J**	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,2-Dichloropropane	2020-04	ug/L			< 1									< 1			
1,2-Dichloropropane	2020-08	ug/L	**0.357 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloropropane	2021-03	ug/L		< 1			< 1			< 1							
1,2-Dichloropropane	2021-08	ug/L	**1.48 J+**	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloropropane	2022-03	ug/L		< 1			< 1			< 1							
1,2-Dichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,2-Dichloropropane	2023-01	ug/L															
1,2-Dichloropropane	2023-03	ug/L		< 1			< 1			< 1							
1,2-Dichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,3,5-Trinitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
1,3,5-Trinitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,3,5-Trinitrobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
1,3,5-Trinitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
1,3,5-Trinitrobenzene	2011-03	ug/L	< 10.0	**2.88 J**	< 10.0	< 10.0	< 10.0	< 10.0									
1,3,5-Trinitrobenzene	2011-09	ug/L		< 10.0			< 10.0										
1,3,5-Trinitrobenzene	2012-03	ug/L		< 10.0			< 10.0										
1,3,5-Trinitrobenzene	2012-09	ug/L		< 10.0			< 10.0										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,3,5-Trinitrobenzene	2013-03	ug/L																
1,3,5-Trinitrobenzene	2013-09	ug/L																
1,3,5-Trinitrobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
1,3,5-Trinitrobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
1,3,5-Trinitrobenzene	2016-03	ug/L			< 11.1	< 11.2												
1,3,5-Trinitrobenzene	2016-06	ug/L			< 11.4	< 11.4												
1,3,5-Trinitrobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
1,3,5-Trinitrobenzene	2023-01	ug/L															< 10.9	
1,3,5-Trinitrobenzene	2023-03	ug/L															< 10.4	
1,3-Dichlorobenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	**5.57**	**9.48**	**1.09**	< 1	< 1.00	< 1.00	< 1	**8.2**	< 1	
1,3-Dichlorobenzene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,3-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,3-Dichlorobenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	
1,3-Dichlorobenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,3-Dichlorobenzene	2011-09	ug/L							< 1.00	< 1.00	< 1.00					< 1.00		
1,3-Dichlorobenzene	2012-03	ug/L							< 1.00	< 1.00	< 1.00					< 1.00		
1,3-Dichlorobenzene	2012-09	ug/L							< 1.00	< 1.00	< 1.00		< 1.00			< 1.00		
1,3-Dichlorobenzene	2013-03	ug/L							**2.16**	< 1	< 1					< 1.00		
1,3-Dichlorobenzene	2013-09	ug/L							< 1.00	< 1.00	< 1.00					< 1.00		
1,3-Dichlorobenzene	2014-03	ug/L							< 1.00	< 1.00	< 1.00					< 1.00		
1,3-Dichlorobenzene	2014-09	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2015-03	ug/L							< 1.00	< 1.00	< 1					< 1		
1,3-Dichlorobenzene	2015-09	ug/L	< 1	< 1			< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,3-Dichlorobenzene	2015-10	ug/L							< 1	< 1					< 1			< 1
1,3-Dichlorobenzene	2016-03	ug/L			< 1	< 1			< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2016-06	ug/L			< 1	< 1												
1,3-Dichlorobenzene	2016-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2017-03	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2017-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2018-03	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2018-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2019-03	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2019-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2020-03	ug/L								< 1	< 1					< 1		
1,3-Dichlorobenzene	2020-04	ug/L							< 1									
1,3-Dichlorobenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	2021-03	ug/L							< 1	< 1	< 1							
1,3-Dichlorobenzene	2021-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2022-03	ug/L							< 1	< 1	< 1							
1,3-Dichlorobenzene	2022-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichlorobenzene	2023-01	ug/L															< 1	
1,3-Dichlorobenzene	2023-03	ug/L							< 1	< 1	< 1						< 1	
1,3-Dichlorobenzene	2023-08	ug/L							< 1	< 1	< 1					< 1		
1,3-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
1,3-Dichloropropane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
1,3-Dichloropropane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,3-Dichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	
1,3-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,3-Dichloropropane	2012-09	ug/L														< 1.00		
1,3-Dichloropropane	2015-09	ug/L	< 1	< 1			< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
1,3-Dichloropropane	2015-10	ug/L							< 1	< 1					< 1			< 1
1,3-Dichloropropane	2016-03	ug/L			< 1	< 1												
1,3-Dichloropropane	2016-06	ug/L			< 1	< 1												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,3,5-Trinitrobenzene	2013-03	ug/L		< 10.5			< 11.8										
1,3,5-Trinitrobenzene	2013-09	ug/L		< 10.1													
1,3,5-Trinitrobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
1,3,5-Trinitrobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
1,3,5-Trinitrobenzene	2016-03	ug/L					< 10.9			< 11.2							
1,3,5-Trinitrobenzene	2016-06	ug/L															
1,3,5-Trinitrobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
1,3,5-Trinitrobenzene	2023-01	ug/L															
1,3,5-Trinitrobenzene	2023-03	ug/L					< 10			< 10							
1,3-Dichlorobenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,3-Dichlorobenzene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,3-Dichlorobenzene	2009-07	ug/L	< 1.00	< 1	**6.58**	**3.68**	< 1.00										
1,3-Dichlorobenzene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,3-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,3-Dichlorobenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00										
1,3-Dichlorobenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00									
1,3-Dichlorobenzene	2011-09	ug/L			< 1.00	< 1.00	< 1.00										
1,3-Dichlorobenzene	2012-03	ug/L			< 1.00	< 1.00	< 1.00										
1,3-Dichlorobenzene	2012-09	ug/L			< 1.00	< 1.00											
1,3-Dichlorobenzene	2013-03	ug/L			< 25.0		< 1.00										
1,3-Dichlorobenzene	2013-09	ug/L			< 1.00	< 1.00											
1,3-Dichlorobenzene	2014-03	ug/L			< 1.00	< 1.00	< 1.00										
1,3-Dichlorobenzene	2014-09	ug/L			< 1	< 1	< 1										
1,3-Dichlorobenzene	2015-03	ug/L			< 1.00	< 1.00	< 1										
1,3-Dichlorobenzene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,3-Dichlorobenzene	2015-10	ug/L	< 1		< 1					< 1							
1,3-Dichlorobenzene	2016-03	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2016-06	ug/L															
1,3-Dichlorobenzene	2016-08	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2017-03	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2017-08	ug/L			< 1	< 1	< 1			< 1				< 1			
1,3-Dichlorobenzene	2018-03	ug/L			< 1	< 1	< 1			< 10							
1,3-Dichlorobenzene	2018-08	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2019-03	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2019-08	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2020-03	ug/L				< 1	< 1			< 1							
1,3-Dichlorobenzene	2020-04	ug/L			< 1												
1,3-Dichlorobenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1							
1,3-Dichlorobenzene	2021-03	ug/L					< 1			< 1							
1,3-Dichlorobenzene	2021-08	ug/L			< 1	**0.561 J**	< 1			< 1							
1,3-Dichlorobenzene	2022-03	ug/L					< 1			< 1							
1,3-Dichlorobenzene	2022-08	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichlorobenzene	2023-01	ug/L															
1,3-Dichlorobenzene	2023-03	ug/L					< 1			< 1							
1,3-Dichlorobenzene	2023-08	ug/L			< 1	< 1	< 1			< 1							
1,3-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,3-Dichloropropane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
1,3-Dichloropropane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
1,3-Dichloropropane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
1,3-Dichloropropane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,3-Dichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00										
1,3-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00									
1,3-Dichloropropane	2012-09	ug/L			< 2.00	< 1.00											
1,3-Dichloropropane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,3-Dichloropropane	2015-10	ug/L	< 1		< 1					< 1							
1,3-Dichloropropane	2016-03	ug/L					< 1			< 1							
1,3-Dichloropropane	2016-06	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,3-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	2023-01	ug/L															< 1	
1,3-Dichloropropane	2023-03	ug/L															< 1	
1,3-Dinitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
1,3-Dinitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3-Dinitrobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
1,3-Dinitrobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
1,3-Dinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
1,3-Dinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	**0.170 J**	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
1,3-Dinitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
1,3-Dinitrobenzene	2011-09	ug/L									< 10.0							
1,3-Dinitrobenzene	2012-03	ug/L									< 10.0							
1,3-Dinitrobenzene	2012-09	ug/L									< 10.0							
1,3-Dinitrobenzene	2013-03	ug/L									< 10.6							
1,3-Dinitrobenzene	2013-09	ug/L									< 10.6							
1,3-Dinitrobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
1,3-Dinitrobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
1,3-Dinitrobenzene	2016-03	ug/L			< 11.1	< 11.2												
1,3-Dinitrobenzene	2016-06	ug/L			< 11.4	< 11.4												
1,3-Dinitrobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
1,3-Dinitrobenzene	2023-01	ug/L															< 10.9	
1,3-Dinitrobenzene	2023-03	ug/L															< 10.4	
1,4-Dichlorobenzene	2008-08	ug/L	**1.29**	< 1	< 1	< 1	< 1	< 1	**7.94**	**8.05**	**1.8**	< 1	< 1	< 1	< 1	**11.4**	< 1	< 1
1,4-Dichlorobenzene	2009-03	ug/L	**1.87**	< 1	< 1	< 1	< 1	< 1	**1.84**	**7.28**	**1.13**	< 1	< 1	< 1	< 1	**7.82**	< 1	< 1
1,4-Dichlorobenzene	2009-07	ug/L	**2.23**	< 1.00		< 1		< 1	**5.17**	**8.8**	**1.01**	< 1	< 1.00	< 1.00	< 1	**7.6**	< 1	
1,4-Dichlorobenzene	2009-09	ug/L	**1.89**	< 1.00		< 1.00		< 1.00	**6.42**	**11.2**	< 1.00	< 1	< 1	< 1	< 1	**7.07**	< 1	
1,4-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**4.70**	**13.8**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**11.0**	< 1.00	< 1.00
1,4-Dichlorobenzene	2010-09	ug/L	**2.55**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**8.95**	**13.4**	**1.56**	< 1.00	< 1.00	< 1.00	< 1.00	**8.09**	< 1.00	< 1.00
1,4-Dichlorobenzene	2011-03	ug/L	**1.68**	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	**2.69**	**10.1**	**1.84**	< 1.00	< 1.00	< 1.00	< 1.00	**8.19**	< 1.00	< 1.00
1,4-Dichlorobenzene	2011-09	ug/L	**1.71**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**3.55**	**14.9**	**1.70**	< 1.00	< 1.00	< 1.00	< 1.00	**7.45**	< 1.00	< 1.00
1,4-Dichlorobenzene	2012-03	ug/L	**1.60**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.56**	**14.7**	**1.95**	< 1.00	< 1.00	< 1.00	< 1.00	**8.10**	< 1.00	< 1.00
1,4-Dichlorobenzene	2012-09	ug/L	**1.75**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.24**	**12.1**	**2.95**	< 1.00	< 1.00	< 1.00	< 1.00	**10.0**	< 1.00	< 1.00
1,4-Dichlorobenzene	2013-03	ug/L	**1.17**	< 1		< 1.00	< 1.00		**2.07**	**16.3**	**3.94**	< 1	< 1	**0.289 J**	< 1.00	**8.80**	< 1	< 1
1,4-Dichlorobenzene	2013-05	ug/L			< 1.00			< 1.00										
1,4-Dichlorobenzene	2013-09	ug/L	**2.17**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**7.05**	**13.8**	**2.61**	< 1.00	< 1.00	**0.686 J**	< 1.00	**6.92**	< 1.00	< 1.00
1,4-Dichlorobenzene	2013-11	ug/L																
1,4-Dichlorobenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**3.95**	< 1.00	**0.808 J**	**1.96**	< 1.00	< 1.00	< 1.00	**0.428 J**	**9.87**	< 1.00	< 1.00
1,4-Dichlorobenzene	2014-06	ug/L																
1,4-Dichlorobenzene	2014-09	ug/L	**2.41**	< 1	< 1	< 1	< 1	< 1	**7.45**	**15.1**	**2.33**	< 1	< 1	< 1	< 1	**7.33**	< 1	< 1
1,4-Dichlorobenzene	2015-03	ug/L	**1.65**	< 1	< 1.00	< 1.00	< 1.00	< 1.00	**1.17**	**10.9**	< 1	< 1	< 1.00	**0.298 J**	< 1	**5.52**	< 1	< 1.00
1,4-Dichlorobenzene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			**3.53**	< 1	< 1	< 1		**4.31**	< 1	
1,4-Dichlorobenzene	2015-10	ug/L			< 1				**3.03**	**9.99**					< 1			**0.807 J**
1,4-Dichlorobenzene	2016-03	ug/L	**1.76**	**0.281 J**	< 1	< 1	< 1	< 1	**9.09**	**12.7**	**3.81**	< 1	< 1	< 1	< 1	**3.71**	< 1	< 1
1,4-Dichlorobenzene	2016-06	ug/L			< 1	< 1												
1,4-Dichlorobenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**9.12**	**15**	**7.43**	< 1	< 1	< 1	< 1	**5.08**	< 1	< 1
1,4-Dichlorobenzene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**8.46**	**14.9**	< 1	< 1	< 1	**0.202 J**	< 1	**11.6**	< 1	< 1
1,4-Dichlorobenzene	2017-08	ug/L	**1.41**	< 1	< 1	< 1	< 1	< 1	**3.12**	**11.9**	**4.7**	< 1	< 1	< 1	< 1	**7.87**	< 1	< 1
1,4-Dichlorobenzene	2017-11	ug/L																
1,4-Dichlorobenzene	2018-03	ug/L	**0.657 J**	< 1	< 1	< 1	< 1	< 1	**1.55**	**12.2**	**6.35**	< 1	< 1	< 1	< 1	**10.5**	< 1	< 1
1,4-Dichlorobenzene	2018-06	ug/L																
1,4-Dichlorobenzene	2018-08	ug/L	**1.19**	< 1	< 1	< 1		< 1	**3.26**	**13.5**	**5.8**	< 1			< 1	**4.27**	< 1	< 1
1,4-Dichlorobenzene	2018-09	ug/L					< 1						< 1	< 1				
1,4-Dichlorobenzene	2018-11	ug/L																
1,4-Dichlorobenzene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**5.51**	**14.7**	**7.88**	< 1	< 1	< 1	< 1	**9.66**	< 1	< 1
1,4-Dichlorobenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**11.2**	**13.7**	**3.36**	< 1	< 1	< 1	< 1	**8.81**	< 1	< 1
1,4-Dichlorobenzene	2020-03	ug/L	**0.541 J**	< 1	< 1			**0.268 J**		**19.5**	**5.37**	< 1	< 1	**0.569 J**	< 1	**12.6**	< 1	< 1
1,4-Dichlorobenzene	2020-04	ug/L				< 1	< 1		**8.64**									

Table 14

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,3-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1							
1,3-Dichloropropane	2023-01	ug/L															
1,3-Dichloropropane	2023-03	ug/L					< 1			< 1							
1,3-Dinitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
1,3-Dinitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,3-Dinitrobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
1,3-Dinitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,3-Dinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,3-Dinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
1,3-Dinitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
1,3-Dinitrobenzene	2011-09	ug/L					< 10.0										
1,3-Dinitrobenzene	2012-03	ug/L					< 10.0										
1,3-Dinitrobenzene	2012-09	ug/L					< 10.0										
1,3-Dinitrobenzene	2013-03	ug/L					< 11.8										
1,3-Dinitrobenzene	2013-09	ug/L															
1,3-Dinitrobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
1,3-Dinitrobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
1,3-Dinitrobenzene	2016-03	ug/L					< 10.9			< 11.2							
1,3-Dinitrobenzene	2016-06	ug/L															
1,3-Dinitrobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
1,3-Dinitrobenzene	2023-01	ug/L															
1,3-Dinitrobenzene	2023-03	ug/L					< 10			< 10							
1,4-Dichlorobenzene	2008-08	ug/L	< 1	**7.09**	**7.73**	< 1	< 1	< 1	< 1								
1,4-Dichlorobenzene	2009-03	ug/L	< 1	**5.57**	**4.34**	< 1	< 1	< 1	< 1								
1,4-Dichlorobenzene	2009-07	ug/L	< 1.00	**6.1**	**6.1**	**3.42**	< 1.00										
1,4-Dichlorobenzene	2009-09	ug/L	< 1.00	**6.00**	**8.54**	< 1.00	< 1.00										
1,4-Dichlorobenzene	2010-03	ug/L	< 1.00	**10.1**	**10.3**	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2010-09	ug/L	< 1.00	**6.15**	**5.41**	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2011-03	ug/L	< 1.00	**5.99**	**5.02**	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2011-09	ug/L	< 1.00	**5.55**	**3.34**	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2012-03	ug/L	< 1.00	**4.87**	**5.01**	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2012-09	ug/L	< 1.00	**4.73**	**6.59**	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2013-03	ug/L	< 1	**3.04**	< 25.0		< 1.00	< 1	< 1								
1,4-Dichlorobenzene	2013-05	ug/L															
1,4-Dichlorobenzene	2013-09	ug/L	< 1.00	**5.55**	**5.95**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2014-03	ug/L	< 1.00	< 1.00	**8.42**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2014-09	ug/L	< 1	**6.86**	**5.37**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2015-03	ug/L	< 1.00	**4.07**	**4.89**	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
1,4-Dichlorobenzene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2016-03	ug/L	< 1	**5.37**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2016-06	ug/L															
1,4-Dichlorobenzene	2016-08	ug/L	< 1	**5.52**	**3.72**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2017-03	ug/L	< 1	**4.67**	**3.6**	**0.354 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2017-08	ug/L	< 1	**3.62**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2017-11	ug/L														< 1	< 1
1,4-Dichlorobenzene	2018-03	ug/L	< 1	**3.3**	**2.17**	**0.272 J**	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2018-06	ug/L														< 1	< 1
1,4-Dichlorobenzene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
1,4-Dichlorobenzene	2018-09	ug/L													< 1	< 1	< 1
1,4-Dichlorobenzene	2018-11	ug/L														< 1	< 1
1,4-Dichlorobenzene	2019-03	ug/L	< 1	**3.11**	< 1	**0.58 J**	< 1	**0.263 J**	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2019-08	ug/L	< 1	**4.58**	**3.97**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2020-03	ug/L	< 1	**4.12**		**0.242 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
1,4-Dichlorobenzene	2020-04	ug/L			**2.48**									< 1			

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
1,4-Dichlorobenzene	2020-08	ug/L	**1.44**	**0.247 J**	< 1	< 1	< 1	**0.247 J**	**9.74**	**16.2**	**4.34**	< 1	< 1	**0.614 J**	< 1	**9.64**	< 1	< 1
1,4-Dichlorobenzene	2021-03	ug/L							**4.13**	**11.8**	**4.45**	< 1						
1,4-Dichlorobenzene	2021-08	ug/L	**0.928 J+**	< 1	< 1	< 1	< 10	< 1	**1.68**	**13.3**	**2.94**	< 1	< 1	**0.638 J**	< 1	**7.96**	< 1	< 1
1,4-Dichlorobenzene	2022-03	ug/L							**1.11**	**13**	**5.68**	< 1						
1,4-Dichlorobenzene	2022-08	ug/L	**0.665 J**	< 1	< 1	< 1	< 1		**2.34**	**13.3**	**2.8**	< 1	< 1	< 1	< 1	**11.1**	< 1	< 1
1,4-Dichlorobenzene	2023-01	ug/L															< 1	
1,4-Dichlorobenzene	2023-03	ug/L							**5.99**	**14.6**	**5.2**	< 1					< 1	
1,4-Dichlorobenzene	2023-08	ug/L	**1.19**	< 1	< 1	< 1	< 1		**1.24**	**12.9**	< 1	< 1	< 1	< 1	< 1	**11.9**	< 1	< 1
1,4-Naphthoquinone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
1,4-Naphthoquinone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,4-Naphthoquinone	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
1,4-Naphthoquinone	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
1,4-Naphthoquinone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
1,4-Naphthoquinone	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
1,4-Naphthoquinone	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
1,4-Naphthoquinone	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
1,4-Naphthoquinone	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
1,4-Naphthoquinone	2016-03	ug/L			< 11.1	< 11.2												
1,4-Naphthoquinone	2016-06	ug/L			< 11.4	< 11.4												
1,4-Naphthoquinone	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
1,4-Naphthoquinone	2023-01	ug/L															< 10.9	
1,4-Naphthoquinone	2023-03	ug/L															< 10.4	
1-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
1-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1-Naphthylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
1-Naphthylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
1-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
1-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
1-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
1-Naphthylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
1-Naphthylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
1-Naphthylamine	2016-03	ug/L			< 11.1	< 11.2												
1-Naphthylamine	2016-06	ug/L			< 11.4	< 11.4												
1-Naphthylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
1-Naphthylamine	2023-01	ug/L															< 10.9	
1-Naphthylamine	2023-03	ug/L															< 10.4	
2,2-Dichloropropane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
2,2-Dichloropropane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
2,2-Dichloropropane	2009-07	ug/L	< 4	< 4.00		< 4		< 4	< 4	< 4	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4	
2,2-Dichloropropane	2009-09	ug/L	< 4	< 4.00		< 4.00		< 4.00	< 4.00	< 20.0	< 4.00	< 4	< 4	< 4	< 4	< 4	< 4	
2,2-Dichloropropane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
2,2-Dichloropropane	2010-09	ug/L	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	
2,2-Dichloropropane	2011-03	ug/L	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	
2,2-Dichloropropane	2012-09	ug/L														< 4.00		
2,2-Dichloropropane	2015-09	ug/L	< 4	< 4			< 4	< 4			< 4	< 4	< 4	< 4		< 4	< 4	
2,2-Dichloropropane	2015-10	ug/L							< 4	< 4					< 4			< 4
2,2-Dichloropropane	2016-03	ug/L			< 4	< 4												
2,2-Dichloropropane	2016-06	ug/L			< 4	< 4												
2,2-Dichloropropane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.09 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
2,2-Dichloropropane	2023-01	ug/L															< 4	
2,2-Dichloropropane	2023-03	ug/L															< 4	
2,2'-oxybis(1-Chloropropane)	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,2'-oxybis(1-Chloropropane)	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,2'-oxybis(1-Chloropropane)	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,2'-oxybis(1-Chloropropane)	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,2'-oxybis(1-Chloropropane)	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,2'-oxybis(1-Chloropropane)	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
1,4-Dichlorobenzene	2020-08	ug/L	< 1	**4.03**	**3.25**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,4-Dichlorobenzene	2021-03	ug/L		**2.48**			< 1			< 1							
1,4-Dichlorobenzene	2021-08	ug/L	< 1	**3.56**	**1.97**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	**0.344 J**		< 1
1,4-Dichlorobenzene	2022-03	ug/L		**1.27**			< 1			< 1							
1,4-Dichlorobenzene	2022-08	ug/L	< 1	**2.77**	**3.03**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,4-Dichlorobenzene	2023-01	ug/L															
1,4-Dichlorobenzene	2023-03	ug/L		**2.32**			< 1			< 1							
1,4-Dichlorobenzene	2023-08	ug/L	< 1	**3.42**	**2.17**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
1,4-Naphthoquinone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
1,4-Naphthoquinone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1,4-Naphthoquinone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
1,4-Naphthoquinone	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,4-Naphthoquinone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,4-Naphthoquinone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
1,4-Naphthoquinone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
1,4-Naphthoquinone	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
1,4-Naphthoquinone	2015-10	ug/L	< 11.8		< 10.3					< 11							
1,4-Naphthoquinone	2016-03	ug/L					< 10.9			< 11.2							
1,4-Naphthoquinone	2016-06	ug/L															
1,4-Naphthoquinone	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
1,4-Naphthoquinone	2023-01	ug/L															
1,4-Naphthoquinone	2023-03	ug/L					< 10			< 10							
1-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
1-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
1-Naphthylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
1-Naphthylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
1-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
1-Naphthylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
1-Naphthylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
1-Naphthylamine	2016-03	ug/L					< 10.9			< 11.2							
1-Naphthylamine	2016-06	ug/L															
1-Naphthylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
1-Naphthylamine	2023-01	ug/L															
1-Naphthylamine	2023-03	ug/L					< 10			< 10							
2,2-Dichloropropane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4								
2,2-Dichloropropane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4								
2,2-Dichloropropane	2009-07	ug/L	< 4.00	< 4	< 4	< 4	< 4.00										
2,2-Dichloropropane	2009-09	ug/L	< 4.00	< 20.0	< 4.00	< 4.00	< 4.00										
2,2-Dichloropropane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
2,2-Dichloropropane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00										
2,2-Dichloropropane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00									
2,2-Dichloropropane	2012-09	ug/L				< 4.00											
2,2-Dichloropropane	2015-09	ug/L		< 4		< 4	< 4	< 4	< 4								
2,2-Dichloropropane	2015-10	ug/L	< 4		< 4					< 4							
2,2-Dichloropropane	2016-03	ug/L					< 4			< 4							
2,2-Dichloropropane	2016-06	ug/L															
2,2-Dichloropropane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4							
2,2-Dichloropropane	2023-01	ug/L															
2,2-Dichloropropane	2023-03	ug/L					< 4			< 4							
2,2'-oxybis(1-Chloropropane)	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,2'-oxybis(1-Chloropropane)	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,2'-oxybis(1-Chloropropane)	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,2'-oxybis(1-Chloropropane)	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,2'-oxybis(1-Chloropropane)	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,2'-oxybis(1-Chloropropane)	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2,2'-oxybis(1-Chloropropane)	2011-03	ug/L	< 10.0 UJ	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,2'-oxybis(1-Chloropropane)	2012-03	ug/L																
2,2'-oxybis(1-Chloropropane)	2012-09	ug/L																
2,2'-oxybis(1-Chloropropane)	2013-03	ug/L																
2,2'-oxybis(1-Chloropropane)	2014-03	ug/L																
2,2'-oxybis(1-Chloropropane)	2014-09	ug/L																
2,2'-oxybis(1-Chloropropane)	2015-03	ug/L																
2,2'-oxybis(1-Chloropropane)	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,2'-oxybis(1-Chloropropane)	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,2'-oxybis(1-Chloropropane)	2016-03	ug/L			< 11.1	< 11.2												
2,2'-oxybis(1-Chloropropane)	2016-06	ug/L			< 11.4	< 11.4												
2,2'-oxybis(1-Chloropropane)	2017-03	ug/L																
2,2'-oxybis(1-Chloropropane)	2017-08	ug/L																
2,2'-oxybis(1-Chloropropane)	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,2'-oxybis(1-Chloropropane)	2022-08	ug/L																
2,2'-oxybis(1-Chloropropane)	2023-01	ug/L															< 10.9	
2,2'-oxybis(1-Chloropropane)	2023-03	ug/L															< 10.4	
2,3,4,6-Tetrachlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,3,4,6-Tetrachlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,3,4,6-Tetrachlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,3,4,6-Tetrachlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,3,4,6-Tetrachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,3,4,6-Tetrachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,3,4,6-Tetrachlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,3,4,6-Tetrachlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,3,4,6-Tetrachlorophenol	2016-03	ug/L			< 11.1	< 11.2												
2,3,4,6-Tetrachlorophenol	2016-06	ug/L			< 11.4	< 11.4												
2,3,4,6-Tetrachlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,3,4,6-Tetrachlorophenol	2023-01	ug/L															< 10.9	
2,3,4,6-Tetrachlorophenol	2023-03	ug/L															< 10.4	
2,4,5-T	2008-08	ug/L	< 0.1			< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	< 0.11	< 0.52	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4,5-T	2008-09	ug/L		< 0.1	< 0.1												< 0.1	
2,4,5-T	2009-03	ug/L	< 0.21	< 0.22	< 0.2	< 0.21	< 0.2	< 0.21	< 0.21	< 0.21	< 0.21	< 0.22	< 0.21	< 0.22	< 0.2	< 0.23	< 0.21	< 0.21
2,4,5-T	2009-07	ug/L					< 0.22			< 0.21	< 0.22	< 0.21	< 0.21	< 0.20				
2,4,5-T	2009-09	ug/L					< 0.22			< 0.21	< 0.21	< 0.2	< 0.2	< 0.2				
2,4,5-T	2010-03	ug/L					< 0.50			< 0.54	< 0.53	< 0.56	< 0.53	< 0.54				
2,4,5-T	2010-09	ug/L	< 0.51	< 0.52	< 0.53			< 0.52	< 0.52	< 0.52	< 0.53	< 0.53		< 0.53	< 0.52	< 0.54	< 0.62	
2,4,5-T	2011-03	ug/L								< 0.53	< 0.52	< 0.53	< 0.51					
2,4,5-T	2015-09	ug/L	< 1.24	< 1.19			< 1.15	< 1.23			< 1.04	< 1.2	< 1.2	< 1.23		< 1.23	**0.723 J**	
2,4,5-T	2015-10	ug/L							< 1.2	< 1.09					< 1.25			< 1.23
2,4,5-T	2016-03	ug/L			< 1.16	< 1.15												
2,4,5-T	2016-06	ug/L			< 1.24	< 1.19												
2,4,5-T	2019-08	ug/L					< 1.19											
2,4,5-T	2020-08	ug/L	< 0.151	< 0.153	< 0.149	< 0.154	< 0.158	< 0.143	< 0.153	< 0.149	< 0.147	< 0.145	< 0.15	< 0.147	< 0.149	< 0.162	< 0.161	< 0.151
2,4,5-T	2023-01	ug/L															< 1.15	
2,4,5-T	2023-03	ug/L															< 0.5	
2,4,5-TP (Silvex)	2008-08	ug/L	< 0.1			< 0.11	< 0.11	< 0.11	< 0.11	< 0.1	< 0.11	< 0.52	< 0.1	**0.11**	< 0.1	< 0.1		< 0.1
2,4,5-TP (Silvex)	2008-09	ug/L		< 0.1	< 0.1												< 0.1	
2,4,5-TP (Silvex)	2009-03	ug/L	< 0.21	< 0.22	< 0.2	< 0.21	**0.21**	< 0.21	< 0.21	**0.65**	**0.23**	**0.25**	**0.11 J**	< 0.22	< 0.2	< 0.23	< 0.21	< 0.21
2,4,5-TP (Silvex)	2009-07	ug/L					< 0.22			**0.52**	< 0.22	< 0.21	< 0.21	< 0.20				
2,4,5-TP (Silvex)	2009-09	ug/L					< 0.22			**0.33**	< 0.21	< 0.2	< 0.2	< 0.2				
2,4,5-TP (Silvex)	2010-03	ug/L					< 0.50			**0.69**	< 0.53	< 0.56	< 0.53	< 0.54				
2,4,5-TP (Silvex)	2010-09	ug/L	< 0.51	< 0.52	< 0.53			< 0.52	< 0.52	< 0.52	< 0.53	< 0.53		< 0.53	< 0.52	< 0.54	< 0.62	
2,4,5-TP (Silvex)	2011-03	ug/L								**0.37 J**	< 0.52	< 0.53	< 0.51					
2,4,5-TP (Silvex)	2011-09	ug/L								< 1.0	< 1.1	< 1.0	< 1.1	< 1.1				
2,4,5-TP (Silvex)	2012-03	ug/L					< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				

Table 14

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2,2'-oxybis(1-Chloropropane)	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,2'-oxybis(1-Chloropropane)	2012-03	ug/L					< 10.0										
2,2'-oxybis(1-Chloropropane)	2012-09	ug/L					< 10.0										
2,2'-oxybis(1-Chloropropane)	2013-03	ug/L					< 11.8										
2,2'-oxybis(1-Chloropropane)	2014-03	ug/L					< 11.2										
2,2'-oxybis(1-Chloropropane)	2014-09	ug/L					< 11										
2,2'-oxybis(1-Chloropropane)	2015-03	ug/L					< 11										
2,2'-oxybis(1-Chloropropane)	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,2'-oxybis(1-Chloropropane)	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,2'-oxybis(1-Chloropropane)	2016-03	ug/L					< 10.9			< 11.2							
2,2'-oxybis(1-Chloropropane)	2016-06	ug/L															
2,2'-oxybis(1-Chloropropane)	2017-03	ug/L					< 10.5			< 10.9							
2,2'-oxybis(1-Chloropropane)	2017-08	ug/L					< 10.6			< 10.4							
2,2'-oxybis(1-Chloropropane)	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,2'-oxybis(1-Chloropropane)	2022-08	ug/L					< 10.4			< 10							
2,2'-oxybis(1-Chloropropane)	2023-01	ug/L															
2,2'-oxybis(1-Chloropropane)	2023-03	ug/L					< 10			< 10							
2,3,4,6-Tetrachlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,3,4,6-Tetrachlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,3,4,6-Tetrachlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,3,4,6-Tetrachlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,3,4,6-Tetrachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,3,4,6-Tetrachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,3,4,6-Tetrachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,3,4,6-Tetrachlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,3,4,6-Tetrachlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,3,4,6-Tetrachlorophenol	2016-03	ug/L					< 10.9			< 11.2							
2,3,4,6-Tetrachlorophenol	2016-06	ug/L															
2,3,4,6-Tetrachlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,3,4,6-Tetrachlorophenol	2023-01	ug/L															
2,3,4,6-Tetrachlorophenol	2023-03	ug/L					< 10			< 10							
2,4,5-T	2008-08	ug/L		< 0.1	< 1	< 0.11											
2,4,5-T	2008-09	ug/L	< 0.1				< 0.099	< 0.1	< 0.1								
2,4,5-T	2009-03	ug/L	< 0.21	< 0.22	< 0.22	< 0.21	< 0.2	< 0.21	< 0.21								
2,4,5-T	2009-07	ug/L		< 0.22			< 0.21										
2,4,5-T	2009-09	ug/L		< 0.22			< 0.20										
2,4,5-T	2010-03	ug/L		< 0.50			< 0.53										
2,4,5-T	2010-09	ug/L	< 0.52	< 0.51	< 0.53	< 0.53	< 0.53										
2,4,5-T	2011-03	ug/L		< 0.53			< 0.50										
2,4,5-T	2015-09	ug/L		< 1.08		< 1.22	< 1.09	< 1.12	< 1.09								
2,4,5-T	2015-10	ug/L	< 1.26		< 1.14					< 1.21							
2,4,5-T	2016-03	ug/L					< 1.1			< 0.944							
2,4,5-T	2016-06	ug/L															
2,4,5-T	2019-08	ug/L		< 1.27													
2,4,5-T	2020-08	ug/L	< 0.167	< 0.149	< 0.15	< 0.168	< 0.171	< 0.153	< 0.144	< 0.14							
2,4,5-T	2023-01	ug/L															
2,4,5-T	2023-03	ug/L					< 0.5			< 0.5							
2,4,5-TP (Silvex)	2008-08	ug/L		< 0.1	< 1	< 0.11											
2,4,5-TP (Silvex)	2008-09	ug/L	< 0.1				< 0.099	< 0.1	< 0.1								
2,4,5-TP (Silvex)	2009-03	ug/L	< 0.21	**0.34**	< 0.22	< 0.21	< 0.2	< 0.21	< 0.21								
2,4,5-TP (Silvex)	2009-07	ug/L		< 0.22			< 0.21										
2,4,5-TP (Silvex)	2009-09	ug/L		< 0.22			< 0.20										
2,4,5-TP (Silvex)	2010-03	ug/L		< 0.50			< 0.53										
2,4,5-TP (Silvex)	2010-09	ug/L	< 0.52	< 0.51	< 0.53	< 0.53	< 0.53										
2,4,5-TP (Silvex)	2011-03	ug/L		< 0.53			< 0.50										
2,4,5-TP (Silvex)	2011-09	ug/L		< 1.0			< 1.1										
2,4,5-TP (Silvex)	2012-03	ug/L		< 1.0			< 1.0										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2,4,5-TP (Silvex)	2012-09	ug/L					< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
2,4,5-TP (Silvex)	2013-03	ug/L					< 1.09			< 1.05	< 1.06	< 1.11	< 1.1	< 1.15				
2,4,5-TP (Silvex)	2013-09	ug/L					< 1.11			< 1.14	< 1.11	< 1.05	< 1.10	< 1.22				
2,4,5-TP (Silvex)	2014-03	ug/L					< 1.09			< 1.08	**0.396 J**	< 1.09		< 1.04				
2,4,5-TP (Silvex)	2014-09	ug/L					< 1.04			< 1.06	< 1.04	< 1.07		< 1.04				
2,4,5-TP (Silvex)	2015-03	ug/L					< 1.15			< 1.12	< 1.19	< 1.15		< 1.13				
2,4,5-TP (Silvex)	2015-09	ug/L	< 1.24	< 1.19			< 1.15	< 1.23			< 1.04	< 1.2	< 1.2	< 1.23		< 1.23	< 1.21	
2,4,5-TP (Silvex)	2015-10	ug/L							< 1.2	< 1.09					< 1.25			< 1.23
2,4,5-TP (Silvex)	2016-03	ug/L			< 1.16	< 1.15	< 1.12			< 1.12	< 0.981	< 1.06		< 1.09				
2,4,5-TP (Silvex)	2016-06	ug/L			< 1.24	< 1.19												
2,4,5-TP (Silvex)	2016-08	ug/L					< 1.16			< 1.01	< 1.2	< 1.21		< 1.16				
2,4,5-TP (Silvex)	2017-03	ug/L					< 1.11			< 1.2	< 1.17	< 1.07		< 1.14				
2,4,5-TP (Silvex)	2017-08	ug/L					< 1.19			< 1.08	< 1.2	< 1.12		< 1.2				
2,4,5-TP (Silvex)	2018-03	ug/L					< 1.14			< 1.21	< 1.07	< 1.1		< 1.2				
2,4,5-TP (Silvex)	2018-08	ug/L								< 1.12	< 1.16	< 1.2						
2,4,5-TP (Silvex)	2018-09	ug/L					< 1.21							< 1.16				
2,4,5-TP (Silvex)	2019-03	ug/L					< 1.04			< 1.1	< 1.21	< 1.21		< 1.16				
2,4,5-TP (Silvex)	2019-08	ug/L					< 1.19			**0.363 J**	< 1.26	< 1.29		< 1.15				
2,4,5-TP (Silvex)	2020-03	ug/L								< 1.2	< 1.05	< 1.24		< 1.25				
2,4,5-TP (Silvex)	2020-04	ug/L					< 1.18											
2,4,5-TP (Silvex)	2020-08	ug/L	< 0.151	< 0.153	< 0.149	< 0.154	< 0.158	< 0.143	< 0.153	< 0.149	< 0.147	< 0.145	< 0.15	< 0.147	< 0.149	< 0.162	**0.0966 J**	< 0.151
2,4,5-TP (Silvex)	2021-03	ug/L								< 0.145	< 0.147							
2,4,5-TP (Silvex)	2021-08	ug/L					< 1.14			< 1.09	< 1.14	< 1.16		**0.387 J**				
2,4,5-TP (Silvex)	2022-03	ug/L								< 1.11	< 1.1	< 1.06						
2,4,5-TP (Silvex)	2022-08	ug/L					< 0.5			< 1.13	< 0.5	< 0.5		< 1.12				
2,4,5-TP (Silvex)	2023-01	ug/L															< 1.15	
2,4,5-TP (Silvex)	2023-03	ug/L								< 0.5	< 0.5	< 0.5					< 0.5	
2,4,5-TP (Silvex)	2023-08	ug/L					< 1.01			< 1.09	< 1.16	< 1.01		< 1.14				
2,4,5-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,4,5-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,5-Trichlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,4,5-Trichlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,4,5-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,4,5-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,4,5-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,4,5-Trichlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,4,5-Trichlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,4,5-Trichlorophenol	2016-03	ug/L			< 11.1	< 11.2												
2,4,5-Trichlorophenol	2016-06	ug/L			< 11.4	< 11.4												
2,4,5-Trichlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,4,5-Trichlorophenol	2023-01	ug/L															< 10.9	
2,4,5-Trichlorophenol	2023-03	ug/L															< 10.4	
2,4,6-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,4,6-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,6-Trichlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,4,6-Trichlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,4,6-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,4,6-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,4,6-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,4,6-Trichlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,4,6-Trichlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,4,6-Trichlorophenol	2016-03	ug/L			< 11.1	< 11.2												
2,4,6-Trichlorophenol	2016-06	ug/L			< 11.4	< 11.4												
2,4,6-Trichlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,4,6-Trichlorophenol	2023-01	ug/L															< 10.9	
2,4,6-Trichlorophenol	2023-03	ug/L															< 10.4	
2,4-D	2008-08	ug/L	< 1			< 1.1	< 1.1	< 1.1	< 1.1	< 1	< 1.1	< 5.2	< 1	< 1	< 1	< 1		< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2,4,5-TP (Silvex)	2012-09	ug/L		< 1.0													
2,4,5-TP (Silvex)	2013-03	ug/L		< 1.09			< 1.07										
2,4,5-TP (Silvex)	2013-09	ug/L		< 1.03													
2,4,5-TP (Silvex)	2014-03	ug/L		< 1.04			< 1.07										
2,4,5-TP (Silvex)	2014-09	ug/L		< 1.06			< 1.07										
2,4,5-TP (Silvex)	2015-03	ug/L		< 1.10			< 1.17										
2,4,5-TP (Silvex)	2015-09	ug/L		< 1.08		< 1.22	< 1.09	< 1.12	< 1.09								
2,4,5-TP (Silvex)	2015-10	ug/L	< 1.26		< 1.14					< 1.21							
2,4,5-TP (Silvex)	2016-03	ug/L		< 1.06			< 1.1			< 0.944							
2,4,5-TP (Silvex)	2016-06	ug/L															
2,4,5-TP (Silvex)	2016-08	ug/L		< 1.2			< 1.19			< 1.13							
2,4,5-TP (Silvex)	2017-03	ug/L		< 1.25			< 1.25			< 1.13							
2,4,5-TP (Silvex)	2017-08	ug/L		< 1.1			< 1.21			< 1.1							
2,4,5-TP (Silvex)	2018-03	ug/L		< 1.15			< 1.42			< 1.18							
2,4,5-TP (Silvex)	2018-08	ug/L		< 1.25			< 1.39			< 1.17							
2,4,5-TP (Silvex)	2018-09	ug/L															
2,4,5-TP (Silvex)	2019-03	ug/L		< 1.19			< 1.36			< 1.13							
2,4,5-TP (Silvex)	2019-08	ug/L		< 1.27			< 1.19			< 1.2							
2,4,5-TP (Silvex)	2020-03	ug/L		< 1.17			< 1.45			< 1.27							
2,4,5-TP (Silvex)	2020-04	ug/L															
2,4,5-TP (Silvex)	2020-08	ug/L	< 0.167	< 0.149	< 0.15	< 0.168	< 0.171	< 0.153	< 0.144	< 0.14							
2,4,5-TP (Silvex)	2021-03	ug/L		< 0.161			< 0.16 J			< 0.152							
2,4,5-TP (Silvex)	2021-08	ug/L		< 1.12			< 1.29			< 1.17							
2,4,5-TP (Silvex)	2022-03	ug/L		< 1.12 J			< 1.1 J			< 1.02 J							
2,4,5-TP (Silvex)	2022-08	ug/L		< 0.5			< 1.16			< 1.11							
2,4,5-TP (Silvex)	2023-01	ug/L															
2,4,5-TP (Silvex)	2023-03	ug/L		< 0.5			< 0.5			< 0.5							
2,4,5-TP (Silvex)	2023-08	ug/L		< 0.979			< 1.11			< 1.01							
2,4,5-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,4,5-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,4,5-Trichlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,4,5-Trichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4,5-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4,5-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,4,5-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,4,5-Trichlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,4,5-Trichlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,4,5-Trichlorophenol	2016-03	ug/L					< 10.9			< 11.2							
2,4,5-Trichlorophenol	2016-06	ug/L															
2,4,5-Trichlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,4,5-Trichlorophenol	2023-01	ug/L															
2,4,5-Trichlorophenol	2023-03	ug/L					< 10			< 10							
2,4,6-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,4,6-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,4,6-Trichlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,4,6-Trichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4,6-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4,6-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,4,6-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,4,6-Trichlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,4,6-Trichlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,4,6-Trichlorophenol	2016-03	ug/L					< 10.9			< 11.2							
2,4,6-Trichlorophenol	2016-06	ug/L															
2,4,6-Trichlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,4,6-Trichlorophenol	2023-01	ug/L															
2,4,6-Trichlorophenol	2023-03	ug/L					< 10			< 10							
2,4-D	2008-08	ug/L		< 1	< 10	< 1.1											

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2,4-D	2008-09	ug/L		< 1	< 1												< 1	
2,4-D	2009-03	ug/L	< 1.1	< 1.1	< 1	< 1.1	< 0.99	< 1.1	< 1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1	< 1.1	< 1.1	< 1.1
2,4-D	2009-07	ug/L					< 1.1			< 1	< 1.1	< 1	< 1.1	< 1.0				
2,4-D	2009-09	ug/L					< 1.1			< 1.0	< 1.0	< 1	< 0.99	< 0.99				
2,4-D	2010-03	ug/L					< 1.0			< 1.1	< 1.1	< 1.1	< 1.1	< 1.1				
2,4-D	2010-09	ug/L	< 1.0	< 1.0	< 1.1			< 1.0	< 1.0	< 1.0	< 1.1	< 1.1		< 1.1	< 1.0	< 1.1	< 1.2	
2,4-D	2011-03	ug/L								< 1.1	< 1.0	< 1.1	< 1.0					
2,4-D	2015-09	ug/L	< 1.24	< 1.19			< 1.15	< 1.23			< 1.04	< 1.2	< 1.2	< 1.23		< 1.23	< 1.21	
2,4-D	2015-10	ug/L							< 1.2	< 1.09					< 1.25			< 1.23
2,4-D	2016-03	ug/L			< 1.16	< 1.15												
2,4-D	2016-06	ug/L			< 1.24	< 1.19												
2,4-D	2019-08	ug/L					< 1.19											
2,4-D	2020-08	ug/L	< 0.302	< 0.307	< 0.298	< 0.308	< 0.316	< 0.287	< 0.306	< 0.297	< 0.293	< 0.29	< 0.299	< 0.294	< 0.297	**0.488**	< 0.323	< 0.302
2,4-D	2020-12	ug/L														< 0.0204		
2,4-D	2020-12	ug/L														< 0.275		
2,4-D	2021-03	ug/L														< 0.297 J		
2,4-D	2021-08	ug/L														< 1.08		
2,4-D	2022-08	ug/L														< 2		
2,4-D	2023-01	ug/L															< 1.15	
2,4-D	2023-03	ug/L															< 2	
2,4-D	2023-08	ug/L														< 1.06		
2,4-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,4-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dichlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,4-Dichlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,4-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		**0.191 J**			< 10.0		< 10.0	**0.219 J**	< 10.0	< 11.2
2,4-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	**0.304 J**	< 10.0	< 10.0		< 10.0	< 10.0	**0.179 J**	< 10.0	
2,4-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	**0.157 J**	< 10.0	
2,4-Dichlorophenol	2011-09	ug/L								**0.248 J**						< 10.0		
2,4-Dichlorophenol	2012-03	ug/L								< 10.0						< 10.0		
2,4-Dichlorophenol	2012-09	ug/L								**0.310 J**						**0.216 J**		
2,4-Dichlorophenol	2013-03	ug/L								**0.18 J**						**0.255 J**		
2,4-Dichlorophenol	2013-09	ug/L								**0.247 J**						< 11.2		
2,4-Dichlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,4-Dichlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,4-Dichlorophenol	2016-03	ug/L			< 11.1	< 11.2												
2,4-Dichlorophenol	2016-06	ug/L			< 11.4	< 11.4												
2,4-Dichlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,4-Dichlorophenol	2023-01	ug/L															< 10.9	
2,4-Dichlorophenol	2023-03	ug/L															< 10.4	
2,4-Dimethylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,4-Dimethylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dimethylphenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,4-Dimethylphenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,4-Dimethylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,4-Dimethylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,4-Dimethylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,4-Dimethylphenol	2011-09	ug/L																
2,4-Dimethylphenol	2012-03	ug/L																
2,4-Dimethylphenol	2012-09	ug/L																
2,4-Dimethylphenol	2013-03	ug/L																
2,4-Dimethylphenol	2013-09	ug/L																
2,4-Dimethylphenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,4-Dimethylphenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,4-Dimethylphenol	2016-03	ug/L			< 11.1	< 11.2												
2,4-Dimethylphenol	2016-06	ug/L			< 11.4	< 11.4												
2,4-Dimethylphenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2,4-D	2008-09	ug/L	< 1				< 0.99	< 1	< 1								
2,4-D	2009-03	ug/L	< 1	< 1.1	< 1.1	< 1.1	< 1	< 1.1	< 1								
2,4-D	2009-07	ug/L		< 1.1			< 1.1										
2,4-D	2009-09	ug/L		< 1.1			< 1.0										
2,4-D	2010-03	ug/L		< 1.0			< 1.1										
2,4-D	2010-09	ug/L	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1										
2,4-D	2011-03	ug/L		< 1.1			< 1.0										
2,4-D	2015-09	ug/L		< 1.08		< 1.22	< 1.09	< 1.12	< 1.09								
2,4-D	2015-10	ug/L	< 1.26		< 1.14					< 1.21							
2,4-D	2016-03	ug/L					< 1.1			< 0.944							
2,4-D	2016-06	ug/L															
2,4-D	2019-08	ug/L		< 1.27													
2,4-D	2020-08	ug/L	< 0.334	< 0.298	< 0.301	< 0.335	< 0.342	< 0.306	< 0.288	< 0.281							
2,4-D	2020-12	ug/L															
2,4-D	2020-12	ug/L															
2,4-D	2021-03	ug/L					< 0.319 J			< 0.303							
2,4-D	2021-08	ug/L					< 1.29			< 1.17							
2,4-D	2022-08	ug/L					< 1.16			< 1.11							
2,4-D	2023-01	ug/L															
2,4-D	2023-03	ug/L					< 2			< 2							
2,4-D	2023-08	ug/L					< 1.11			< 1.01							
2,4-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,4-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,4-Dichlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,4-Dichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	**0.169 J**	< 10.0	< 10.0	< 10.0	< 10.0								
2,4-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,4-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,4-Dichlorophenol	2011-09	ug/L			< 10.0		< 10.0										
2,4-Dichlorophenol	2012-03	ug/L			< 10.0		< 10.0										
2,4-Dichlorophenol	2012-09	ug/L			< 10.0		< 10.0										
2,4-Dichlorophenol	2013-03	ug/L			< 10.6		< 11.8										
2,4-Dichlorophenol	2013-09	ug/L			< 11.0												
2,4-Dichlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,4-Dichlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,4-Dichlorophenol	2016-03	ug/L					< 10.9			< 11.2							
2,4-Dichlorophenol	2016-06	ug/L															
2,4-Dichlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,4-Dichlorophenol	2023-01	ug/L															
2,4-Dichlorophenol	2023-03	ug/L					< 10			< 10							
2,4-Dimethylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,4-Dimethylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,4-Dimethylphenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,4-Dimethylphenol	2009-09	ug/L	< 10.0	**0.489 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4-Dimethylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4-Dimethylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,4-Dimethylphenol	2011-03	ug/L	< 10.0	**0.296 J**	< 10.0	< 10.0	< 10.0	< 10.0									
2,4-Dimethylphenol	2011-09	ug/L		**0.317 J**			< 10.0										
2,4-Dimethylphenol	2012-03	ug/L		< 10.0			< 10.0										
2,4-Dimethylphenol	2012-09	ug/L		< 10.0			< 10.0										
2,4-Dimethylphenol	2013-03	ug/L		< 10.5			< 11.8										
2,4-Dimethylphenol	2013-09	ug/L		**0.239 J**													
2,4-Dimethylphenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,4-Dimethylphenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,4-Dimethylphenol	2016-03	ug/L					< 10.9			< 11.2							
2,4-Dimethylphenol	2016-06	ug/L															
2,4-Dimethylphenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2,4-Dimethylphenol	2023-01	ug/L															< 10.9	
2,4-Dimethylphenol	2023-03	ug/L															< 10.4	
2,4-Dinitrophenol	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20
2,4-Dinitrophenol	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
2,4-Dinitrophenol	2009-07	ug/L	< 20	< 20.0	< 20.0	< 20		< 20		< 20			< 20.0		< 20	< 20	< 20	< 20
2,4-Dinitrophenol	2009-09	ug/L	< 20	< 20.0	< 20.0	< 20.0		< 20.0		< 20.0			< 20		< 20	< 22.5	< 20	< 20
2,4-Dinitrophenol	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0			< 20.0		< 20.0	< 20.0	< 20.0	< 22.5
2,4-Dinitrophenol	2010-09	ug/L	< 20.0	< 20.0	< 20.0			< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	
2,4-Dinitrophenol	2011-03	ug/L	< 20.0	< 20.0	< 20.0			< 20.0		< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	
2,4-Dinitrophenol	2015-09	ug/L	< 22.7	< 22.2			< 22.2	< 23.3			< 21.7	< 22.2	< 21.7	< 22.5		< 22.7	< 21.1	
2,4-Dinitrophenol	2015-10	ug/L							< 20.8	< 21.1					< 23.5			< 23.5
2,4-Dinitrophenol	2016-03	ug/L			< 22.2	< 22.5												
2,4-Dinitrophenol	2016-06	ug/L			< 22.7	< 22.7												
2,4-Dinitrophenol	2020-08	ug/L	< 23.5	< 23.3	< 24.4	< 23.5	< 23.5	< 23.5	< 23	< 21.7	< 22.7	< 23.5	< 23.3	< 22.2	< 23.8	< 23.3	< 23.8	< 23.3
2,4-Dinitrophenol	2023-01	ug/L															< 21.7	
2,4-Dinitrophenol	2023-03	ug/L															< 20.8	
2,4-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,4-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dinitrotoluene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,4-Dinitrotoluene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,4-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,4-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,4-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,4-Dinitrotoluene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,4-Dinitrotoluene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,4-Dinitrotoluene	2016-03	ug/L			< 11.1	< 11.2												
2,4-Dinitrotoluene	2016-06	ug/L			< 11.4	< 11.4												
2,4-Dinitrotoluene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,4-Dinitrotoluene	2023-01	ug/L															< 10.9	
2,4-Dinitrotoluene	2023-03	ug/L															< 10.4	
2,6-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,6-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dichlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,6-Dichlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,6-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,6-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,6-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,6-Dichlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,6-Dichlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,6-Dichlorophenol	2016-03	ug/L			< 11.1	< 11.2												
2,6-Dichlorophenol	2016-06	ug/L			< 11.4	< 11.4												
2,6-Dichlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,6-Dichlorophenol	2023-01	ug/L															< 10.9	
2,6-Dichlorophenol	2023-03	ug/L															< 10.4	
2,6-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2,6-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dinitrotoluene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2,6-Dinitrotoluene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2,6-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2,6-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2,6-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2,6-Dinitrotoluene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2,6-Dinitrotoluene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2,6-Dinitrotoluene	2016-03	ug/L			< 11.1	< 11.2												
2,6-Dinitrotoluene	2016-06	ug/L			< 11.4	< 11.4												
2,6-Dinitrotoluene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2,6-Dinitrotoluene	2023-01	ug/L															< 10.9	

Table 14

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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2,4-Dimethylphenol	2023-01	ug/L															
2,4-Dimethylphenol	2023-03	ug/L					< 10			< 10							
2,4-Dinitrophenol	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20								
2,4-Dinitrophenol	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20								
2,4-Dinitrophenol	2009-07	ug/L	< 20.0	< 20	< 20	< 20	< 20.0	< 22.7	< 20.0								
2,4-Dinitrophenol	2009-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0								
2,4-Dinitrophenol	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0								
2,4-Dinitrophenol	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0										
2,4-Dinitrophenol	2011-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0									
2,4-Dinitrophenol	2015-09	ug/L		< 22		< 22.5	< 23.3	< 22.5	< 22.5								
2,4-Dinitrophenol	2015-10	ug/L	< 23.5		< 20.6					< 22							
2,4-Dinitrophenol	2016-03	ug/L					< 21.7			< 22.5							
2,4-Dinitrophenol	2016-06	ug/L															
2,4-Dinitrophenol	2020-08	ug/L	< 23.8	< 23.5	< 21.1	< 22	< 27	< 23.5	< 22.2	< 22.2							
2,4-Dinitrophenol	2023-01	ug/L															
2,4-Dinitrophenol	2023-03	ug/L					< 20			< 20							
2,4-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,4-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,4-Dinitrotoluene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,4-Dinitrotoluene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,4-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,4-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,4-Dinitrotoluene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,4-Dinitrotoluene	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,4-Dinitrotoluene	2016-03	ug/L					< 10.9			< 11.2							
2,4-Dinitrotoluene	2016-06	ug/L															
2,4-Dinitrotoluene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,4-Dinitrotoluene	2023-01	ug/L															
2,4-Dinitrotoluene	2023-03	ug/L					< 10			< 10							
2,6-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,6-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,6-Dichlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,6-Dichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,6-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,6-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,6-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,6-Dichlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,6-Dichlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,6-Dichlorophenol	2016-03	ug/L					< 10.9			< 11.2							
2,6-Dichlorophenol	2016-06	ug/L															
2,6-Dichlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,6-Dichlorophenol	2023-01	ug/L															
2,6-Dichlorophenol	2023-03	ug/L					< 10			< 10							
2,6-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2,6-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2,6-Dinitrotoluene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2,6-Dinitrotoluene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,6-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2,6-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2,6-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2,6-Dinitrotoluene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2,6-Dinitrotoluene	2015-10	ug/L	< 11.8		< 10.3					< 11							
2,6-Dinitrotoluene	2016-03	ug/L					< 10.9			< 11.2							
2,6-Dinitrotoluene	2016-06	ug/L															
2,6-Dinitrotoluene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2,6-Dinitrotoluene	2023-01	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2,6-Dinitrotoluene	2023-03	ug/L															< 10.4	
2-Acetylaminofluorene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Acetylaminofluorene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Acetylaminofluorene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Acetylaminofluorene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2-Acetylaminofluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Acetylaminofluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Acetylaminofluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Acetylaminofluorene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Acetylaminofluorene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Acetylaminofluorene	2016-03	ug/L			< 11.1	< 11.2												
2-Acetylaminofluorene	2016-06	ug/L			< 11.4	< 11.4												
2-Acetylaminofluorene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Acetylaminofluorene	2023-01	ug/L															< 10.9	
2-Acetylaminofluorene	2023-03	ug/L															< 10.4	
2-Butanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**69**	< 10
2-Butanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
2-Butanone	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
2-Butanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10 J	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10 J
2-Butanone	2013-05	ug/L			< 10.0			< 10.0										
2-Butanone	2013-09	ug/L	< 10.0	< 10.0	**2.30 J**	< 10.0 J	< 10.0 J	**1.80 J**	**9.77 J**	**3.44 J**	**4.44 J**	**1.20 J**	**0.855 J**	**3.31 J**	< 10.0	**1.71 J**	< 10.0	< 10.0
2-Butanone	2013-11	ug/L																
2-Butanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2014-06	ug/L																
2-Butanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**1.43 J**	**4.33 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0 J	< 10.0 J	**2.46 J**	< 10	< 10.0	**1.44 J**	< 10	< 10	< 10	< 10.0
2-Butanone	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			**4.79 J**	< 10	< 10	**1.61 J**		< 10	< 10	
2-Butanone	2015-10	ug/L			< 10				**4.79 J**	< 10					< 10			< 10
2-Butanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**6.29 J**	< 10	< 10	**2.74 J**	< 10	< 10	< 10	< 10
2-Butanone	2016-06	ug/L			< 10	< 10												
2-Butanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**12.3**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**9.85 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**5.2 J**	**1.89 J**	**1.56 J**	< 10	< 10	**2.74 J**	< 10	< 10	< 10	< 10
2-Butanone	2017-11	ug/L																
2-Butanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**2.71 J**	**3.08 J**	**2.43 J**	< 10	< 10	**1.19 J**	< 10	**2.41 J**	< 10	< 10
2-Butanone	2018-06	ug/L																
2-Butanone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10	**3.61 J**	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Butanone	2018-09	ug/L					< 10						**2.27 J**	< 10				
2-Butanone	2018-11	ug/L																
2-Butanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**9.62 J**	< 10	**6.25 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**3.76 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	**5.84 J**	< 10	< 10	< 10	< 10
2-Butanone	2020-04	ug/L				< 10	< 10		< 10									
2-Butanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**9.21 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2021-03	ug/L							< 10	< 10	< 10	< 10						
2-Butanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2022-03	ug/L							< 10	< 10	< 10	< 10						
2-Butanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	**2.71 J**	< 10	< 10	< 10	< 10
2-Butanone	2023-01	ug/L															< 10	
2-Butanone	2023-03	ug/L							< 10	< 10	< 10	< 10					< 10	

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2,6-Dinitrotoluene	2023-03	ug/L					< 10			< 10							
2-Acetylaminofluorene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Acetylaminofluorene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Acetylaminofluorene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Acetylaminofluorene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Acetylaminofluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Acetylaminofluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Acetylaminofluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Acetylaminofluorene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Acetylaminofluorene	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Acetylaminofluorene	2016-03	ug/L					< 10.9			< 11.2							
2-Acetylaminofluorene	2016-06	ug/L															
2-Acetylaminofluorene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Acetylaminofluorene	2023-01	ug/L															
2-Acetylaminofluorene	2023-03	ug/L					< 10			< 10							
2-Butanone	2008-08	ug/L	**14.4**	< 10	< 10	< 10	< 10	< 10	< 10								
2-Butanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Butanone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
2-Butanone	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
2-Butanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2013-03	ug/L	< 10	**9.42 J**	< 250		< 10.0	< 10	< 10								
2-Butanone	2013-05	ug/L															
2-Butanone	2013-09	ug/L	< 10.0	< 10.0 J	**178**	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2014-09	ug/L	< 10	< 10	**1.72 J**	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
2-Butanone	2015-03	ug/L	< 10.0	< 10.0 J	< 10.0 J	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
2-Butanone	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
2-Butanone	2016-03	ug/L	< 10	**1.26 J**	**1.36 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Butanone	2016-06	ug/L															
2-Butanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Butanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Butanone	2017-08	ug/L	< 10	**2.7 J**	**2.52 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Butanone	2017-11	ug/L														< 10	< 10
2-Butanone	2018-03	ug/L	< 10	**2.79 J**	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2018-06	ug/L														< 10	< 10
2-Butanone	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
2-Butanone	2018-09	ug/L													< 10	< 10	< 10
2-Butanone	2018-11	ug/L														< 10	< 10
2-Butanone	2019-03	ug/L	< 10	< 10	**4.17 J**	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2019-08	ug/L	< 10	< 10	**3.73 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
2-Butanone	2020-04	ug/L			< 10									< 10			
2-Butanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Butanone	2021-03	ug/L		< 10			< 10			< 10							
2-Butanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Butanone	2022-03	ug/L		< 10			< 10			< 10							
2-Butanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Butanone	2023-01	ug/L															
2-Butanone	2023-03	ug/L		**2.38 J**			< 10			< 10							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2-Butanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloronaphthalene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Chloronaphthalene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloronaphthalene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Chloronaphthalene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2-Chloronaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Chloronaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Chloronaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Chloronaphthalene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Chloronaphthalene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Chloronaphthalene	2016-03	ug/L			< 11.1	< 11.2												
2-Chloronaphthalene	2016-06	ug/L			< 11.4	< 11.4												
2-Chloronaphthalene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Chloronaphthalene	2023-01	ug/L															< 10.9	
2-Chloronaphthalene	2023-03	ug/L															< 10.4	
2-Chlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Chlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Chlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	**0.696 J**	< 10	< 10
2-Chlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	**0.536 J**	< 10.0	< 11.2
2-Chlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	**0.757 J**	< 10.0	
2-Chlorophenol	2011-03	ug/L	**0.157 J**	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	**0.578 J**	< 10.0	
2-Chlorophenol	2011-09	ug/L	**0.219 J**													**0.452 J**		
2-Chlorophenol	2012-03	ug/L	< 10.0													**0.613 J**		
2-Chlorophenol	2012-09	ug/L	< 10.0													**0.500 J**		
2-Chlorophenol	2013-03	ug/L	< 10.9													**0.712 J**		
2-Chlorophenol	2013-09	ug/L	**0.225 J**		< 10.2											**0.398 J**		
2-Chlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		**0.216 J**	< 10.5	
2-Chlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Chlorophenol	2016-03	ug/L			< 11.1	< 11.2												
2-Chlorophenol	2016-06	ug/L			< 11.4	< 11.4												
2-Chlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Chlorophenol	2023-01	ug/L															< 10.9	
2-Chlorophenol	2023-03	ug/L															< 10.4	
2-Hexanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
2-Hexanone	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
2-Hexanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10
2-Hexanone	2013-05	ug/L			< 10.0			< 10.0										
2-Hexanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2013-11	ug/L																
2-Hexanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2014-06	ug/L																
2-Hexanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Hexanone	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
2-Hexanone	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
2-Hexanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2016-06	ug/L			< 10	< 10												
2-Hexanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2-Butanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Chloronaphthalene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Chloronaphthalene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Chloronaphthalene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Chloronaphthalene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Chloronaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Chloronaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Chloronaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Chloronaphthalene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Chloronaphthalene	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Chloronaphthalene	2016-03	ug/L					< 10.9			< 11.2							
2-Chloronaphthalene	2016-06	ug/L															
2-Chloronaphthalene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Chloronaphthalene	2023-01	ug/L															
2-Chloronaphthalene	2023-03	ug/L					< 10			< 10							
2-Chlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Chlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Chlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Chlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Chlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Chlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Chlorophenol	2011-03	ug/L	< 10.0	**0.153 J**	< 10.0	< 10.0	< 10.0	< 10.0									
2-Chlorophenol	2011-09	ug/L		**0.164 J**			< 10.0										
2-Chlorophenol	2012-03	ug/L		**0.157 J**			< 10.0										
2-Chlorophenol	2012-09	ug/L		< 10.0			< 10.0										
2-Chlorophenol	2013-03	ug/L		< 10.5			< 11.8										
2-Chlorophenol	2013-09	ug/L		< 10.1													
2-Chlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Chlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Chlorophenol	2016-03	ug/L					< 10.9			< 11.2							
2-Chlorophenol	2016-06	ug/L															
2-Chlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Chlorophenol	2023-01	ug/L															
2-Chlorophenol	2023-03	ug/L					< 10			< 10							
2-Hexanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Hexanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Hexanone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
2-Hexanone	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
2-Hexanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								
2-Hexanone	2013-05	ug/L															
2-Hexanone	2013-09	ug/L	< 10.0	< 10.0	**1.25 J**	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
2-Hexanone	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2016-06	ug/L															
2-Hexanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2-Hexanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2017-11	ug/L																
2-Hexanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2018-06	ug/L																
2-Hexanone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Hexanone	2018-09	ug/L					< 10						< 10	< 10				
2-Hexanone	2018-11	ug/L																
2-Hexanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2020-04	ug/L				< 10	< 10		< 10									
2-Hexanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2021-03	ug/L							< 10	< 10	< 10	< 10						
2-Hexanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2022-03	ug/L							< 10	< 10	< 10	< 10						
2-Hexanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2023-01	ug/L															< 10	
2-Hexanone	2023-03	ug/L							< 10	< 10	< 10	< 10					< 10	
2-Hexanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Methylnaphthalene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Methylnaphthalene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2-Methylnaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Methylnaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Methylnaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Methylnaphthalene	2011-09	ug/L																
2-Methylnaphthalene	2012-03	ug/L																
2-Methylnaphthalene	2012-09	ug/L																
2-Methylnaphthalene	2013-03	ug/L																
2-Methylnaphthalene	2013-09	ug/L																
2-Methylnaphthalene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Methylnaphthalene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Methylnaphthalene	2016-03	ug/L			< 11.1	< 11.2												
2-Methylnaphthalene	2016-06	ug/L			< 11.4	< 11.4												
2-Methylnaphthalene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Methylnaphthalene	2023-01	ug/L															< 10.9	
2-Methylnaphthalene	2023-03	ug/L															< 10.4	
2-Methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylphenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Methylphenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2-Methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Methylphenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Methylphenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Methylphenol	2016-03	ug/L			< 11.1	< 11.2												
2-Methylphenol	2016-06	ug/L			< 11.4	< 11.4												
2-Methylphenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Methylphenol	2023-01	ug/L															< 10.9	
2-Methylphenol	2023-03	ug/L															< 10.4	
2-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Naphthylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Naphthylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2-Hexanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2017-11	ug/L														< 10	< 10
2-Hexanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2018-06	ug/L														< 10	< 10
2-Hexanone	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
2-Hexanone	2018-09	ug/L													< 10	< 10	< 10
2-Hexanone	2018-11	ug/L														< 10	< 10
2-Hexanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
2-Hexanone	2020-04	ug/L			< 10									< 10			
2-Hexanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Hexanone	2021-03	ug/L		< 10			< 10			< 10							
2-Hexanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Hexanone	2022-03	ug/L		< 10			< 10			< 10							
2-Hexanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Hexanone	2023-01	ug/L															
2-Hexanone	2023-03	ug/L		< 10			< 10			< 10							
2-Hexanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
2-Methylnaphthalene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Methylnaphthalene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Methylnaphthalene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Methylnaphthalene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Methylnaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Methylnaphthalene	2010-09	ug/L	< 10.0	**0.191 J**	< 10.0	< 10.0	< 10.0										
2-Methylnaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Methylnaphthalene	2011-09	ug/L		< 10.0			< 10.0										
2-Methylnaphthalene	2012-03	ug/L		< 10.0			< 10.0										
2-Methylnaphthalene	2012-09	ug/L		< 10.0			< 10.0										
2-Methylnaphthalene	2013-03	ug/L		< 10.5			< 11.8										
2-Methylnaphthalene	2013-09	ug/L		< 10.1													
2-Methylnaphthalene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Methylnaphthalene	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Methylnaphthalene	2016-03	ug/L					< 10.9			< 11.2							
2-Methylnaphthalene	2016-06	ug/L															
2-Methylnaphthalene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Methylnaphthalene	2023-01	ug/L															
2-Methylnaphthalene	2023-03	ug/L					< 10			< 10							
2-Methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Methylphenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Methylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Methylphenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Methylphenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Methylphenol	2016-03	ug/L					< 10.9			< 11.2							
2-Methylphenol	2016-06	ug/L															
2-Methylphenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Methylphenol	2023-01	ug/L															
2-Methylphenol	2023-03	ug/L					< 10			< 10							
2-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Naphthylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Naphthylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
2-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Naphthylamine	2012-03	ug/L																
2-Naphthylamine	2012-09	ug/L																
2-Naphthylamine	2013-03	ug/L																
2-Naphthylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Naphthylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Naphthylamine	2016-03	ug/L			< 11.1	< 11.2												
2-Naphthylamine	2016-06	ug/L			< 11.4	< 11.4												
2-Naphthylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Naphthylamine	2023-01	ug/L															< 10.9	
2-Naphthylamine	2023-03	ug/L															< 10.4	
2-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitroaniline	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Nitroaniline	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Nitroaniline	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Nitroaniline	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Nitroaniline	2016-03	ug/L			< 11.1	< 11.2												
2-Nitroaniline	2016-06	ug/L			< 11.4	< 11.4												
2-Nitroaniline	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Nitroaniline	2023-01	ug/L															< 10.9	
2-Nitroaniline	2023-03	ug/L															< 10.4	
2-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
2-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitrophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
2-Nitrophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
2-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
2-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
2-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
2-Nitrophenol	2012-03	ug/L																
2-Nitrophenol	2012-09	ug/L																
2-Nitrophenol	2013-03	ug/L																
2-Nitrophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
2-Nitrophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
2-Nitrophenol	2016-03	ug/L			< 11.1	< 11.2												
2-Nitrophenol	2016-06	ug/L			< 11.4	< 11.4												
2-Nitrophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
2-Nitrophenol	2023-01	ug/L															< 10.9	
2-Nitrophenol	2023-03	ug/L															< 10.4	
3,3-Dichlorobenzidine	2008-08	ug/L	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 94.4	< 85	< 85	< 85	< 85	< 85	< 94.4	< 85
3,3-Dichlorobenzidine	2009-03	ug/L	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85
3,3-Dichlorobenzidine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
3,3-Dichlorobenzidine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
3,3-Dichlorobenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
3,3-Dichlorobenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
3,3-Dichlorobenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
3,3-Dichlorobenzidine	2015-09	ug/L	< 56.8	< 55.6			< 55.6	< 58.1			< 54.3	< 55.6	< 54.3	< 56.2		< 56.8	< 52.6	
3,3-Dichlorobenzidine	2015-10	ug/L							< 52.1	< 52.6					< 58.8			< 58.8
3,3-Dichlorobenzidine	2016-03	ug/L			< 55.6	< 56.2												
3,3-Dichlorobenzidine	2016-06	ug/L			< 56.8	< 56.8												
3,3-Dichlorobenzidine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
3,3-Dichlorobenzidine	2023-01	ug/L															< 10.9	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
2-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Naphthylamine	2012-03	ug/L					< 10.0										
2-Naphthylamine	2012-09	ug/L		< 10.0			< 10.0										
2-Naphthylamine	2013-03	ug/L					< 11.8										
2-Naphthylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Naphthylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Naphthylamine	2016-03	ug/L					< 10.9			< 11.2							
2-Naphthylamine	2016-06	ug/L															
2-Naphthylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Naphthylamine	2023-01	ug/L															
2-Naphthylamine	2023-03	ug/L					< 10			< 10							
2-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Nitroaniline	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Nitroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Nitroaniline	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Nitroaniline	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Nitroaniline	2016-03	ug/L					< 10.9			< 11.2							
2-Nitroaniline	2016-06	ug/L															
2-Nitroaniline	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Nitroaniline	2023-01	ug/L															
2-Nitroaniline	2023-03	ug/L					< 10			< 10							
2-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
2-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
2-Nitrophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
2-Nitrophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
2-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
2-Nitrophenol	2012-03	ug/L					< 10.0										
2-Nitrophenol	2012-09	ug/L					< 10.0										
2-Nitrophenol	2013-03	ug/L					< 11.8										
2-Nitrophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
2-Nitrophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
2-Nitrophenol	2016-03	ug/L					< 10.9			< 11.2							
2-Nitrophenol	2016-06	ug/L															
2-Nitrophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
2-Nitrophenol	2023-01	ug/L															
2-Nitrophenol	2023-03	ug/L					< 10			< 10							
3,3-Dichlorobenzidine	2008-08	ug/L	< 85	< 85	< 85	< 85	< 85	< 94.4	< 85								
3,3-Dichlorobenzidine	2009-03	ug/L	< 85	< 85	< 85	< 85	< 85	< 85	< 85								
3,3-Dichlorobenzidine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
3,3-Dichlorobenzidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3,3-Dichlorobenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3,3-Dichlorobenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
3,3-Dichlorobenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
3,3-Dichlorobenzidine	2015-09	ug/L		< 54.9		< 56.2	< 58.1	< 56.2	< 56.2								
3,3-Dichlorobenzidine	2015-10	ug/L	< 58.8		< 51.5					< 54.9							
3,3-Dichlorobenzidine	2016-03	ug/L					< 54.3			< 56.2							
3,3-Dichlorobenzidine	2016-06	ug/L															
3,3-Dichlorobenzidine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
3,3-Dichlorobenzidine	2023-01	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
3,3-Dichlorobenzidine	2023-03	ug/L															< 10.4	
3,3-Dimethylbenzidine	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20
3,3-Dimethylbenzidine	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
3,3-Dimethylbenzidine	2009-07	ug/L	< 20	< 20.0	< 20.0	< 20		< 20		< 20			< 20.0		< 20	< 20	< 20	< 20
3,3-Dimethylbenzidine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
3,3-Dimethylbenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
3,3-Dimethylbenzidine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
3,3-Dimethylbenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
3,3-Dimethylbenzidine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
3,3-Dimethylbenzidine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
3,3-Dimethylbenzidine	2016-03	ug/L			< 11.1	< 11.2												
3,3-Dimethylbenzidine	2016-06	ug/L			< 11.4	< 11.4												
3,3-Dimethylbenzidine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
3,3-Dimethylbenzidine	2023-01	ug/L															< 10.9	
3,3-Dimethylbenzidine	2023-03	ug/L															< 10.4	
3-Methylcholanthrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
3-Methylcholanthrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3-Methylcholanthrene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
3-Methylcholanthrene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
3-Methylcholanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
3-Methylcholanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
3-Methylcholanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
3-Methylcholanthrene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
3-Methylcholanthrene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
3-Methylcholanthrene	2016-03	ug/L			< 11.1	< 11.2												
3-Methylcholanthrene	2016-06	ug/L			< 11.4	< 11.4												
3-Methylcholanthrene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
3-Methylcholanthrene	2023-01	ug/L															< 10.9	
3-Methylcholanthrene	2023-03	ug/L															< 10.4	
3-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
3-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3-Nitroaniline	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
3-Nitroaniline	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
3-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
3-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
3-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
3-Nitroaniline	2011-09	ug/L																
3-Nitroaniline	2012-03	ug/L																
3-Nitroaniline	2012-09	ug/L																
3-Nitroaniline	2013-03	ug/L																
3-Nitroaniline	2013-09	ug/L																
3-Nitroaniline	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
3-Nitroaniline	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
3-Nitroaniline	2016-03	ug/L			< 11.1	< 11.2												
3-Nitroaniline	2016-06	ug/L			< 11.4	< 11.4												
3-Nitroaniline	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
3-Nitroaniline	2023-01	ug/L															< 10.9	
3-Nitroaniline	2023-03	ug/L															< 10.4	
4,4'-DDD	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
4,4'-DDD	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
4,4'-DDD	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
4,4'-DDD	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
4,4'-DDD	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
4,4'-DDD	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
4,4'-DDD	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
4,4'-DDD	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
4,4'-DDD	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	

Table 14

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
3,3-Dichlorobenzidine	2023-03	ug/L					< 10			< 10							
3,3-Dimethylbenzidine	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20								
3,3-Dimethylbenzidine	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20								
3,3-Dimethylbenzidine	2009-07	ug/L	< 20.0	< 20	< 20	< 20	< 20.0	< 22.7	< 20.0								
3,3-Dimethylbenzidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3,3-Dimethylbenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3,3-Dimethylbenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
3,3-Dimethylbenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
3,3-Dimethylbenzidine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
3,3-Dimethylbenzidine	2015-10	ug/L	< 11.8		< 10.3					< 11							
3,3-Dimethylbenzidine	2016-03	ug/L					< 10.9			< 11.2							
3,3-Dimethylbenzidine	2016-06	ug/L															
3,3-Dimethylbenzidine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
3,3-Dimethylbenzidine	2023-01	ug/L															
3,3-Dimethylbenzidine	2023-03	ug/L					< 10			< 10							
3-Methylcholanthrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
3-Methylcholanthrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
3-Methylcholanthrene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
3-Methylcholanthrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3-Methylcholanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3-Methylcholanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
3-Methylcholanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
3-Methylcholanthrene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
3-Methylcholanthrene	2015-10	ug/L	< 11.8		< 10.3					< 11							
3-Methylcholanthrene	2016-03	ug/L					< 10.9			< 11.2							
3-Methylcholanthrene	2016-06	ug/L															
3-Methylcholanthrene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
3-Methylcholanthrene	2023-01	ug/L															
3-Methylcholanthrene	2023-03	ug/L					< 10			< 10							
3-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
3-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
3-Nitroaniline	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
3-Nitroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
3-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
3-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	**0.646 J**	< 10.0	< 10.0	< 10.0									
3-Nitroaniline	2011-09	ug/L			< 10.0		< 10.0										
3-Nitroaniline	2012-03	ug/L			< 10.0		< 10.0										
3-Nitroaniline	2012-09	ug/L			< 10.0		< 10.0										
3-Nitroaniline	2013-03	ug/L			< 10.6		< 11.8										
3-Nitroaniline	2013-09	ug/L			< 11.0												
3-Nitroaniline	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
3-Nitroaniline	2015-10	ug/L	< 11.8		< 10.3					< 11							
3-Nitroaniline	2016-03	ug/L					< 10.9			< 11.2							
3-Nitroaniline	2016-06	ug/L															
3-Nitroaniline	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
3-Nitroaniline	2023-01	ug/L															
3-Nitroaniline	2023-03	ug/L					< 10			< 10							
4,4'-DDD	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
4,4'-DDD	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
4,4'-DDD	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
4,4'-DDD	2009-07	ug/L					< 0.0320		< 0.0320								
4,4'-DDD	2009-09	ug/L					< 0.0320		< 0.0320								
4,4'-DDD	2010-03	ug/L					< 0.0320		< 0.0320								
4,4'-DDD	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
4,4'-DDD	2011-03	ug/L					< 0.0320										
4,4'-DDD	2015-09	ug/L		**0.00581 J**		< 0.0356	< 0.0368	< 0.0356	< 0.0352								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
4,4'-DDD	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
4,4'-DDD	2016-03	ug/L			< 0.032	< 0.0356												
4,4'-DDD	2016-06	ug/L			< 0.0364	< 0.0364												
4,4'-DDD	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
4,4'-DDD	2023-01	ug/L															< 0.0727	
4,4'-DDD	2023-03	ug/L															< 0.0667	
4,4'-DDE	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
4,4'-DDE	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
4,4'-DDE	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
4,4'-DDE	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
4,4'-DDE	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
4,4'-DDE	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
4,4'-DDE	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
4,4'-DDE	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
4,4'-DDE	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
4,4'-DDE	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
4,4'-DDE	2016-03	ug/L			**0.00273 J**	< 0.0356												
4,4'-DDE	2016-06	ug/L			< 0.0364	< 0.0364												
4,4'-DDE	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	**0.0093 J**	**0.0029 J**	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
4,4'-DDE	2023-01	ug/L															< 0.0727	
4,4'-DDE	2023-03	ug/L															< 0.0667	
4,4'-DDT	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	**0.53**	< 0.058	< 0.053		< 0.053
4,4'-DDT	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
4,4'-DDT	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
4,4'-DDT	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
4,4'-DDT	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
4,4'-DDT	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
4,4'-DDT	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
4,4'-DDT	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
4,4'-DDT	2011-09	ug/L												< 0.0320				
4,4'-DDT	2012-03	ug/L												< 0.0320				
4,4'-DDT	2012-09	ug/L												< 0.0320				
4,4'-DDT	2013-03	ug/L												< 0.036				
4,4'-DDT	2013-09	ug/L												< 0.0360				
4,4'-DDT	2014-03	ug/L												< 0.0348				
4,4'-DDT	2014-09	ug/L												< 0.0348				
4,4'-DDT	2015-03	ug/L												< 0.0348				
4,4'-DDT	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
4,4'-DDT	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
4,4'-DDT	2016-03	ug/L			< 0.032	**0.0131 J**								< 0.0352				
4,4'-DDT	2016-06	ug/L			< 0.0364	**0.0121 J**												
4,4'-DDT	2016-08	ug/L												< 0.036				
4,4'-DDT	2017-03	ug/L												< 0.0333				
4,4'-DDT	2017-08	ug/L												**0.00628 J**				
4,4'-DDT	2018-03	ug/L												< 0.036				
4,4'-DDT	2018-08	ug/L																
4,4'-DDT	2018-09	ug/L												< 0.0344				
4,4'-DDT	2019-03	ug/L												< 0.0364				
4,4'-DDT	2019-08	ug/L												< 0.034				
4,4'-DDT	2020-03	ug/L												**0.00602 J**				
4,4'-DDT	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	**0.0149 J**	< 0.0416	**0.00888 J**	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
4,4'-DDT	2021-08	ug/L												< 0.0386				
4,4'-DDT	2022-08	ug/L												< 0.064				
4,4'-DDT	2023-01	ug/L															< 0.0727	
4,4'-DDT	2023-03	ug/L															< 0.0667	
4,4'-DDT	2023-08	ug/L												< 0.0744				
4,6-Dinitro-2-methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
4,4'-DDD	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
4,4'-DDD	2016-03	ug/L					< 0.0333			< 0.0356							
4,4'-DDD	2016-06	ug/L															
4,4'-DDD	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
4,4'-DDD	2023-01	ug/L															
4,4'-DDD	2023-03	ug/L					< 0.0696			< 0.064							
4,4'-DDE	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
4,4'-DDE	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
4,4'-DDE	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
4,4'-DDE	2009-07	ug/L					< 0.0320		< 0.0320								
4,4'-DDE	2009-09	ug/L					< 0.0320		< 0.0320								
4,4'-DDE	2010-03	ug/L					< 0.0320		< 0.0320								
4,4'-DDE	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
4,4'-DDE	2011-03	ug/L					< 0.0320										
4,4'-DDE	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
4,4'-DDE	2015-10	ug/L	< 0.0372		**0.00279 J**					< 0.0372							
4,4'-DDE	2016-03	ug/L					**0.00227 J**			< 0.0356 J							
4,4'-DDE	2016-06	ug/L															
4,4'-DDE	2020-08	ug/L	< 0.039	**0.00456 J**	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
4,4'-DDE	2023-01	ug/L															
4,4'-DDE	2023-03	ug/L					< 0.0696			< 0.064							
4,4'-DDT	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
4,4'-DDT	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
4,4'-DDT	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
4,4'-DDT	2009-07	ug/L					< 0.0320		< 0.0320								
4,4'-DDT	2009-09	ug/L					< 0.0320		< 0.0320								
4,4'-DDT	2010-03	ug/L					< 0.0320		< 0.0320								
4,4'-DDT	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
4,4'-DDT	2011-03	ug/L					< 0.0320										
4,4'-DDT	2011-09	ug/L					< 0.0320										
4,4'-DDT	2012-03	ug/L					< 0.0320		< 0.0320								
4,4'-DDT	2012-09	ug/L															
4,4'-DDT	2013-03	ug/L					< 0.0333										
4,4'-DDT	2013-09	ug/L															
4,4'-DDT	2014-03	ug/L					< 0.0348										
4,4'-DDT	2014-09	ug/L					< 0.032										
4,4'-DDT	2015-03	ug/L					< 0.036										
4,4'-DDT	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
4,4'-DDT	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
4,4'-DDT	2016-03	ug/L					< 0.0333			< 0.0356							
4,4'-DDT	2016-06	ug/L															
4,4'-DDT	2016-08	ug/L					< 0.0356			< 0.0356							
4,4'-DDT	2017-03	ug/L					< 0.0337			< 0.0372							
4,4'-DDT	2017-08	ug/L					< 0.0356			< 0.0356							
4,4'-DDT	2018-03	ug/L					< 0.0444			< 0.0372							
4,4'-DDT	2018-08	ug/L					< 0.0451			< 0.0381							
4,4'-DDT	2018-09	ug/L															
4,4'-DDT	2019-03	ug/L					< 0.039			< 0.0395							
4,4'-DDT	2019-08	ug/L					< 0.0346			< 0.034							
4,4'-DDT	2020-03	ug/L					< 0.0427			< 0.0376							
4,4'-DDT	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
4,4'-DDT	2021-08	ug/L					< 0.04			< 0.0368							
4,4'-DDT	2022-08	ug/L					< 0.0667			< 0.0604							
4,4'-DDT	2023-01	ug/L															
4,4'-DDT	2023-03	ug/L					< 0.0696			< 0.064							
4,4'-DDT	2023-08	ug/L					< 0.0604			< 0.0711							
4,6-Dinitro-2-methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
4,6-Dinitro-2-methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4,6-Dinitro-2-methylphenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4,6-Dinitro-2-methylphenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4,6-Dinitro-2-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4,6-Dinitro-2-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4,6-Dinitro-2-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4,6-Dinitro-2-methylphenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4,6-Dinitro-2-methylphenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4,6-Dinitro-2-methylphenol	2016-03	ug/L			< 11.1	< 11.2												
4,6-Dinitro-2-methylphenol	2016-06	ug/L			< 11.4	< 11.4												
4,6-Dinitro-2-methylphenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4,6-Dinitro-2-methylphenol	2023-01	ug/L															< 10.9	
4,6-Dinitro-2-methylphenol	2023-03	ug/L															< 10.4	
4-Aminobiphenyl	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20
4-Aminobiphenyl	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
4-Aminobiphenyl	2009-07	ug/L	< 20	< 20.0	< 20.0	< 20		< 20		< 20			< 20.0		< 20	< 20	< 20	< 20
4-Aminobiphenyl	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Aminobiphenyl	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4-Aminobiphenyl	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4-Aminobiphenyl	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Aminobiphenyl	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Aminobiphenyl	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Aminobiphenyl	2016-03	ug/L			< 11.1	< 11.2												
4-Aminobiphenyl	2016-06	ug/L			< 11.4	< 11.4												
4-Aminobiphenyl	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Aminobiphenyl	2023-01	ug/L															< 10.9	
4-Aminobiphenyl	2023-03	ug/L															< 10.4	
4-Bromophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
4-Bromophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Bromophenyl Phenyl Ether	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4-Bromophenyl Phenyl Ether	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Bromophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4-Bromophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4-Bromophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Bromophenyl Phenyl Ether	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Bromophenyl Phenyl Ether	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Bromophenyl Phenyl Ether	2016-03	ug/L			< 11.1	< 11.2												
4-Bromophenyl Phenyl Ether	2016-06	ug/L			< 11.4	< 11.4												
4-Bromophenyl Phenyl Ether	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Bromophenyl Phenyl Ether	2023-01	ug/L															< 10.9	
4-Bromophenyl Phenyl Ether	2023-03	ug/L															< 10.4	
4-Chloro-3-methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
4-Chloro-3-methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloro-3-methylphenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4-Chloro-3-methylphenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Chloro-3-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4-Chloro-3-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4-Chloro-3-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Chloro-3-methylphenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Chloro-3-methylphenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Chloro-3-methylphenol	2016-03	ug/L			< 11.1	< 11.2												
4-Chloro-3-methylphenol	2016-06	ug/L			< 11.4	< 11.4												
4-Chloro-3-methylphenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Chloro-3-methylphenol	2023-01	ug/L															< 10.9	
4-Chloro-3-methylphenol	2023-03	ug/L															< 10.4	
4-Chloroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
4-Chloroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
4,6-Dinitro-2-methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4,6-Dinitro-2-methylphenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4,6-Dinitro-2-methylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4,6-Dinitro-2-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4,6-Dinitro-2-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4,6-Dinitro-2-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4,6-Dinitro-2-methylphenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4,6-Dinitro-2-methylphenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
4,6-Dinitro-2-methylphenol	2016-03	ug/L					< 10.9			< 11.2							
4,6-Dinitro-2-methylphenol	2016-06	ug/L															
4,6-Dinitro-2-methylphenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4,6-Dinitro-2-methylphenol	2023-01	ug/L															
4,6-Dinitro-2-methylphenol	2023-03	ug/L					< 10			< 10							
4-Aminobiphenyl	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20								
4-Aminobiphenyl	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20								
4-Aminobiphenyl	2009-07	ug/L	< 20.0	< 20	< 20	< 20	< 20.0	< 22.7	< 20.0								
4-Aminobiphenyl	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Aminobiphenyl	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Aminobiphenyl	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Aminobiphenyl	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Aminobiphenyl	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Aminobiphenyl	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Aminobiphenyl	2016-03	ug/L					< 10.9			< 11.2							
4-Aminobiphenyl	2016-06	ug/L															
4-Aminobiphenyl	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Aminobiphenyl	2023-01	ug/L															
4-Aminobiphenyl	2023-03	ug/L					< 10			< 10							
4-Bromophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
4-Bromophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Bromophenyl Phenyl Ether	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4-Bromophenyl Phenyl Ether	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Bromophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Bromophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Bromophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Bromophenyl Phenyl Ether	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Bromophenyl Phenyl Ether	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Bromophenyl Phenyl Ether	2016-03	ug/L					< 10.9			< 11.2							
4-Bromophenyl Phenyl Ether	2016-06	ug/L															
4-Bromophenyl Phenyl Ether	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Bromophenyl Phenyl Ether	2023-01	ug/L															
4-Bromophenyl Phenyl Ether	2023-03	ug/L					< 10			< 10							
4-Chloro-3-methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
4-Chloro-3-methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Chloro-3-methylphenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4-Chloro-3-methylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Chloro-3-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Chloro-3-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Chloro-3-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Chloro-3-methylphenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Chloro-3-methylphenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Chloro-3-methylphenol	2016-03	ug/L					< 10.9			< 11.2							
4-Chloro-3-methylphenol	2016-06	ug/L															
4-Chloro-3-methylphenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Chloro-3-methylphenol	2023-01	ug/L															
4-Chloro-3-methylphenol	2023-03	ug/L					< 10			< 10							
4-Chloroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
4-Chloroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
4-Chloroaniline	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4-Chloroaniline	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Chloroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	**0.310 J**	< 10.0	< 11.2
4-Chloroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4-Chloroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Chloroaniline	2011-09	ug/L														< 10.0		
4-Chloroaniline	2012-03	ug/L														< 10.0		
4-Chloroaniline	2012-09	ug/L														< 10.0		
4-Chloroaniline	2013-03	ug/L														< 11.0		
4-Chloroaniline	2013-09	ug/L														< 11.2		
4-Chloroaniline	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Chloroaniline	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Chloroaniline	2016-03	ug/L			< 11.1	< 11.2												
4-Chloroaniline	2016-06	ug/L			< 11.4	< 11.4												
4-Chloroaniline	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Chloroaniline	2023-01	ug/L															< 10.9	
4-Chloroaniline	2023-03	ug/L															< 10.4	
4-Chlorophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
4-Chlorophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chlorophenyl Phenyl Ether	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4-Chlorophenyl Phenyl Ether	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Chlorophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4-Chlorophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4-Chlorophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Chlorophenyl Phenyl Ether	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Chlorophenyl Phenyl Ether	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Chlorophenyl Phenyl Ether	2016-03	ug/L			< 11.1	< 11.2												
4-Chlorophenyl Phenyl Ether	2016-06	ug/L			< 11.4	< 11.4												
4-Chlorophenyl Phenyl Ether	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Chlorophenyl Phenyl Ether	2023-01	ug/L															< 10.9	
4-Chlorophenyl Phenyl Ether	2023-03	ug/L															< 10.4	
4-Methyl-2-pentanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
4-Methyl-2-pentanone	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
4-Methyl-2-pentanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10
4-Methyl-2-pentanone	2013-05	ug/L			< 10.0			< 10.0										
4-Methyl-2-pentanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2013-11	ug/L																
4-Methyl-2-pentanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2014-06	ug/L																
4-Methyl-2-pentanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Methyl-2-pentanone	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
4-Methyl-2-pentanone	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
4-Methyl-2-pentanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2016-06	ug/L			< 10	< 10												
4-Methyl-2-pentanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2017-11	ug/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
4-Chloroaniline	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4-Chloroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Chloroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Chloroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Chloroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Chloroaniline	2011-09	ug/L					< 10.0										
4-Chloroaniline	2012-03	ug/L					< 10.0										
4-Chloroaniline	2012-09	ug/L					< 10.0										
4-Chloroaniline	2013-03	ug/L					< 11.8										
4-Chloroaniline	2013-09	ug/L															
4-Chloroaniline	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Chloroaniline	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Chloroaniline	2016-03	ug/L					< 10.9			< 11.2							
4-Chloroaniline	2016-06	ug/L															
4-Chloroaniline	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Chloroaniline	2023-01	ug/L															
4-Chloroaniline	2023-03	ug/L					< 10			< 10							
4-Chlorophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
4-Chlorophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Chlorophenyl Phenyl Ether	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4-Chlorophenyl Phenyl Ether	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Chlorophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Chlorophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Chlorophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Chlorophenyl Phenyl Ether	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Chlorophenyl Phenyl Ether	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Chlorophenyl Phenyl Ether	2016-03	ug/L					< 10.9			< 11.2							
4-Chlorophenyl Phenyl Ether	2016-06	ug/L															
4-Chlorophenyl Phenyl Ether	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Chlorophenyl Phenyl Ether	2023-01	ug/L															
4-Chlorophenyl Phenyl Ether	2023-03	ug/L					< 10			< 10							
4-Methyl-2-pentanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Methyl-2-pentanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Methyl-2-pentanone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
4-Methyl-2-pentanone	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
4-Methyl-2-pentanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								
4-Methyl-2-pentanone	2013-05	ug/L															
4-Methyl-2-pentanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
4-Methyl-2-pentanone	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2016-06	ug/L															
4-Methyl-2-pentanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2017-11	ug/L														< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
4-Methyl-2-pentanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2018-06	ug/L																
4-Methyl-2-pentanone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2018-09	ug/L					< 10						< 10	< 10				
4-Methyl-2-pentanone	2018-11	ug/L																
4-Methyl-2-pentanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-04	ug/L				< 10	< 10		< 10									
4-Methyl-2-pentanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2021-03	ug/L							< 10	< 10	< 10	< 10						
4-Methyl-2-pentanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2022-03	ug/L							< 10	< 10	< 10	< 10						
4-Methyl-2-pentanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2023-01	ug/L															< 10	
4-Methyl-2-pentanone	2023-03	ug/L							< 10	< 10	< 10	< 10					< 10	
4-Methyl-2-pentanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
4-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitroaniline	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4-Nitroaniline	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
4-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Nitroaniline	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Nitroaniline	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Nitroaniline	2016-03	ug/L			< 11.1	< 11.2												
4-Nitroaniline	2016-06	ug/L			< 11.4	< 11.4												
4-Nitroaniline	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Nitroaniline	2023-01	ug/L															< 10.9	
4-Nitroaniline	2023-03	ug/L															< 10.4	
4-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
4-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitrophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
4-Nitrophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
4-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
4-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	**0.120 J**		< 10.0	< 10.0	< 10.0	< 10.0	
4-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
4-Nitrophenol	2011-09	ug/L										< 10.0						
4-Nitrophenol	2012-03	ug/L										< 10.0						
4-Nitrophenol	2012-09	ug/L										< 10.0						
4-Nitrophenol	2013-03	ug/L										< 10.6						
4-Nitrophenol	2013-09	ug/L										< 10.2						
4-Nitrophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
4-Nitrophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
4-Nitrophenol	2016-03	ug/L			< 11.1	< 11.2												
4-Nitrophenol	2016-06	ug/L			< 11.4	< 11.4												
4-Nitrophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
4-Nitrophenol	2023-01	ug/L															< 10.9	
4-Nitrophenol	2023-03	ug/L															< 10.4	
5-Nitro-o-toluidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
5-Nitro-o-toluidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
5-Nitro-o-toluidine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
5-Nitro-o-toluidine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
5-Nitro-o-toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
5-Nitro-o-toluidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
5-Nitro-o-toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
4-Methyl-2-pentanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2018-06	ug/L														< 10	< 10
4-Methyl-2-pentanone	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
4-Methyl-2-pentanone	2018-09	ug/L													< 10	< 10	< 10
4-Methyl-2-pentanone	2018-11	ug/L														< 10	< 10
4-Methyl-2-pentanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
4-Methyl-2-pentanone	2020-04	ug/L			< 10									< 10			
4-Methyl-2-pentanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
4-Methyl-2-pentanone	2021-03	ug/L		< 10			< 10			< 10							
4-Methyl-2-pentanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
4-Methyl-2-pentanone	2022-03	ug/L		< 10			< 10			< 10							
4-Methyl-2-pentanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
4-Methyl-2-pentanone	2023-01	ug/L															
4-Methyl-2-pentanone	2023-03	ug/L		< 10			< 10			< 10							
4-Methyl-2-pentanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
4-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
4-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Nitroaniline	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4-Nitroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Nitroaniline	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Nitroaniline	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Nitroaniline	2016-03	ug/L					< 10.9			< 11.2							
4-Nitroaniline	2016-06	ug/L															
4-Nitroaniline	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Nitroaniline	2023-01	ug/L															
4-Nitroaniline	2023-03	ug/L					< 10			< 10							
4-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
4-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
4-Nitrophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
4-Nitrophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
4-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
4-Nitrophenol	2011-09	ug/L					< 10.0										
4-Nitrophenol	2012-03	ug/L					< 10.0										
4-Nitrophenol	2012-09	ug/L					< 10.0										
4-Nitrophenol	2013-03	ug/L					< 11.8										
4-Nitrophenol	2013-09	ug/L															
4-Nitrophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
4-Nitrophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
4-Nitrophenol	2016-03	ug/L					< 10.9			< 11.2							
4-Nitrophenol	2016-06	ug/L															
4-Nitrophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
4-Nitrophenol	2023-01	ug/L															
4-Nitrophenol	2023-03	ug/L					< 10			< 10							
5-Nitro-o-toluidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
5-Nitro-o-toluidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
5-Nitro-o-toluidine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
5-Nitro-o-toluidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
5-Nitro-o-toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
5-Nitro-o-toluidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
5-Nitro-o-toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
5-Nitro-o-toluidine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
5-Nitro-o-toluidine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
5-Nitro-o-toluidine	2016-03	ug/L			< 11.1	< 11.2												
5-Nitro-o-toluidine	2016-06	ug/L			< 11.4	< 11.4												
5-Nitro-o-toluidine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
5-Nitro-o-toluidine	2023-01	ug/L															< 10.9	
5-Nitro-o-toluidine	2023-03	ug/L															< 10.4	
7,12-Dimethylbenz(a)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
7,12-Dimethylbenz(a)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
7,12-Dimethylbenz(a)anthracene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
7,12-Dimethylbenz(a)anthracene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
7,12-Dimethylbenz(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
7,12-Dimethylbenz(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
7,12-Dimethylbenz(a)anthracene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
7,12-Dimethylbenz(a)anthracene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
7,12-Dimethylbenz(a)anthracene	2016-03	ug/L			< 11.1	< 11.2												
7,12-Dimethylbenz(a)anthracene	2016-06	ug/L			< 11.4	< 11.4												
7,12-Dimethylbenz(a)anthracene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
7,12-Dimethylbenz(a)anthracene	2023-01	ug/L															< 10.9	
7,12-Dimethylbenz(a)anthracene	2023-03	ug/L															< 10.4	
Acenaphthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Acenaphthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Acenaphthene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Acenaphthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Acenaphthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Acenaphthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Acenaphthene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Acenaphthene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Acenaphthene	2016-03	ug/L			< 11.1	< 11.2												
Acenaphthene	2016-06	ug/L			< 11.4	< 11.4												
Acenaphthene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Acenaphthene	2023-01	ug/L															< 10.9	
Acenaphthene	2023-03	ug/L															< 10.4	
Acenaphthylene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Acenaphthylene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Acenaphthylene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Acenaphthylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Acenaphthylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Acenaphthylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Acenaphthylene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Acenaphthylene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Acenaphthylene	2016-03	ug/L			< 11.1	< 11.2												
Acenaphthylene	2016-06	ug/L			< 11.4	< 11.4												
Acenaphthylene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Acenaphthylene	2023-01	ug/L															< 10.9	
Acenaphthylene	2023-03	ug/L															< 10.4	
Acetone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**236**	< 10
Acetone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**10.1**	< 10	< 10
Acetone	2009-07	ug/L	< 10	**11.0**		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
Acetone	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
Acetone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**24.4**	< 10.0	< 10.0
Acetone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
5-Nitro-o-toluidine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
5-Nitro-o-toluidine	2015-10	ug/L	< 11.8		< 10.3					< 11							
5-Nitro-o-toluidine	2016-03	ug/L					< 10.9			< 11.2							
5-Nitro-o-toluidine	2016-06	ug/L															
5-Nitro-o-toluidine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
5-Nitro-o-toluidine	2023-01	ug/L															
5-Nitro-o-toluidine	2023-03	ug/L					< 10			< 10							
7,12-Dimethylbenz(a)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
7,12-Dimethylbenz(a)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
7,12-Dimethylbenz(a)anthracene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
7,12-Dimethylbenz(a)anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
7,12-Dimethylbenz(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
7,12-Dimethylbenz(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
7,12-Dimethylbenz(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
7,12-Dimethylbenz(a)anthracene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
7,12-Dimethylbenz(a)anthracene	2015-10	ug/L	< 11.8		< 10.3					< 11							
7,12-Dimethylbenz(a)anthracene	2016-03	ug/L					< 10.9			< 11.2							
7,12-Dimethylbenz(a)anthracene	2016-06	ug/L															
7,12-Dimethylbenz(a)anthracene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
7,12-Dimethylbenz(a)anthracene	2023-01	ug/L															
7,12-Dimethylbenz(a)anthracene	2023-03	ug/L					< 10			< 10							
Acenaphthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Acenaphthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acenaphthene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Acenaphthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acenaphthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acenaphthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Acenaphthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Acenaphthene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Acenaphthene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Acenaphthene	2016-03	ug/L					< 10.9			< 11.2							
Acenaphthene	2016-06	ug/L															
Acenaphthene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Acenaphthene	2023-01	ug/L															
Acenaphthene	2023-03	ug/L					< 10			< 10							
Acenaphthylene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Acenaphthylene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acenaphthylene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Acenaphthylene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acenaphthylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acenaphthylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Acenaphthylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Acenaphthylene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Acenaphthylene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Acenaphthylene	2016-03	ug/L					< 10.9			< 11.2							
Acenaphthylene	2016-06	ug/L															
Acenaphthylene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Acenaphthylene	2023-01	ug/L															
Acenaphthylene	2023-03	ug/L					< 10			< 10							
Acetone	2008-08	ug/L	**33.6**	< 10	< 10	< 10	< 10	< 10	< 10								
Acetone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acetone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
Acetone	2009-09	ug/L	< 10.0	< 50.0	**26.1**	< 10.0	< 10.0										
Acetone	2010-03	ug/L	< 10.0	< 10.0	**15.7**	< 10.0	< 10.0	< 10.0	**10.4**								
Acetone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Acetone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2013-03	ug/L	< 10.0	< 10		**3.11 J**	< 10.0		< 10	**3.33 J**	**2.26 J**	< 10	< 10	< 10	< 10.0	< 10.0	**2.18 J**	< 10
Acetone	2013-05	ug/L			< 10.0			< 10.0										
Acetone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2013-11	ug/L																
Acetone	2014-03	ug/L	< 10.0	< 10.0	< 10.0 J	< 10.0	< 10.0 J	< 10.0	**7.87 J**	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0	< 10.0	< 10.0 J	**3.43 J**	< 10.0	**2.84 J**
Acetone	2014-06	ug/L																
Acetone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2015-03	ug/L	< 10	< 10 J	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0 J	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Acetone	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Acetone	2015-10	ug/L			**4.88 J**				**4.72 J**	**10.1**					< 10			< 10
Acetone	2016-03	ug/L	< 10	< 10	**6.52 J**	< 10 J	< 10 J	< 10	< 10	< 10 J	< 10 J	< 10	< 10 J	< 10	< 10	**4.29 J**	< 10	< 10
Acetone	2016-06	ug/L			< 10	< 10												
Acetone	2016-08	ug/L	< 10	< 10	< 10	**2.52 J**	< 10	< 10	< 10	**6.87 J**	**2.18 J**	**3.06 J**	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2017-03	ug/L	< 10	**3.52 J**	< 10	**3.5 J**	**2.73 J**	**3.25 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**6.98 J**	< 10	< 10
Acetone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2017-11	ug/L																
Acetone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2018-06	ug/L																
Acetone	2018-08	ug/L	< 10	< 10	< 10	**4.54 J**		< 10	**3.41 J**	**8.44 J**	**3.65 J**	< 10			< 10	< 10	< 10	< 10
Acetone	2018-09	ug/L					**7.88 J**						< 10	< 10				
Acetone	2018-11	ug/L																
Acetone	2019-03	ug/L	< 10	< 10	< 10	< 10	**7.44 J**	< 10	**3.79 J**	**4.81 J**	**5.81 J**	**5.48 J**	< 10	**4.07 J**	< 10	< 10	< 10	< 10
Acetone	2019-08	ug/L	< 10	< 10	< 10	**3.69 J**	< 10	< 10	< 10	**4.72 J**	< 10	< 10	< 10	< 10	< 10	< 10	**19**	< 10
Acetone	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2020-04	ug/L				< 10	**3.27 J**		< 10									
Acetone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2021-03	ug/L							< 10	**16.2**	< 10	< 10						
Acetone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	**3.43 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**4.3 J**	< 10
Acetone	2022-03	ug/L							< 10	**48.2**	< 10	< 10						
Acetone	2022-08	ug/L	< 10	**6.14 J**	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2023-01	ug/L															< 10	
Acetone	2023-03	ug/L							< 10	< 10	< 10	< 10					**11.6**	
Acetone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	**6.28 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetonitrile	2008-08	mg/L	< 10			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10
Acetonitrile	2009-03	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetonitrile	2010-09	mg/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Acetonitrile	2015-09	mg/L	< 10	< 10			< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Acetonitrile	2015-10	mg/L							< 10	< 10					< 10			< 10
Acetonitrile	2016-03	mg/L			< 10	< 10												
Acetonitrile	2016-06	mg/L			< 10	< 10												
Acetonitrile	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetonitrile	2023-01	mg/L															< 10	
Acetonitrile	2023-03	mg/L															< 10	
Acetophenone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Acetophenone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetophenone	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Acetophenone	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Acetophenone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Acetophenone	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Acetophenone	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Acetophenone	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Acetophenone	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Acetophenone	2016-03	ug/L			< 11.1	< 11.2												
Acetophenone	2016-06	ug/L			< 11.4	< 11.4												
Acetophenone	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Acetone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetone	2013-03	ug/L	< 10	**2.3 J**	**896**		< 10.0	< 10	< 10								
Acetone	2013-05	ug/L															
Acetone	2013-09	ug/L	< 10.0 J	< 10.0	**832**	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	**6.50 J**	< 10.0		
Acetone	2013-11	ug/L									< 10.0	< 10.0	**4.42 J**	< 10.0	< 10.0		
Acetone	2014-03	ug/L	< 10.0	**2.26 J**	< 10.0 J	**7.07 J**	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	**1.94 J**	< 10.0		
Acetone	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2014-09	ug/L	< 10	**3.09 J**	< 10 J	< 10	< 10	< 10	< 10		< 10	**1.96 J**	< 10	< 10	< 10		
Acetone	2015-03	ug/L	< 10.0	< 10.0	< 10.0 J	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Acetone	2015-10	ug/L	< 10		**3.66 J**					< 10	< 10	< 10	< 10	< 10	< 10		
Acetone	2016-03	ug/L	< 10	< 10 J	< 10 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10 J	< 10	< 10 J		
Acetone	2016-06	ug/L															
Acetone	2016-08	ug/L	< 10	< 10	**18.6**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**3.14 J**	< 10	< 10		
Acetone	2017-03	ug/L	< 10	< 10	**4.7 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Acetone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Acetone	2017-11	ug/L														< 10	< 10
Acetone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2018-06	ug/L														< 10	< 10
Acetone	2018-08	ug/L	< 10	**4.05 J**	**3.71 J**	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
Acetone	2018-09	ug/L													< 10	< 10	< 10
Acetone	2018-11	ug/L														< 10	< 10
Acetone	2019-03	ug/L	< 10	< 10	< 10	**4.04 J**	< 10	< 10	< 10	< 10		**5.1 J**	< 10	< 10	< 10	**4.2 J**	< 10
Acetone	2019-08	ug/L	< 10	< 10	**4.67 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**5.27 J**	< 10	< 10	< 10
Acetone	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
Acetone	2020-04	ug/L			**3.49 J**									< 10			
Acetone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Acetone	2021-03	ug/L		< 10			< 10			< 10							
Acetone	2021-08	ug/L	< 10	**5.82 J**	< 10	< 10	< 10	< 10	**6.69 J+**	< 10			< 10	**4.06 J**	< 10		< 10
Acetone	2022-03	ug/L		< 10			< 10			< 10							
Acetone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**9.8 J**	< 10			< 10	< 10	< 10		< 10
Acetone	2023-01	ug/L															
Acetone	2023-03	ug/L		< 10			< 10			< 10							
Acetone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Acetonitrile	2008-08	mg/L		< 10	< 10	< 10											
Acetonitrile	2009-03	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acetonitrile	2010-09	mg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Acetonitrile	2015-09	mg/L		< 10		< 10	< 10	< 10	< 10								
Acetonitrile	2015-10	mg/L	< 10		< 10					< 10							
Acetonitrile	2016-03	mg/L					< 10			< 10							
Acetonitrile	2016-06	mg/L															
Acetonitrile	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10							
Acetonitrile	2023-01	mg/L															
Acetonitrile	2023-03	mg/L					< 10			< 10							
Acetophenone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Acetophenone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acetophenone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Acetophenone	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetophenone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetophenone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Acetophenone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Acetophenone	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Acetophenone	2015-10	ug/L	< 11.8		< 10.3					< 11							
Acetophenone	2016-03	ug/L					< 10.9			< 11.2							
Acetophenone	2016-06	ug/L															
Acetophenone	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Acetophenone	2023-01	ug/L															< 10.9	
Acetophenone	2023-03	ug/L															< 10.4	
Acrolein	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrolein	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrolein	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
Acrolein	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
Acrolein	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrolein	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Acrolein	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
Acrolein	2012-09	ug/L														< 10.0		
Acrolein	2015-09	ug/L	< 10	< 10			< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Acrolein	2015-10	ug/L							< 10	< 10					< 10			< 10
Acrolein	2016-03	ug/L			< 10	< 10												
Acrolein	2016-06	ug/L			< 10	< 10												
Acrolein	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrolein	2023-01	ug/L															< 10	
Acrolein	2023-03	ug/L															< 10	
Acrylonitrile	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
Acrylonitrile	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
Acrylonitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10
Acrylonitrile	2013-05	ug/L			< 10.0			< 10.0										
Acrylonitrile	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2013-11	ug/L																
Acrylonitrile	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2014-06	ug/L																
Acrylonitrile	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Acrylonitrile	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Acrylonitrile	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
Acrylonitrile	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2016-06	ug/L			< 10	< 10												
Acrylonitrile	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 5	< 5	< 5	< 10	< 10	< 10	< 10	< 5	< 5
Acrylonitrile	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2017-11	ug/L																
Acrylonitrile	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2018-06	ug/L																
Acrylonitrile	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Acrylonitrile	2018-09	ug/L					< 5						< 5	< 5				
Acrylonitrile	2018-11	ug/L																
Acrylonitrile	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2020-04	ug/L				< 5	< 5		< 5									
Acrylonitrile	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2021-03	ug/L							< 5	< 5	< 5	< 5						
Acrylonitrile	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2022-03	ug/L							< 5	< 5	< 5	< 5						
Acrylonitrile	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Acetophenone	2023-01	ug/L															
Acetophenone	2023-03	ug/L					< 10			< 10							
Acrolein	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acrolein	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acrolein	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
Acrolein	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
Acrolein	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrolein	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Acrolein	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Acrolein	2012-09	ug/L				< 10.0											
Acrolein	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Acrolein	2015-10	ug/L	< 10		< 10					< 10							
Acrolein	2016-03	ug/L					< 10			< 10							
Acrolein	2016-06	ug/L															
Acrolein	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10							
Acrolein	2023-01	ug/L															
Acrolein	2023-03	ug/L					< 10			< 10							
Acrylonitrile	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acrylonitrile	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Acrylonitrile	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
Acrylonitrile	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
Acrylonitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								
Acrylonitrile	2013-05	ug/L															
Acrylonitrile	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
Acrylonitrile	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Acrylonitrile	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
Acrylonitrile	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Acrylonitrile	2016-06	ug/L															
Acrylonitrile	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Acrylonitrile	2017-03	ug/L	< 5	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 5	< 5	< 10	< 10	< 5		
Acrylonitrile	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Acrylonitrile	2017-11	ug/L														**0.795 J**	< 5
Acrylonitrile	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2018-06	ug/L														< 5	< 5
Acrylonitrile	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
Acrylonitrile	2018-09	ug/L													< 5	< 5	< 5
Acrylonitrile	2018-11	ug/L														< 5	< 5
Acrylonitrile	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
Acrylonitrile	2020-04	ug/L			< 5									< 5			
Acrylonitrile	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Acrylonitrile	2021-03	ug/L		< 5			< 5			< 5							
Acrylonitrile	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Acrylonitrile	2022-03	ug/L		< 5			< 5			< 5							
Acrylonitrile	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Acrylonitrile	2023-01	ug/L															< 5	
Acrylonitrile	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
Acrylonitrile	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Aldrin	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Aldrin	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Aldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Aldrin	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Aldrin	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Aldrin	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Aldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Aldrin	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Aldrin	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Aldrin	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Aldrin	2016-03	ug/L			< 0.032	< 0.0356												
Aldrin	2016-06	ug/L			< 0.0364	< 0.0364												
Aldrin	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	**0.0062 J**	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Aldrin	2023-01	ug/L															< 0.0727	
Aldrin	2023-03	ug/L															< 0.0667	
Allyl Chloride	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Allyl Chloride	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Allyl Chloride	2009-07	ug/L	< 2	< 2.00		< 2		< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	
Allyl Chloride	2009-09	ug/L	< 2	< 2.00		< 2.00		< 2.00	< 2.00	< 10.0	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	
Allyl Chloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Allyl Chloride	2010-09	ug/L	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	
Allyl Chloride	2011-03	ug/L	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	
Allyl Chloride	2012-09	ug/L														< 4.00		
Allyl Chloride	2015-09	ug/L	< 2	< 2			< 2	< 2			< 2	< 2	< 2	< 2		< 2	< 2	
Allyl Chloride	2015-10	ug/L							< 2	< 2					< 2			< 2
Allyl Chloride	2016-03	ug/L			< 2	< 2												
Allyl Chloride	2016-06	ug/L			< 2	< 2												
Allyl Chloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Allyl Chloride	2023-01	ug/L															< 2	
Allyl Chloride	2023-03	ug/L															< 2	
alpha-BHC	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
alpha-BHC	2008-09	ug/L		< 0.016	< 0.016												**0.326**	
alpha-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
alpha-BHC	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
alpha-BHC	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
alpha-BHC	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
alpha-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
alpha-BHC	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
alpha-BHC	2011-09	ug/L															< 0.0320	
alpha-BHC	2012-03	ug/L															< 0.0320	
alpha-BHC	2012-09	ug/L															< 0.0320	
alpha-BHC	2013-03	ug/L															**0.00223 J**	
alpha-BHC	2013-09	ug/L															< 0.0323	
alpha-BHC	2014-03	ug/L															< 0.0330	
alpha-BHC	2014-09	ug/L															< 0.0381	
alpha-BHC	2015-03	ug/L															**0.00308 J**	
alpha-BHC	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
alpha-BHC	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
alpha-BHC	2016-03	ug/L			< 0.032	< 0.0356											< 0.0333	
alpha-BHC	2016-06	ug/L			< 0.0364	< 0.0364												
alpha-BHC	2016-08	ug/L															< 0.036	
alpha-BHC	2017-03	ug/L															< 0.0381	
alpha-BHC	2017-08	ug/L															< 0.178	
alpha-BHC	2018-03	ug/L															< 0.0372	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Acrylonitrile	2023-01	ug/L															
Acrylonitrile	2023-03	ug/L		< 5			< 5			< 5							
Acrylonitrile	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Aldrin	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Aldrin	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Aldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Aldrin	2009-07	ug/L					< 0.0320		< 0.0320								
Aldrin	2009-09	ug/L					< 0.0320		< 0.0320								
Aldrin	2010-03	ug/L					< 0.0320		< 0.0320								
Aldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Aldrin	2011-03	ug/L					< 0.0320										
Aldrin	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Aldrin	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Aldrin	2016-03	ug/L					< 0.0333			< 0.0356							
Aldrin	2016-06	ug/L															
Aldrin	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Aldrin	2023-01	ug/L															
Aldrin	2023-03	ug/L					< 0.0696			< 0.064							
Allyl Chloride	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Allyl Chloride	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Allyl Chloride	2009-07	ug/L	< 2.00	< 2	< 2	< 2	< 2.00										
Allyl Chloride	2009-09	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00										
Allyl Chloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Allyl Chloride	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00										
Allyl Chloride	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00									
Allyl Chloride	2012-09	ug/L				< 4.00											
Allyl Chloride	2015-09	ug/L		< 2		< 2	< 2	< 2	< 2								
Allyl Chloride	2015-10	ug/L	< 2		< 2					< 2							
Allyl Chloride	2016-03	ug/L					< 2			< 2							
Allyl Chloride	2016-06	ug/L															
Allyl Chloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2							
Allyl Chloride	2023-01	ug/L															
Allyl Chloride	2023-03	ug/L					< 2			< 2							
alpha-BHC	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
alpha-BHC	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
alpha-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
alpha-BHC	2009-07	ug/L					< 0.0320		< 0.0320								
alpha-BHC	2009-09	ug/L					< 0.0320		< 0.0320								
alpha-BHC	2010-03	ug/L					< 0.0320		< 0.0320								
alpha-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
alpha-BHC	2011-03	ug/L					< 0.0320										
alpha-BHC	2011-09	ug/L					< 0.0320										
alpha-BHC	2012-03	ug/L					< 0.0320		< 0.0320								
alpha-BHC	2012-09	ug/L															
alpha-BHC	2013-03	ug/L					< 0.0333										
alpha-BHC	2013-09	ug/L															
alpha-BHC	2014-03	ug/L					< 0.0348										
alpha-BHC	2014-09	ug/L					< 0.032										
alpha-BHC	2015-03	ug/L					< 0.036										
alpha-BHC	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
alpha-BHC	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
alpha-BHC	2016-03	ug/L					**0.00294 J**			< 0.0356							
alpha-BHC	2016-06	ug/L															
alpha-BHC	2016-08	ug/L					< 0.0356			< 0.0356							
alpha-BHC	2017-03	ug/L					< 0.0337			< 0.0372							
alpha-BHC	2017-08	ug/L					< 0.0356			< 0.0356							
alpha-BHC	2018-03	ug/L					< 0.0444			< 0.0372							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
alpha-BHC	2018-08	ug/L															< 0.0352	
alpha-BHC	2019-03	ug/L															< 0.039	
alpha-BHC	2019-08	ug/L															< 0.0327	
alpha-BHC	2020-03	ug/L															< 0.0356	
alpha-BHC	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
alpha-BHC	2021-08	ug/L															< 0.0356	
alpha-BHC	2023-01	ug/L															< 0.0727	
alpha-BHC	2023-03	ug/L															< 0.0667	
alpha-BHC	2023-08	ug/L															< 0.0604	
Anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Anthracene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Anthracene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Anthracene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Anthracene	2016-03	ug/L			< 11.1	< 11.2												
Anthracene	2016-06	ug/L			< 11.4	< 11.4												
Anthracene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Anthracene	2023-01	ug/L															< 10.9	
Anthracene	2023-03	ug/L															< 10.4	
Antimony	2008-08	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Antimony	2009-03	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Antimony	2010-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2010-09	mg/L	**0.0106**	< 0.00600	< 0.00600	**0.00784**	**0.00686**	**0.00985 J**	**0.0109**	**0.00760**	**0.00934**	**0.0212 J**	**0.0105**	**0.00779**	**0.00840**	< 0.00600	< 0.00600	**0.00942**
Antimony	2011-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2011-09	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	**0.00747**	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2012-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2012-09	mg/L	< 0.0120	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.0120	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2013-03	mg/L	**0.00579 J**	< 0.006		< 0.00600	**0.00131 J**		**0.000841 J**	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	**0.00202 J**	< 0.00600	< 0.006	< 0.006 J
Antimony	2013-05	mg/L			< 0.00600			< 0.00600										
Antimony	2013-09	mg/L	**0.00408 J**	**0.00222 J**	**0.00241 J**	**0.00588 J**	**0.00709**	**0.0105**	**0.0117**	**0.00901**	**0.0121**	**0.00945**	**0.00896**	**0.00823**	**0.00745**	< 0.00600	< 0.00600	< 0.00600
Antimony	2013-11	mg/L																
Antimony	2014-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2014-06	mg/L																
Antimony	2014-09	mg/L	< 0.001	< 0.001	< 0.001	**0.000593 J**	**0.000529 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000426 J**	**0.000248 J**	**0.000183 J**
Antimony	2015-03	mg/L	< 0.001	**0.000438 J**	< 0.00100	**0.000615 J**	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.001	< 0.00100
Antimony	2015-09	mg/L	< 0.001	< 0.001		**0.00119**	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	
Antimony	2015-10	mg/L			< 0.001				< 0.001	< 0.001					< 0.001			< 0.001
Antimony	2016-03	mg/L	< 0.001	< 0.001	< 0.001	**0.00126**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2016-06	mg/L			< 0.001	**0.00097 J**												
Antimony	2016-08	mg/L	< 0.001	< 0.001	< 0.001	**0.00247**	< 0.001	< 0.001	**0.001**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2017-03	mg/L	< 0.001	< 0.001	< 0.001	**0.000848 J**	**0.000299 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.0003 J**	< 0.001	< 0.001	< 0.001
Antimony	2017-08	mg/L	< 0.001	< 0.001	< 0.001	**0.000568 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2017-11	mg/L																
Antimony	2018-03	mg/L	**0.000496 J**	**0.00049 J**	< 0.001	**0.00147**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00124**	< 0.001
Antimony	2018-06	mg/L																
Antimony	2018-08	mg/L	< 0.001	< 0.001	**0.00233**	**0.00156**		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2018-09	mg/L					< 0.001						< 0.001	< 0.001				
Antimony	2018-11	mg/L																
Antimony	2019-03	mg/L	< 0.001	< 0.001	< 0.001	**0.000854 J**	< 0.001	< 0.001	< 0.001	< 0.001	**0.000677 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2019-08	mg/L	< 0.001	< 0.001	< 0.001	**0.00279**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-03	mg/L	< 0.001	< 0.001	< 0.001			< 0.001		< 0.001	< 0.004	< 0.001	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-04	mg/L				**0.000861 J**	< 0.001		< 0.001									
Antimony	2020-08	mg/L	< 0.001	< 0.001	< 0.001	**0.00117**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
alpha-BHC	2018-08	ug/L					< 0.0451			< 0.0381							
alpha-BHC	2019-03	ug/L					< 0.039			< 0.0395							
alpha-BHC	2019-08	ug/L					**0.00189 J**			**0.00209 J**							
alpha-BHC	2020-03	ug/L					< 0.0427			< 0.0376							
alpha-BHC	2020-08	ug/L	< 0.039	< 0.0376	**0.0804 J**	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
alpha-BHC	2021-08	ug/L					< 0.04			< 0.0368							
alpha-BHC	2023-01	ug/L															
alpha-BHC	2023-03	ug/L					< 0.0696			< 0.064							
alpha-BHC	2023-08	ug/L					< 0.0604			< 0.0711							
Anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Anthracene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Anthracene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Anthracene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Anthracene	2016-03	ug/L					< 10.9			< 11.2							
Anthracene	2016-06	ug/L															
Anthracene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Anthracene	2023-01	ug/L															
Anthracene	2023-03	ug/L					< 10			< 10							
Antimony	2008-08	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003								
Antimony	2009-03	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004								
Antimony	2010-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600								
Antimony	2010-09	mg/L	**0.00603**	< 0.00600	**0.00668**	**0.0180 J**	**0.00739**	< 0.00600	**0.00658**								
Antimony	2011-03	mg/L	< 0.00600	< 0.00600	< 0.0120	< 0.00600	< 0.00600	< 0.00600	< 0.00600								
Antimony	2011-09	mg/L	< 0.00600	**0.0213**	< 0.00600	**0.00721**	< 0.00600	< 0.00600	< 0.00600								
Antimony	2012-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600								
Antimony	2012-09	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.0120	< 0.00600	< 0.00600	< 0.00600								
Antimony	2013-03	mg/L	**0.00649**	< 0.006	**0.00395 J**		< 0.00600	**0.00508 J**	**0.00357 J**								
Antimony	2013-05	mg/L															
Antimony	2013-09	mg/L	**0.00760**	**0.00288 J**	**0.00986**	**0.00872**	**0.00153 J**	**0.00161 J**	**0.00354 J**	~~< 0.00600~~	< 0.00600	**0.00513 J**	< 0.00600	< 0.00600	**0.00579 J**		
Antimony	2013-11	mg/L								~~< 0.00600~~	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600		
Antimony	2014-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	~~< 0.00600~~	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600		
Antimony	2014-06	mg/L								~~< 0.00600~~	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600		
Antimony	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.000292 J**	< 0.001	< 0.001	~~< 0.001~~	< 0.001	< 0.001	**0.000218 J**	< 0.001	< 0.001		
Antimony	2015-03	mg/L	< 0.00100	**0.000274 J**	**0.000162 J**	**0.000163 J**	< 0.001	**0.000441 J**	< 0.001	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Antimony	2015-09	mg/L		< 0.001		< 0.001	< 0.001	< 0.001	< 0.001								
Antimony	2015-10	mg/L	< 0.001		< 0.001					< 0.001	< 0.001	< 0.001	**0.000296 J**	< 0.001	< 0.001		
Antimony	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.000265 J**	< 0.001	< 0.001	< 0.001	< 0.001	**0.000321 J**	< 0.001	< 0.001	< 0.001		
Antimony	2016-06	mg/L															
Antimony	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.000466 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000307 J**	< 0.001	< 0.001		
Antimony	2017-03	mg/L	**0.000394 J**	**0.000352 J**	< 0.001	< 0.001	**0.0003 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000221 J**	< 0.001	**0.000253 J**		
Antimony	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.00021 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.0003 J**	< 0.001	< 0.001		
Antimony	2017-11	mg/L														< 0.001	< 0.001
Antimony	2018-03	mg/L	< 0.001	< 0.001	**0.00039 J**	**0.000284 J**	**0.000301 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000215 J**	< 0.001	< 0.001	< 0.001	**0.000531 J**
Antimony	2018-06	mg/L														< 0.001	< 0.001
Antimony	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001			
Antimony	2018-09	mg/L													< 0.001	< 0.001	< 0.001
Antimony	2018-11	mg/L														< 0.001	< 0.001
Antimony	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000625 J**
Antimony	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-03	mg/L	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	**0.000702 J**
Antimony	2020-04	mg/L			< 0.001									< 0.001			
Antimony	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Antimony	2021-03	mg/L							< 0.002	< 0.002	< 0.002	< 0.002						
Antimony	2021-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	**0.0011 J**	< 0.002	< 0.002
Antimony	2022-03	mg/L							< 0.002	< 0.008	< 0.002	< 0.002						
Antimony	2022-08	mg/L	< 0.002 J	< 0.002	< 0.002	**0.0042**	**0.000918 J**		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Antimony	2023-01	mg/L															< 0.002	
Antimony	2023-03	mg/L							< 0.002	< 0.002	< 0.002	< 0.002					< 0.002	
Antimony	2023-08	mg/L	< 0.002	< 0.002	< 0.002	**0.00104 J**	< 0.002		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Arsenic	2008-08	mg/L	**0.0791**	**0.0435**	**0.0033**	**0.0082**	**0.008**	**0.056**	**0.113**	**0.0223**	**0.0368**	**0.0443**	~~**0.0216**~~	**0.003**	< 0.001	**0.0372**	**0.0015**	< 0.001
Arsenic	2009-03	mg/L	**0.0916**	**0.0219**	**0.0026**	**0.0066**	**0.0028**	**0.0412**	**0.1632**	**0.0160**	**0.0739**	**0.0586**	~~**0.0332**~~	**0.0038**	< 0.001	**0.0231**	**0.0047**	**0.0034**
Arsenic	2009-07	mg/L	**0.209**	**0.202**	**0.0024**	**0.0033**	**0.0036**	**0.0387**	**0.15**	**0.0355**	**0.0722**	**0.0479**	~~**0.0221**~~	**0.0013**	**0.0014**	**0.0463**	**0.0039**	**0.0026**
Arsenic	2009-09	mg/L	**0.0716**	**0.0159**	**0.00204**	**0.00310**	**0.00313**	**0.0468**	**0.137**	**0.0231**	**0.0410**	**0.0512**	~~**0.021**~~	**0.0028**	**0.00187**	**0.0513**	**0.00245**	**0.00145**
Arsenic	2010-03	mg/L	**0.00949**	**0.0184**	**0.00317**	< 0.00100	**0.0122**	**0.0278**	**0.177**	**0.0139**	**0.114**	**0.0209**	~~**0.0116**~~	**0.00177**	< 0.00100	**0.0443**	**0.00677**	**0.00334**
Arsenic	2010-09	mg/L	**0.0636**	**0.0167**	**0.00728**	< 0.00100	**0.00233**	**0.0680 J**	**0.163**	**0.0355**	**0.0869**	**0.0699 J**	~~**0.0234**~~	**0.00313**	< 0.00100	< 0.00300	**0.00781**	**0.0103**
Arsenic	2011-03	mg/L	**0.0741**	**0.0165**	**0.00252**	< 0.00200	**0.0128**	**0.0386**	**0.238**	**0.0421**	**0.104**	**0.0665**	~~**0.0105**~~	< 0.00100	< 0.00200	**0.0539**	**0.00629**	< 0.00100
Arsenic	2011-09	mg/L	**0.0509**	**0.0138**	**0.00422**	< 0.00200	**0.00381**	**0.0468**	**0.169**	**0.0341**	**0.0704**	**0.0516**	~~**0.0146**~~	**0.00765**	< 0.00600	**0.0531**	**0.0152**	**0.00167**
Arsenic	2012-03	mg/L	**0.0679**	**0.0170**	**0.00318**	**0.00240**	**0.0132**	**0.0404**	**0.154**	**0.0262**	**0.122**	**0.0406**	~~**0.00336**~~	**0.0109**	**0.00238**	**0.0927**	**0.0103**	**0.00747**
Arsenic	2012-09	mg/L	**0.0590**	**0.0216**	**0.00374**	**0.00200**	**0.00490**	**0.0372**	**0.177**	**0.0719**	**0.0673**	**0.0435**	~~**0.0385**~~	**0.0604**	**0.00148**	**0.205**	**0.00491**	**0.00330**
Arsenic	2013-03	mg/L	**0.0721**	**0.0343**		**0.000733 J**	**0.0148**		**0.156**	**0.0455**	**0.194**	**0.0306**	~~**0.00933**~~	**0.00837**	**0.000704 J**	**0.143**	**0.00547**	**0.00602**
Arsenic	2013-05	mg/L			< 0.00100			**0.0376**										
Arsenic	2013-09	mg/L	**0.0570**	**0.0176**	**0.00138**	**0.00108**	**0.0192**	**0.0550**	**0.138**	**0.0475**	**0.137**	**0.0568**	~~**0.0373**~~	**0.0110**	**0.000777 J**	**0.0697**	**0.00584**	**0.00406**
Arsenic	2013-11	mg/L																
Arsenic	2014-03	mg/L	**0.0670**	**0.0220**	< 0.00100	< 0.00100	**0.0231**	**0.0384**	**0.139**	**0.0919**	**0.0966**	**0.0420**	~~**0.0375**~~	**0.0694**	**0.00192**	**0.209**	**0.00636**	**0.00578**
Arsenic	2014-06	mg/L																
Arsenic	2014-09	mg/L	**0.0515**	**0.0175**	< 0.002	**0.0017 J**	**0.0021**	**0.0627**	**0.135**	**0.055**	**0.131**	**0.0523**	~~**0.0238**~~	**0.00641**	**0.00186 J**	**0.139**	**0.0119**	**0.00332**
Arsenic	2015-03	mg/L	**0.0557**	**0.0533**	**0.00137 J**	**0.00143 J**	**0.0153**	**0.0255**	**0.155**	**0.0587**	**0.0839**	**0.038**	~~**0.00239**~~	**0.00149 J**	**0.00136 J**	**0.0307**	**0.00112 J**	< 0.00200
Arsenic	2015-09	mg/L	**0.0427**	**0.0163**		**0.00148 J**	**0.0118**	**0.0465**			**0.125**	**0.0419**	~~**0.0229**~~	< 0.002		**0.0413**	**0.00182 J**	
Arsenic	2015-10	mg/L			**0.00459**				**0.172**	**0.0438**					< 0.002			< 0.002
Arsenic	2016-03	mg/L	**0.048**	**0.0148**	**0.00127 J**	**0.00153 J**	**0.00502**	**0.0464**	**0.13**	**0.0436**	**0.261**	**0.05**	~~**0.00216**~~	**0.000713 J**	**0.000742 J**	**0.052**	**0.00178 J**	< 0.002
Arsenic	2016-06	mg/L			**0.0043**	**0.00137 J**												
Arsenic	2016-08	mg/L	**0.0409**	**0.0133**	**0.00734**	**0.00254**	**0.00809**	**0.0348**	**0.128**	**0.0412**	**0.239**	**0.0786**	~~**0.0412**~~	< 0.002	< 0.002	**0.0409**	**0.0019 J**	< 0.002
Arsenic	2017-03	mg/L	**0.026**	**0.0148**	**0.00388**	**0.00111 J**	**0.0112**	**0.054**	**0.14**	**0.0561**	**0.147**	**0.0681**	~~**0.00525**~~	**0.0118**	**0.000795 J**	**0.0122**	**0.00177 J**	< 0.002
Arsenic	2017-08	mg/L	**0.042**	**0.0131**	**0.0129**	**0.00103 J**	**0.00536**	**0.0331**	**0.124**	**0.0429**	**0.157**	**0.0819**	~~**0.00629**~~	**0.00149 J**	< 0.002	**0.0252**	< 0.002	< 0.002
Arsenic	2017-11	mg/L																
Arsenic	2018-03	mg/L	**0.0562**	**0.0161**	**0.00356**	**0.00158 J**	**0.0129**	**0.0298**	**0.149**	**0.0608**	**0.217**	**0.0403**	~~**0.00204**~~	**0.00198 J**	**0.000708 J**	**0.0238**	**0.00171 J**	< 0.002
Arsenic	2018-06	mg/L																
Arsenic	2018-08	mg/L	**0.0458**	**0.0141**	**0.0307**	**0.00177 J**		**0.0264**	**0.128**	**0.0548**	**0.142**	**0.105**			< 0.002	**0.0645**	**0.00157 J**	< 0.002
Arsenic	2018-09	mg/L					**0.0109**						~~**0.067**~~	**0.00259**				
Arsenic	2018-11	mg/L																
Arsenic	2019-03	mg/L	**0.00174 J**	**0.014**	**0.0124**	**0.00123 J**	**0.0126**	**0.0535**	**0.126**	**0.0917**	**0.00836**	**0.0729**	~~**0.00161 J**~~	**0.000938 J**	< 0.002	**0.02**	< 0.002	< 0.002
Arsenic	2019-08	mg/L	**0.0424**	**0.0143**	**0.0114**	**0.00314**	**0.00116 J**	**0.0282**	**0.0702**	**0.072**	**0.0654**	**0.095**	~~**0.00171 J**~~	**0.00444**	**0.00097 J**	**0.0132**	**0.00165 J**	< 0.002
Arsenic	2020-03	mg/L	**0.0221**	**0.0171**	**0.00576**			**0.0732**		**0.0553**	**0.0558**	**0.066**	**0.00178 J**	**0.00752 J**	< 0.002	**0.0116**	< 0.002	< 0.002
Arsenic	2020-04	mg/L				**0.00122 J**	**0.0028**		**0.104**									
Arsenic	2020-08	mg/L	**0.0466**	**0.0149**	**0.00504**	**0.00164 J**	**0.00439**	**0.0352**	**0.0963**	**0.0663**	**0.187**	**0.096**	**0.00774**	**0.00332**	< 0.002	**0.0237**	< 0.002	< 0.002
Arsenic	2021-03	mg/L							**0.133**	**0.049**	**0.102**	**0.0638**						
Arsenic	2021-08	mg/L	**0.0484**	**0.0172**	**0.0232**	**0.00135 J**	**0.00914**	**0.0105 J**	**0.149**	**0.0717**	**0.0902**	**0.0599**	**0.00235**	**0.0319**	**0.00132 J**	**0.0925**	< 0.002	**0.00368**
Arsenic	2022-03	mg/L							**0.144**	**0.0973**	**0.146**	**0.0316**						
Arsenic	2022-08	mg/L	**0.0407 J**	**0.0157**	**0.00561**	**0.00321**	**0.0125**		**0.14**	**0.0398**	**0.193**	**0.0808**	**0.00563**	**0.00194 J**	< 0.002	**0.0279**	**0.00203**	**0.00113 J**
Arsenic	2023-01	mg/L															< 0.002	
Arsenic	2023-03	mg/L							**0.116**	**0.0534**	**0.0481**	**0.0675**					**0.00149 J**	
Arsenic	2023-08	mg/L	**0.0678**	**0.0173**	**0.00513**	**0.00163 J**	**0.0133**		**0.156**	**0.0549**	**0.0775**	**0.048**	**0.00565**	**0.0371**	**0.000545 J**	**0.024**	**0.00112 J**	< 0.002
Barium	2008-08	mg/L	**0.53**	**0.48**	**0.12**	**0.11**	**0.21**	**0.67**	**0.16**	**0.27**	< 0.1	**0.13**	**0.16**	**0.22**	**0.21**	**1**	**0.38**	**0.24**
Barium	2009-03	mg/L	**0.76**	**0.39**	< 0.05	< 0.05	**0.14**	**0.37**	**0.16**	**0.17**	**0.11**	**0.13**	**0.16**	**0.28**	**0.13**	**0.89**	**0.32**	**0.26**
Barium	2009-07	mg/L	**0.72**	**1**	**0.1**	< 0.1	**0.18**	**0.36**	**0.14**	**0.22**	< 0.1	**0.11**	**0.15**	**0.26**	**0.13**	< 0.1	**0.22**	**0.26**
Barium	2009-09	mg/L	**0.366**	**0.342**	**0.0833**	**0.0668**	**0.106**	**0.124**	**0.124**	**0.194**	**0.0783**	**0.093**	**0.128**	**0.221**	**0.118**	**0.886**	**0.24**	**0.187**
Barium	2010-03	mg/L	**0.0784**	**0.359**	**0.0923**	**0.0675**	**0.114**	**0.0785**	**0.149**	**0.304**	**0.0695**	**0.0968**	**0.123**	**0.173**	**0.167**	**0.968**	**0.301**	**0.242**
Barium	2010-09	mg/L	**0.548**	**0.352**	**0.0927**	**0.100**	**0.101**	**0.147**	**0.135**	**0.261**	**0.0844**	**0.0984**	**0.151**	**0.252**	**0.136**	**0.812**	**0.294**	**0.282**
Barium	2011-03	mg/L	**0.260**	**0.323**	**0.0783**	**0.0833**	**0.101**	**0.240**	**0.129**	**0.227**	**0.0986**	**0.0817**	**0.180**	**0.267**	**0.148**	**0.893**	**0.291**	**0.272**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Antimony	2021-03	mg/L		< 0.002			< 0.002			< 0.002							
Antimony	2021-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	< 0.002		< 0.002
Antimony	2022-03	mg/L		< 0.008			**0.000989 J**			< 0.002							
Antimony	2022-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	< 0.002		< 0.002
Antimony	2023-01	mg/L															
Antimony	2023-03	mg/L		< 0.002			< 0.002			< 0.002							
Antimony	2023-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	< 0.002		< 0.002
Arsenic	2008-08	mg/L	**0.0424**	**0.051**	**0.0389**	**0.0095**	< 0.001	~~**0.0253**~~	**0.003**								
Arsenic	2009-03	mg/L	**0.0601**	**0.0676**	**0.0511**	< 0.001	< 0.001	~~**0.0396**~~	**0.0050**								
Arsenic	2009-07	mg/L	**0.0739**	**0.027**	**0.022**	**0.0111**	**0.001**	~~**0.0299**~~	**0.0056**								
Arsenic	2009-09	mg/L	**0.0516**	**0.0456**	**0.0179**	**0.00906**	**0.00176**	~~**0.0175**~~									
Arsenic	2010-03	mg/L	**0.0129**	**0.0231**	**0.00750**	**0.0150**	< 0.00100	~~**0.0103**~~	**0.00490**								
Arsenic	2010-09	mg/L	**0.0504**	**0.0236**	**0.0227**	**0.0131**	< 0.00200	~~**0.00781**~~	**0.00335**								
Arsenic	2011-03	mg/L	**0.0536**	**0.0971**	**0.0820**	**0.0126**	< 0.00200	~~**0.00465**~~	**0.00726**								
Arsenic	2011-09	mg/L	**0.0445**	**0.0350**	**0.0563**	**0.00455**	< 0.00200	~~**0.0147**~~	**0.0120**								
Arsenic	2012-03	mg/L	**0.0396**	**0.0614**	**0.0580**	**0.0161**	< 0.00100	~~**0.0131**~~	**0.00990**								
Arsenic	2012-09	mg/L	**0.0412**	**0.0650**	**0.0585**	**0.0293**	< 0.00100	~~**0.0294**~~	**0.00606**								
Arsenic	2013-03	mg/L	**0.0373**	**0.127**	**0.0862**		< 0.00100	~~**0.0254**~~	**0.00702**								
Arsenic	2013-05	mg/L															
Arsenic	2013-09	mg/L	**0.0534**	**0.146**	**0.0516**	**0.00480**	< 0.00100	~~**0.0385**~~	**0.00734**	~~**0.000395 J**~~	< 0.00100	**0.000350 J**	**0.00337**	**0.00766**	**0.000550 J**		
Arsenic	2013-11	mg/L								~~< 0.00100~~	< 0.00100	< 0.00100	**0.00125**	**0.0110**	< 0.00100		
Arsenic	2014-03	mg/L	**0.0664**	**0.0850**	**0.0619**	**0.0233**	< 0.00100	~~**0.0153**~~	**0.00849**	~~**0.000461 J**~~	< 0.00100	< 0.00100	**0.00173**	**0.0111**	< 0.00100		
Arsenic	2014-06	mg/L								~~< 0.00100~~	< 0.00100	< 0.00100	**0.000931 J**	**0.0122**	< 0.00100		
Arsenic	2014-09	mg/L	**0.0607**	**0.118**	**0.0402**	**0.00458**	**0.00195 J**	~~**0.0198**~~	**0.00548**	~~< 0.002~~	< 0.002	< 0.002	**0.00272**	**0.0184**	< 0.002		
Arsenic	2015-03	mg/L	**0.0449**	**0.11**	**0.0483**	**0.00850**	< 0.002	~~**0.00802**~~	**0.00422**	**0.00145 J**	< 0.00200	< 0.00200	**0.00480**	**0.0163**	< 0.00200		
Arsenic	2015-09	mg/L		**0.0506**		**0.00393**	**0.00205**	~~**0.00476**~~	**0.00364**								
Arsenic	2015-10	mg/L	**0.0885**		**0.0492**					< 0.002	< 0.002	< 0.002	**0.00245**	**0.0192**	< 0.002		
Arsenic	2016-03	mg/L	**0.0307**	**0.0373**	**0.0194**	**0.00609**	**0.00094 J**	~~**0.00489**~~	**0.00369**	< 0.002	< 0.002	**0.000991 J**	**0.00184 J**	**0.0177**	< 0.002		
Arsenic	2016-06	mg/L															
Arsenic	2016-08	mg/L	**0.0215**	**0.0361**	**0.0205**	**0.00419**	< 0.002	~~**0.00657**~~	**0.00287**	< 0.002	< 0.002	< 0.002	**0.00179 J**	**0.0168**	**0.000713 J**		
Arsenic	2017-03	mg/L	**0.0171**	**0.0328**	**0.0305**	**0.0047**	< 0.002	**0.00482**	**0.00368**	< 0.002	< 0.002	< 0.002	**0.00139 J**	**0.0173**	< 0.002		
Arsenic	2017-08	mg/L	**0.0107**	**0.0384**	**0.0329**	**0.00529**	**0.00094 J**	**0.00363**	**0.00295**	< 0.002	< 0.002	< 0.002	**0.00165 J**	**0.0235**	< 0.002		
Arsenic	2017-11	mg/L														< 0.002	**0.00051 J**
Arsenic	2018-03	mg/L	**0.0135**	**0.189**	**0.0496**	**0.00703**	**0.000584 J**	**0.0081**	**0.00342**	< 0.002	< 0.002	**0.000584 J**	**0.00143 J**	**0.0151**	**0.000597 J**	< 0.002	**0.000719 J**
Arsenic	2018-06	mg/L														**0.0014 J**	< 0.002
Arsenic	2018-08	mg/L	**0.00912**	**0.0639**	**0.0371**	**0.00543**	~~**0.000574 J**~~	**0.00639**	**0.00311**	< 0.002		< 0.002	**0.00161 J**	**0.0128**			
Arsenic	2018-09	mg/L													< 0.002	**0.000705 J**	< 0.002
Arsenic	2018-11	mg/L														**0.00101 J**	**0.000735 J**
Arsenic	2019-03	mg/L	**0.0208**	**0.0743**	**0.0226**	**0.00533**	< 0.002	**0.0113**	**0.00237**	< 0.002		< 0.002	**0.000965 J**	**0.0133**	< 0.002	**0.000925 J**	< 0.002
Arsenic	2019-08	mg/L	**0.00519**	**0.0253**	**0.0237**	**0.00156 J**	< 0.002	**0.00527**	**0.00481**	**0.000753 J**	< 0.002	< 0.002	**0.00164 J**	**0.0168**	< 0.002	< 0.002	< 0.002
Arsenic	2020-03	mg/L	**0.0469**	**0.0702**		**0.00282**	< 0.002	**0.0188**	**0.00335**	< 0.002	< 0.002	< 0.002	**0.00118 J**		< 0.002	**0.00198 J**	< 0.002
Arsenic	2020-04	mg/L			**0.0217**									**0.0102**			
Arsenic	2020-08	mg/L	**0.00257**	**0.0465**	**0.0245**	**0.00168 J**	< 0.002	**0.00322**	**0.00327**	< 0.002			**0.00132 J**	**0.0135**	< 0.002		< 0.002
Arsenic	2021-03	mg/L		**0.0889**			< 0.002			**0.000798 J**							
Arsenic	2021-08	mg/L	**0.0185**	**0.0272**	**0.0498**	**0.00403**	< 0.002	**0.00688**	**0.00285**	< 0.002			**0.00123 J**	**0.0141**	< 0.002		< 0.002
Arsenic	2022-03	mg/L		**0.172**			< 0.002			< 0.002							
Arsenic	2022-08	mg/L	**0.00856**	**0.345**	**0.0399**	**0.0033**	< 0.002	**0.00992**	**0.00339**	< 0.002			**0.000917 J**	**0.0106**	< 0.002		< 0.002
Arsenic	2023-01	mg/L															
Arsenic	2023-03	mg/L		**0.135**			< 0.002			< 0.002							
Arsenic	2023-08	mg/L	**0.00927**	**0.207**	**0.0418**	**0.00536**	< 0.002	**0.0089**	**0.00296**	< 0.002			**0.00142 J**	**0.0124**	< 0.002		**0.00055 J**
Barium	2008-08	mg/L	**0.23**	**0.58**	**0.26**	**0.39**	~~< 0.1~~	**0.45**	< 0.1								
Barium	2009-03	mg/L	**0.29**	**0.86**	**0.14**	**0.42**	~~< 0.05~~	**0.52**	< 0.05								
Barium	2009-07	mg/L	**0.28**	**0.93**	**0.17**	**0.48**	~~< 0.1~~	**0.52**	< 0.1								
Barium	2009-09	mg/L	**0.287**	**0.802**	**0.134**	**0.449**	**0.0340**	**0.398**									
Barium	2010-03	mg/L	**0.209**	**0.566**	**0.143**	**0.466**	**0.0591**	**0.335**	**0.0662**								
Barium	2010-09	mg/L	**0.244**	**0.790**	**0.196**	**0.340**	**0.0277**	**0.258**	**0.0531**								
Barium	2011-03	mg/L	**0.190**	**0.831**	**0.0614**	**0.180**	**0.0365**	**0.266**	**0.0600**								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Barium	2011-09	mg/L	0.371	0.329	0.0794	0.0652	0.117	0.129	0.140	0.471	0.109	0.141	0.179	0.303	0.145	0.913	0.286	0.254
Barium	2012-03	mg/L	0.332	0.376	0.0827	0.0828	0.135	0.232	0.143	0.590	0.124	0.105	0.151	0.330	0.180	1.02	0.261	0.254
Barium	2012-09	mg/L	0.367	0.414	0.0869	0.0616	0.142	0.0480	0.157	0.514	0.134	0.128	0.213	0.461	0.228	1.07	0.243	0.272
Barium	2013-03	mg/L	0.266	0.454		0.111	0.109		0.162	0.704	0.0746	0.141	0.162	0.312	0.263	0.943	0.225	0.362
Barium	2013-05	mg/L			0.0872			0.121										
Barium	2013-09	mg/L	0.406	0.405	0.0920	0.0705	0.274	0.194	0.169	0.602	0.0438	0.206	0.161	0.309	0.207	0.955	0.245	0.302
Barium	2013-11	mg/L																
Barium	2014-03	mg/L	0.417	0.393	0.0866	0.0607	0.359	0.0581	0.142	0.484	0.0749	0.173	0.186	0.369	0.209	1.03	0.230	0.328
Barium	2014-06	mg/L																
Barium	2014-09	mg/L	0.524	0.406	0.0983	0.0923	0.203	0.223	0.171	0.723	0.0562	0.277	0.154	0.286	0.203	0.941	0.245	0.271
Barium	2015-03	mg/L	0.501	0.573	0.0759	0.0739	0.153	0.355	0.172	0.621	0.0694	0.246	0.15	0.324	0.208	1.19	0.209	0.255
Barium	2015-09	mg/L	0.442	0.431		0.117	0.125	0.12			0.0467	0.372	0.164	0.28		1.01	0.202	
Barium	2015-10	mg/L			0.0876				0.182	0.67					0.174			0.286
Barium	2016-03	mg/L	0.771	0.379	0.104	0.0788	0.114	0.442	0.159	0.746	0.0571	0.428	0.115	0.196	0.139	1.07	0.177	0.277
Barium	2016-06	mg/L			0.0895	0.0819												
Barium	2016-08	mg/L	0.64	0.332	0.0782	0.0938	0.0981	0.179	0.225	0.739	0.0599	0.43	0.241	0.207	0.121	0.973	0.203	0.271
Barium	2017-03	mg/L	0.303	0.346	0.0762	0.0967	0.148	0.406	0.307	0.861	0.0772	0.372	0.127	0.26	0.168	0.594	0.208	0.337
Barium	2017-08	mg/L	0.518	0.3	0.0748	0.0895	0.141	0.0537	0.329	0.778	0.0561	0.274	0.164	0.281	0.134	0.704	0.176	0.259
Barium	2017-11	mg/L																
Barium	2018-03	mg/L	0.547	0.417	0.078	0.117	0.241	0.0439	0.239	0.846	0.132	0.211	0.149	0.357	0.147	1	0.179	0.216
Barium	2018-06	mg/L																
Barium	2018-08	mg/L	0.386	0.343	0.0858	0.0988		0.0808	0.368	0.823	0.0839	0.301			0.115	1.32	0.218	0.261
Barium	2018-09	mg/L					0.222						0.373	0.328				
Barium	2018-11	mg/L																
Barium	2019-03	mg/L	0.101	0.358	0.0841	0.0959	0.196	0.134	0.384	1.09	0.0783	0.364	0.0946	0.117	0.108	0.601	0.184	0.234
Barium	2019-08	mg/L	0.573	0.351	0.0857	0.117	0.135	0.108	0.367	0.939	0.0648	0.386	0.113	0.257	0.123	0.605	0.225	0.227
Barium	2020-03	mg/L	0.223	0.414	0.0795			0.308		1.05	0.0662	0.191	0.101	0.272	0.136	0.584	0.184	0.267
Barium	2020-04	mg/L				0.093	0.15		0.504									
Barium	2020-08	mg/L	0.408	0.422	0.0741	0.104	0.161	0.135	0.463	0.899	0.0582	0.239	0.167	0.334	0.125	0.68	0.179	0.213
Barium	2021-03	mg/L							0.355	1	0.0692	0.133						
Barium	2021-08	mg/L	0.0802	0.424	0.069	0.0984	0.209	0.0561	0.361	0.824	0.0594	0.12	0.171	0.423	0.144	0.86	0.154	0.219
Barium	2022-03	mg/L							0.347	0.906	0.144	0.0676						
Barium	2022-08	mg/L	0.171 J	0.443	0.0691	0.118	0.241		0.473	0.852	0.0764	0.136	0.139	0.155	0.14	0.872	0.165	0.213
Barium	2023-01	mg/L															0.139	
Barium	2023-03	mg/L							0.407	1.1	0.172	0.161					0.131	
Barium	2023-08	mg/L	0.153	0.438	0.0619	0.103	0.255		0.417	0.794	0.0678	0.134	0.15	0.333	0.148	0.758	0.139	0.155
Benzene	2008-08	ug/L	< 0.5	0.79	< 0.5	< 0.5	< 0.5	1.29	5.35	5.52	3.67	< 0.5	< 0.5	1.33	< 0.5	4.73	1.58	< 0.5
Benzene	2009-03	ug/L	< 0.5	0.69	< 0.5	< 0.5	< 0.5	1.08	1.89	2.56	3.9	< 0.5	< 0.5	< 0.5	< 0.5	4.43	1.43	< 0.5
Benzene	2009-07	ug/L	0.56	0.550		< 0.5		< 0.5	3.36	3.4	3.66	< 0.5	< 0.500	< 0.500	< 0.5	4.01	1.68	
Benzene	2009-09	ug/L	1.16	0.570		< 0.500		0.910	3.91	4.65	3.85	< 0.5	< 0.5	< 0.5	< 0.5	3.6	1.78	
Benzene	2010-03	ug/L	< 0.500	0.570	< 0.500	< 0.500	< 0.500	< 0.500	3.79	3.40	2.47	< 0.500	< 0.500	< 0.500	< 0.500	4.10	0.800	< 0.500
Benzene	2010-09	ug/L	0.990	0.500	< 0.500	< 0.500	< 0.500	1.42	4.74	7.45	4.11	< 0.500	< 0.500	0.520	< 0.500	4.98	1.26	< 0.500
Benzene	2011-03	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 5.00	< 0.500	1.50	4.43	3.62	< 0.500	< 0.500	< 0.500	< 0.500	4.36	0.810	< 0.500
Benzene	2011-09	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.540	2.00	6.45	3.23	< 0.500	< 0.500	< 0.500	< 0.500	5.46	0.680	< 0.500
Benzene	2012-03	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	1.16	5.53	2.72	< 0.500	< 0.500	< 0.500	< 0.500	4.16	< 0.500	< 0.500
Benzene	2012-09	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	1.68	4.04	3.13	0.580	< 0.500	< 0.500	< 0.500	5.34	0.670	< 0.500
Benzene	2013-03	ug/L	0.115 J	0.246 J		< 0.500	< 0.500		1.13	5.62	3.21	1.07	< 0.5	< 0.5	< 0.500	5.32	0.401 J	< 0.5
Benzene	2013-05	ug/L			< 0.500			< 0.500										
Benzene	2013-09	ug/L	1.07	0.447 J	< 0.500	< 0.500	< 0.500	0.706	2.50	4.48	2.92	0.267 J	< 0.500	0.528	< 0.500	3.66	0.920	< 0.500
Benzene	2013-11	ug/L																
Benzene	2014-03	ug/L	0.312 J	< 0.500	< 0.500	< 0.500	< 0.500	1.85	1.04	2.39	2.94	0.287 J	< 0.500	< 0.500	0.357 J	4.19	0.455 J	< 0.500
Benzene	2014-06	ug/L																
Benzene	2014-09	ug/L	0.872	0.266 J	< 0.5	< 0.5	< 0.5	0.754	2.45	5.16	2.86	0.19 J	< 0.5	< 0.5	< 0.5	3.4	0.584	< 0.5
Benzene	2015-03	ug/L	0.232 J	0.355 J	< 0.500	< 0.500	< 0.500	0.169 J	0.996	4.46	2.46	< 0.5	< 0.500	0.117 J	< 0.5	4.31	0.325 J	< 0.500
Benzene	2015-09	ug/L	0.154 J	0.237 J		< 0.5	< 0.5	< 0.5			2.85	< 0.5	< 0.5	< 0.5		3.5	0.474 J	
Benzene	2015-10	ug/L			< 0.5				1.58	4.05					< 0.5			< 0.5
Benzene	2016-03	ug/L	0.283 J	0.3 J	< 0.5	< 0.5	< 0.5	0.197 J	3.58	5.54	2.43	< 0.5	< 0.5	< 0.5	< 0.5	3.4	0.367 J	< 0.5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Barium	2011-09	mg/L	0.246	1.00	0.171	0.209	0.0244	0.485	0.0671								
Barium	2012-03	mg/L	0.148	0.786	0.159	0.232	0.0430	0.535	0.0649								
Barium	2012-09	mg/L	0.180	0.932	0.163	0.325	0.0501	0.637	0.0682								
Barium	2013-03	mg/L	0.0999	0.163	0.136		0.191	0.978	0.0642								
Barium	2013-05	mg/L															
Barium	2013-09	mg/L	0.269	1.13	0.685	0.128	0.0596	1.10	0.0684	~~0.172~~	0.141	0.182	0.0675	0.367	0.153		
Barium	2013-11	mg/L								~~0.146~~	0.102	0.0985	0.0696	0.0932	0.0944		
Barium	2014-03	mg/L	0.162	0.884	0.193	0.478	0.0487	0.476	0.0698	~~0.0769~~	0.105	0.100	0.0628	0.134	0.0905		
Barium	2014-06	mg/L								~~0.0507~~	0.120	0.0969	0.0425	0.167	0.0852		
Barium	2014-09	mg/L	0.179	1.09	0.398	0.16	0.0525	0.655	0.065	~~0.0699~~	0.122	0.142	0.0724	0.407	0.095		
Barium	2015-03	mg/L	0.15	1	0.249	0.16	0.0405	0.593	0.0705	0.112	0.148	0.0988	0.0759	0.129	0.0848		
Barium	2015-09	mg/L		0.975		0.135	0.0563	0.761	0.0729								
Barium	2015-10	mg/L	0.2		0.31					0.059	0.144	0.108	0.0759	0.266	0.0993		
Barium	2016-03	mg/L	0.218	0.802	0.361	0.124	0.0506	0.642	0.0701	0.0463	0.105	0.106	0.0536	0.203	0.095		
Barium	2016-06	mg/L															
Barium	2016-08	mg/L	0.24	0.778	0.46	0.122	0.0469	0.598	0.0641	0.0441	0.125	0.109	0.0558	0.225	0.114		
Barium	2017-03	mg/L	0.235	0.704	0.509	0.146	0.0633	0.582	0.0747	0.0265	0.119	0.106	0.05	0.229	0.0533		
Barium	2017-08	mg/L	0.234	0.784	0.498	0.142	0.0469	0.525	0.0626	0.0377	0.112	0.116	0.0652	0.26	0.135		
Barium	2017-11	mg/L														0.192	0.168
Barium	2018-03	mg/L	0.162	0.797	0.284	0.184	0.0345	0.712	0.0683	0.0531	0.107	0.0829	0.071	0.129	0.0962	0.231	0.22
Barium	2018-06	mg/L														0.0668	0.258
Barium	2018-08	mg/L	0.183	0.805	0.388	0.15	~~0.0295~~	0.847	0.0579	0.047		0.122	0.0614	0.123			
Barium	2018-09	mg/L													0.136	0.51	0.195
Barium	2018-11	mg/L														0.108	0.176
Barium	2019-03	mg/L	0.259	0.566	0.477	0.177	0.0368	0.966	0.0748	0.0389		0.0279	0.0612	0.129	0.0966	0.0449	0.182
Barium	2019-08	mg/L	0.52	0.653	0.672	0.117	0.0294	0.427	0.065	0.0327	0.116	0.0814	0.0713	0.29	0.134	0.262	0.227
Barium	2020-03	mg/L	0.616	0.919		0.174	0.0387	0.541	0.0669	0.0452	0.102	0.103	0.0913		0.135	0.0932	0.241
Barium	2020-04	mg/L			0.455									0.149			
Barium	2020-08	mg/L	0.358	0.765	0.59	0.131	0.0299	0.393	0.0659	0.0694			0.0628	0.239	0.14		0.225
Barium	2021-03	mg/L		0.539			0.035			0.0697							
Barium	2021-08	mg/L	0.349	0.855	0.372	0.157	0.0347	0.575	0.075	0.043			0.0851	0.202	0.132		0.204
Barium	2022-03	mg/L		0.11			0.0255			0.0588							
Barium	2022-08	mg/L	0.272	0.8	0.394	0.142	0.0252	0.748	0.0642	0.0819			0.0813	0.165	0.194		0.248
Barium	2023-01	mg/L															
Barium	2023-03	mg/L		0.695			0.0286			~~0.141~~							
Barium	2023-08	mg/L	0.203	0.918	0.373	0.167	0.0349	0.682	0.0677	0.0846			0.0734	0.11	0.131		0.196
Benzene	2008-08	ug/L	2.02	4.25	3.67	0.76	< 0.5	< 0.5	< 0.5								
Benzene	2009-03	ug/L	2	3.26	3.33	1.19	< 0.5	< 0.5	< 0.5								
Benzene	2009-07	ug/L	1.44	3.54	3.34	2.71	< 0.500										
Benzene	2009-09	ug/L	1.24	4.20	4.01	1.15	< 0.500										
Benzene	2010-03	ug/L	1.85	4.58	3.28	2.26	< 0.500	< 0.500	< 0.500								
Benzene	2010-09	ug/L	2.62	3.98	2.92	2.06	< 0.500	< 0.500	< 0.500								
Benzene	2011-03	ug/L	2.40	3.40	2.69	1.04	< 0.500	< 0.500	< 0.500								
Benzene	2011-09	ug/L	2.51	3.55	2.58	1.73	< 0.500	< 0.500	< 0.500								
Benzene	2012-03	ug/L	1.47	1.99	2.86	< 0.500	< 0.500	< 0.500	< 0.500								
Benzene	2012-09	ug/L	2.31	2.06	3.68	< 0.500	< 0.500	< 0.500	< 0.500								
Benzene	2013-03	ug/L	1.04	1.44	< 12.5		< 0.500	0.149 J	< 0.5								
Benzene	2013-05	ug/L															
Benzene	2013-09	ug/L	2.55	2.30	2.39	0.230 J	< 0.500	0.347 J	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2013-11	ug/L									< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2014-03	ug/L	< 0.500	< 0.500	3.49	0.118 J	< 0.500	0.380 J	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2014-06	ug/L									< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2014-09	ug/L	2.67	2.69	2.84	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Benzene	2015-03	ug/L	2.11	2.09	2.92	< 0.500	< 0.5	0.161 J	< 0.5		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2015-09	ug/L		2.72		< 0.5	< 0.5	0.302 J	< 0.5								
Benzene	2015-10	ug/L	1.39		2.54					< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Benzene	2016-03	ug/L	1.93	2.35	2.89	< 0.5	< 0.5	0.25 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Benzene	2016-06	ug/L			< 0.5	< 0.5												
Benzene	2016-08	ug/L	**0.321 J**	**0.344 J**	< 0.5	< 0.5	< 0.5	< 0.5	**3.21**	**5.78**	**2.39**	< 0.5	< 0.5	< 0.5	< 0.5	**3.85**	**0.38 J**	< 0.5
Benzene	2017-03	ug/L	< 0.5	**0.467 J**	< 0.5	< 0.5	< 0.5	< 0.5	**3.02**	**4.82**	**1.17**	< 0.5	< 0.5	< 0.5	< 0.5	**6.53**	**0.409 J**	< 0.5
Benzene	2017-08	ug/L	< 0.5	**0.418 J**	< 0.5	< 0.5	< 0.5	< 0.5	**1.07**	**4.1**	**1.44**	< 0.5	< 0.5	**0.181 J**	< 0.5	**5.95**	**0.389 J**	< 0.5
Benzene	2017-11	ug/L																
Benzene	2018-03	ug/L	< 0.5	**0.246 J**	< 0.5	< 0.5	< 0.5	< 0.5	**0.379 J**	**3.21**	**1.75**	< 0.5	< 0.5	< 0.5	< 0.5	**7.03**	**0.198 J**	< 0.5
Benzene	2018-06	ug/L																
Benzene	2018-08	ug/L	< 0.5	**0.278 J**	< 0.5	< 0.5		< 0.5	**0.697**	**4.81**	**1.87**	< 0.5			< 0.5	**4**	**0.796**	< 0.5
Benzene	2018-09	ug/L					< 0.5						< 0.5	< 0.5				
Benzene	2018-11	ug/L																
Benzene	2019-03	ug/L	< 0.5	**0.295 J**	< 0.5	< 0.5	< 0.5	< 0.5	**1.45**	**4.02**	**1.04**	< 0.5	< 0.5	< 0.5	< 0.5	**5.75**	**0.393 J**	< 0.5
Benzene	2019-08	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**2.76**	**4.24**	**1.45**	< 0.5	< 0.5	**0.478 J**	< 0.5	**6.51**	**1.09**	< 0.5
Benzene	2020-03	ug/L	< 0.5	**0.392 J**	< 0.5			**0.357 J**		**5.38**	**1.24**	< 0.5	< 0.5	< 0.5	< 0.5	**7.87**	**0.409 J**	< 0.5
Benzene	2020-04	ug/L				< 0.5	< 0.5		**1.68**									
Benzene	2020-08	ug/L	< 0.5	**0.601**	< 0.5	< 0.5	< 0.5	< 0.5	**1.95**	**4.38**	**1.13**	< 0.5	< 0.5	**0.223 J**	< 0.5	**7.04**	**0.493 J**	< 0.5
Benzene	2021-03	ug/L							**0.921**	**3.76**	**1.02**	< 0.5						
Benzene	2021-08	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	**3.65**	**0.64**	< 0.5	< 0.5	< 0.5	< 0.5	**4.16**	< 0.5	< 0.5
Benzene	2022-03	ug/L							< 0.5	**2.44**	**0.813**	< 0.5						
Benzene	2022-08	ug/L	< 0.5	**0.227 J**	< 0.5	< 0.5	< 0.5		< 0.5	**3.76**	**0.303 J**	< 0.5	< 0.5	**0.257 J**	< 0.5	**6.61**	< 0.5	< 0.5
Benzene	2023-01	ug/L															< 0.5	
Benzene	2023-03	ug/L							**0.918**	**3.74**	**0.726**	< 0.5					< 0.5	
Benzene	2023-08	ug/L	**0.225 J**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	**3.51**	**0.534**	< 0.5	< 0.5	< 0.5	< 0.5	**7.69**	**0.373 J**	< 0.5
Benzo(a)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Benzo(a)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)anthracene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Benzo(a)anthracene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Benzo(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Benzo(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Benzo(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Benzo(a)anthracene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Benzo(a)anthracene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Benzo(a)anthracene	2016-03	ug/L			< 11.1	< 11.2												
Benzo(a)anthracene	2016-06	ug/L			< 11.4	< 11.4												
Benzo(a)anthracene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Benzo(a)anthracene	2023-01	ug/L															< 10.9	
Benzo(a)anthracene	2023-03	ug/L															< 10.4	
Benzo(a)pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Benzo(a)pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Benzo(a)pyrene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Benzo(a)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Benzo(a)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Benzo(a)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Benzo(a)pyrene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Benzo(a)pyrene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Benzo(a)pyrene	2016-03	ug/L			< 11.1	< 11.2												
Benzo(a)pyrene	2016-06	ug/L			< 11.4	< 11.4												
Benzo(a)pyrene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Benzo(a)pyrene	2023-01	ug/L															< 10.9	
Benzo(a)pyrene	2023-03	ug/L															< 10.4	
Benzo(b)fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Benzo(b)fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Benzo(b)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Benzo(b)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Benzo(b)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	

Table 14

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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Benzene	2016-06	ug/L															
Benzene	2016-08	ug/L	**2.61**	**2.47**	**2.34**	< 0.5	< 0.5	**0.253 J**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Benzene	2017-03	ug/L	**1.51**	**2.19**	**2.27**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Benzene	2017-08	ug/L	**2.28**	**2.13**	**1.83**	< 0.5	< 0.5	**0.126 J**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Benzene	2017-11	ug/L														< 0.5	< 0.5
Benzene	2018-03	ug/L	**1.17**	**2.31**	**2.17**	< 0.5	< 0.5	**0.289 J**	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2018-06	ug/L														< 0.5	< 0.5
Benzene	2018-08	ug/L	**1.9**	**2**	**2.23**	< 0.5	**0.943**	**1.09**	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5			
Benzene	2018-09	ug/L													< 0.5	< 0.5	< 0.5
Benzene	2018-11	ug/L					< 0.5									< 0.5	< 0.5
Benzene	2019-03	ug/L	**1.85**	**0.419 J**	**2.74**	< 0.5	< 0.5	**0.793**	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2019-08	ug/L	**4.73**	**1.51**	**2.12**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2020-03	ug/L	**2.66**	**1.28**		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5
Benzene	2020-04	ug/L			**1.33**									< 0.5			
Benzene	2020-08	ug/L	**4.16**	**0.779**	**1.74**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5		< 0.5
Benzene	2021-03	ug/L		**0.731**			< 0.5			< 0.5							
Benzene	2021-08	ug/L	**2.85 J+**	**0.658**	**1.56**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	**0.453 J**		< 0.5
Benzene	2022-03	ug/L		< 0.5			< 0.5			< 0.5							
Benzene	2022-08	ug/L	**2.23**	**0.634**	**1.79**	**0.23 J**	< 0.5	**0.396 J**	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5		< 0.5
Benzene	2023-01	ug/L															
Benzene	2023-03	ug/L		**0.384 J**			< 0.5			< 0.5							
Benzene	2023-08	ug/L	**1.29**	**0.647**	**1.56**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5		< 0.5
Benzo(a)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Benzo(a)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Benzo(a)anthracene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Benzo(a)anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Benzo(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Benzo(a)anthracene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Benzo(a)anthracene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Benzo(a)anthracene	2016-03	ug/L					< 10.9			< 11.2							
Benzo(a)anthracene	2016-06	ug/L															
Benzo(a)anthracene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Benzo(a)anthracene	2023-01	ug/L															
Benzo(a)anthracene	2023-03	ug/L					< 10			< 10							
Benzo(a)pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Benzo(a)pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Benzo(a)pyrene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Benzo(a)pyrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(a)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(a)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Benzo(a)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Benzo(a)pyrene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Benzo(a)pyrene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Benzo(a)pyrene	2016-03	ug/L					< 10.9			< 11.2							
Benzo(a)pyrene	2016-06	ug/L															
Benzo(a)pyrene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Benzo(a)pyrene	2023-01	ug/L															
Benzo(a)pyrene	2023-03	ug/L					< 10			< 10							
Benzo(b)fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Benzo(b)fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Benzo(b)fluoranthene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Benzo(b)fluoranthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(b)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(b)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Benzo(b)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Benzo(b)fluoranthene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Benzo(b)fluoranthene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Benzo(b)fluoranthene	2016-03	ug/L			< 11.1	< 11.2												
Benzo(b)fluoranthene	2016-06	ug/L			< 11.4	< 11.4												
Benzo(b)fluoranthene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Benzo(b)fluoranthene	2023-01	ug/L															< 10.9	
Benzo(b)fluoranthene	2023-03	ug/L															< 10.4	
Benzo(ghi)perylene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Benzo(ghi)perylene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(ghi)perylene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Benzo(ghi)perylene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Benzo(ghi)perylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Benzo(ghi)perylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Benzo(ghi)perylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Benzo(ghi)perylene	2011-09	ug/L																
Benzo(ghi)perylene	2012-03	ug/L																
Benzo(ghi)perylene	2012-09	ug/L																
Benzo(ghi)perylene	2013-03	ug/L																
Benzo(ghi)perylene	2013-09	ug/L																
Benzo(ghi)perylene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Benzo(ghi)perylene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Benzo(ghi)perylene	2016-03	ug/L			< 11.1	< 11.2												
Benzo(ghi)perylene	2016-06	ug/L			< 11.4	< 11.4												
Benzo(ghi)perylene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Benzo(ghi)perylene	2023-01	ug/L															< 10.9	
Benzo(ghi)perylene	2023-03	ug/L															< 10.4	
Benzo(k)fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Benzo(k)fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Benzo(k)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Benzo(k)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Benzo(k)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Benzo(k)fluoranthene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Benzo(k)fluoranthene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Benzo(k)fluoranthene	2016-03	ug/L			< 11.1	< 11.2												
Benzo(k)fluoranthene	2016-06	ug/L			< 11.4	< 11.4												
Benzo(k)fluoranthene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Benzo(k)fluoranthene	2023-01	ug/L															< 10.9	
Benzo(k)fluoranthene	2023-03	ug/L															< 10.4	
Benzyl Alcohol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Benzyl Alcohol	2009-03	ug/L	< 10	< 10	**1.19 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**1.51 J**
Benzyl Alcohol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Benzyl Alcohol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Benzyl Alcohol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Benzyl Alcohol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Benzyl Alcohol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Benzyl Alcohol	2011-09	ug/L																
Benzyl Alcohol	2012-03	ug/L			< 10.0													< 10.0
Benzyl Alcohol	2012-09	ug/L			< 10.0													< 10.0
Benzyl Alcohol	2013-03	ug/L																< 10.2
Benzyl Alcohol	2013-05	ug/L			< 11.2													
Benzyl Alcohol	2013-09	ug/L			< 10.2													< 10.2
Benzyl Alcohol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Benzyl Alcohol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Benzyl Alcohol	2016-03	ug/L			< 11.1	< 11.2												
Benzyl Alcohol	2016-06	ug/L			< 11.4	< 11.4												

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Benzo(b)fluoranthene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Benzo(b)fluoranthene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Benzo(b)fluoranthene	2016-03	ug/L					< 10.9			< 11.2							
Benzo(b)fluoranthene	2016-06	ug/L															
Benzo(b)fluoranthene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Benzo(b)fluoranthene	2023-01	ug/L															
Benzo(b)fluoranthene	2023-03	ug/L					< 10			< 10							
Benzo(ghi)perylene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Benzo(ghi)perylene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Benzo(ghi)perylene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Benzo(ghi)perylene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	**0.484 J**	< 10.0	< 10.0								
Benzo(ghi)perylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(ghi)perylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Benzo(ghi)perylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Benzo(ghi)perylene	2011-09	ug/L					< 10.0										
Benzo(ghi)perylene	2012-03	ug/L					< 10.0										
Benzo(ghi)perylene	2012-09	ug/L					< 10.0										
Benzo(ghi)perylene	2013-03	ug/L					< 11.8										
Benzo(ghi)perylene	2013-09	ug/L					< 10.6										
Benzo(ghi)perylene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Benzo(ghi)perylene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Benzo(ghi)perylene	2016-03	ug/L					< 10.9			< 11.2							
Benzo(ghi)perylene	2016-06	ug/L															
Benzo(ghi)perylene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Benzo(ghi)perylene	2023-01	ug/L															
Benzo(ghi)perylene	2023-03	ug/L					< 10			< 10							
Benzo(k)fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Benzo(k)fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Benzo(k)fluoranthene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Benzo(k)fluoranthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(k)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzo(k)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Benzo(k)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Benzo(k)fluoranthene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Benzo(k)fluoranthene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Benzo(k)fluoranthene	2016-03	ug/L					< 10.9			< 11.2							
Benzo(k)fluoranthene	2016-06	ug/L															
Benzo(k)fluoranthene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Benzo(k)fluoranthene	2023-01	ug/L															
Benzo(k)fluoranthene	2023-03	ug/L					< 10			< 10							
Benzyl Alcohol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Benzyl Alcohol	2009-03	ug/L	**1.17 J**	< 10	< 10	< 10	< 10	**1.39 J**	**1.3 J**								
Benzyl Alcohol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Benzyl Alcohol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Benzyl Alcohol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Benzyl Alcohol	2011-09	ug/L	< 10.0				< 10.0	< 10.0									
Benzyl Alcohol	2012-03	ug/L	< 10.0				< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2012-09	ug/L	< 10.0				< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2013-03	ug/L	< 10.2				< 11.8	< 11.1	< 10								
Benzyl Alcohol	2013-05	ug/L															
Benzyl Alcohol	2013-09	ug/L	< 10.4					< 10.1	< 11.2								
Benzyl Alcohol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Benzyl Alcohol	2015-10	ug/L	< 11.8		< 10.3					< 11							
Benzyl Alcohol	2016-03	ug/L					< 10.9			< 11.2							
Benzyl Alcohol	2016-06	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Benzyl Alcohol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Benzyl Alcohol	2023-01	ug/L															< 10.9	
Benzyl Alcohol	2023-03	ug/L															< 10.4	
Beryllium	2008-08	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Beryllium	2009-03	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Beryllium	2009-07	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Beryllium	2009-09	mg/L	< 0.001	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2010-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2010-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2011-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2011-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2012-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2012-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2013-03	mg/L	< 0.00100	< 0.001		< 0.00100	< 0.00100		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001
Beryllium	2013-05	mg/L			< 0.00100			< 0.00100										
Beryllium	2013-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2013-11	mg/L																
Beryllium	2014-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2014-06	mg/L																
Beryllium	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2015-03	mg/L	< 0.001	**0.000091 J**	< 0.00100	< 0.00100	< 0.00100	**0.0000400 J**	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.001	< 0.00100
Beryllium	2015-09	mg/L	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001			< 0.001	**0.000048 J**	< 0.001	**0.000039 J**		< 0.001	< 0.001	
Beryllium	2015-10	mg/L			< 0.001				< 0.001	< 0.001					< 0.001			< 0.001
Beryllium	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2016-06	mg/L			< 0.001	< 0.001												
Beryllium	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00105**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2017-11	mg/L																
Beryllium	2018-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2018-06	mg/L																
Beryllium	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2018-09	mg/L					< 0.001						< 0.001	< 0.001				
Beryllium	2018-11	mg/L																
Beryllium	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-03	mg/L	< 0.001	< 0.001	< 0.001			< 0.001		< 0.001	< 0.004	< 0.001	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-04	mg/L				< 0.001	< 0.001		< 0.001									
Beryllium	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2021-03	mg/L							< 0.001	< 0.001	< 0.001	< 0.001						
Beryllium	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2022-03	mg/L							< 0.001	< 0.004	< 0.001	< 0.001						
Beryllium	2022-08	mg/L	< 0.001 J	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2023-01	mg/L															< 0.001	
Beryllium	2023-03	mg/L							< 0.001	< 0.001	< 0.001	< 0.001					< 0.001	
Beryllium	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
beta-BHC	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
beta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
beta-BHC	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
beta-BHC	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
beta-BHC	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
beta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	**0.0358**	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
beta-BHC	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
beta-BHC	2011-09	ug/L							< 0.0320									
beta-BHC	2012-03	ug/L							< 0.0320									
beta-BHC	2012-09	ug/L							< 0.0320									

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Benzyl Alcohol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Benzyl Alcohol	2023-01	ug/L															
Benzyl Alcohol	2023-03	ug/L					< 10			< 10							
Beryllium	2008-08	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004								
Beryllium	2009-03	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004								
Beryllium	2009-07	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004								
Beryllium	2009-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100									
Beryllium	2010-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2010-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2011-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2011-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2012-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2012-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2013-03	mg/L	< 0.001	< 0.001	< 0.00100		< 0.00100	< 0.001	< 0.001								
Beryllium	2013-05	mg/L															
Beryllium	2013-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	~~0.000348 J~~	< 0.00100	**0.000637 J**	< 0.00100	< 0.00100	**0.000330 J**		
Beryllium	2013-11	mg/L								~~< 0.00100~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2014-03	mg/L	< 0.00100	< 0.00100	< 0.00100	**0.00162**	< 0.00100	< 0.00100	< 0.00100	~~< 0.00100~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2014-06	mg/L								~~< 0.00100~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2014-09	mg/L	< 0.001	**0.000045 J**	< 0.001	**0.000052 J**	< 0.001	< 0.001	< 0.001	~~< 0.001~~	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2015-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.001	**0.000044 J**	< 0.001	**0.0000410 J**	< 0.00100	< 0.00100	**0.0000640 J**	< 0.00100	< 0.00100		
Beryllium	2015-09	mg/L		< 0.001		< 0.001	< 0.001	< 0.001	< 0.001								
Beryllium	2015-10	mg/L	< 0.001		< 0.001					< 0.001	< 0.001	**0.000048 J**	< 0.001	< 0.001	< 0.001		
Beryllium	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2016-06	mg/L															
Beryllium	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2017-11	mg/L														< 0.001	< 0.001
Beryllium	2018-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2018-06	mg/L														< 0.001	< 0.001
Beryllium	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001			
Beryllium	2018-09	mg/L													< 0.001	< 0.001	< 0.001
Beryllium	2018-11	mg/L														< 0.001	< 0.001
Beryllium	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-03	mg/L	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001
Beryllium	2020-04	mg/L			< 0.001									< 0.001			
Beryllium	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Beryllium	2021-03	mg/L		< 0.001			< 0.001			< 0.001							
Beryllium	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Beryllium	2022-03	mg/L		< 0.004			< 0.001			< 0.001							
Beryllium	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Beryllium	2023-01	mg/L															
Beryllium	2023-03	mg/L		< 0.001			< 0.001			< 0.001							
Beryllium	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
beta-BHC	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
beta-BHC	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
beta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
beta-BHC	2009-07	ug/L					< 0.0320		< 0.0320								
beta-BHC	2009-09	ug/L					< 0.0320		< 0.0320								
beta-BHC	2010-03	ug/L					< 0.0320		< 0.0320								
beta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
beta-BHC	2011-03	ug/L					< 0.0320										
beta-BHC	2011-09	ug/L					< 0.0320										
beta-BHC	2012-03	ug/L					< 0.0320		< 0.0320								
beta-BHC	2012-09	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
beta-BHC	2013-03	ug/L							**0.00786 J**									
beta-BHC	2013-09	ug/L							< 0.0320									
beta-BHC	2014-03	ug/L							**0.0162 J**									
beta-BHC	2014-09	ug/L							**0.00884 J**									
beta-BHC	2015-03	ug/L							< 0.0320									
beta-BHC	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			**0.0102 J**	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
beta-BHC	2015-10	ug/L							**0.00941 J**	**0.0079 J**					< 0.0386			< 0.0368
beta-BHC	2016-03	ug/L			< 0.032	< 0.0356			**0.0379**									
beta-BHC	2016-06	ug/L			< 0.0364	**0.00577 J**												
beta-BHC	2016-08	ug/L							**0.0156 J**									
beta-BHC	2017-03	ug/L							**0.00963 J**									
beta-BHC	2017-08	ug/L							< 0.0356									
beta-BHC	2018-03	ug/L							< 0.0344									
beta-BHC	2018-08	ug/L							**0.00937 J**									
beta-BHC	2019-03	ug/L							< 0.0356									
beta-BHC	2019-08	ug/L							< 0.0337									
beta-BHC	2020-03	ug/L																
beta-BHC	2020-04	ug/L							< 0.0386									
beta-BHC	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	**0.00634 J**	< 0.0376	< 0.0376	**0.0136 J**	< 0.0416	**0.00739 J**	< 0.0368	< 0.0386	**0.00983 J**	< 0.0395	< 0.039	< 0.0381	< 0.04
beta-BHC	2021-03	ug/L							< 0.0356									
beta-BHC	2021-08	ug/L							< 0.0372									
beta-BHC	2022-03	ug/L							< 0.08									
beta-BHC	2022-08	ug/L							< 0.064									
beta-BHC	2023-01	ug/L															< 0.0727	
beta-BHC	2023-03	ug/L							< 0.064								< 0.0667	
beta-BHC	2023-08	ug/L							< 0.0711									
bis(2-Chloroethoxy)methane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
bis(2-Chloroethoxy)methane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
bis(2-Chloroethoxy)methane	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
bis(2-Chloroethoxy)methane	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
bis(2-Chloroethoxy)methane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
bis(2-Chloroethoxy)methane	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
bis(2-Chloroethoxy)methane	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
bis(2-Chloroethoxy)methane	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
bis(2-Chloroethoxy)methane	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
bis(2-Chloroethoxy)methane	2016-03	ug/L			< 11.1	< 11.2												
bis(2-Chloroethoxy)methane	2016-06	ug/L			< 11.4	< 11.4												
bis(2-Chloroethoxy)methane	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
bis(2-Chloroethoxy)methane	2023-01	ug/L															< 10.9	
bis(2-Chloroethoxy)methane	2023-03	ug/L															< 10.4	
bis(2-Chloroethyl)ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
bis(2-Chloroethyl)ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
bis(2-Chloroethyl)ether	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
bis(2-Chloroethyl)ether	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
bis(2-Chloroethyl)ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
bis(2-Chloroethyl)ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
bis(2-Chloroethyl)ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
bis(2-Chloroethyl)ether	2011-09	ug/L																
bis(2-Chloroethyl)ether	2012-03	ug/L																
bis(2-Chloroethyl)ether	2012-09	ug/L																
bis(2-Chloroethyl)ether	2013-03	ug/L																
bis(2-Chloroethyl)ether	2013-09	ug/L																
bis(2-Chloroethyl)ether	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
bis(2-Chloroethyl)ether	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
bis(2-Chloroethyl)ether	2016-03	ug/L			< 11.1	< 11.2												
bis(2-Chloroethyl)ether	2016-06	ug/L			< 11.4	< 11.4												
bis(2-Chloroethyl)ether	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
beta-BHC	2013-03	ug/L					< 0.0333										
beta-BHC	2013-09	ug/L															
beta-BHC	2014-03	ug/L					< 0.0348										
beta-BHC	2014-09	ug/L					< 0.032										
beta-BHC	2015-03	ug/L					< 0.036										
beta-BHC	2015-09	ug/L		**0.0257 J**		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
beta-BHC	2015-10	ug/L	< 0.0372		**0.00728 J**					< 0.0372							
beta-BHC	2016-03	ug/L					**0.00996 J**			< 0.0356							
beta-BHC	2016-06	ug/L															
beta-BHC	2016-08	ug/L					< 0.0356			< 0.0356							
beta-BHC	2017-03	ug/L					< 0.0337			< 0.0372							
beta-BHC	2017-08	ug/L					< 0.0356			< 0.0356							
beta-BHC	2018-03	ug/L					< 0.0444			< 0.0372							
beta-BHC	2018-08	ug/L					< 0.0451			< 0.0381							
beta-BHC	2019-03	ug/L					< 0.039			< 0.0395							
beta-BHC	2019-08	ug/L					< 0.0346			< 0.034							
beta-BHC	2020-03	ug/L					< 0.0427			< 0.0376							
beta-BHC	2020-04	ug/L															
beta-BHC	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
beta-BHC	2021-03	ug/L					< 0.041			< 0.0381							
beta-BHC	2021-08	ug/L					< 0.04			< 0.0368							
beta-BHC	2022-03	ug/L					< 0.064			< 0.08							
beta-BHC	2022-08	ug/L					< 0.0667		< 0.064	< 0.0604							
beta-BHC	2023-01	ug/L															
beta-BHC	2023-03	ug/L					< 0.0696			< 0.064							
beta-BHC	2023-08	ug/L					< 0.0604			< 0.0711							
bis(2-Chloroethoxy)methane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
bis(2-Chloroethoxy)methane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
bis(2-Chloroethoxy)methane	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
bis(2-Chloroethoxy)methane	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethoxy)methane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethoxy)methane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
bis(2-Chloroethoxy)methane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
bis(2-Chloroethoxy)methane	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
bis(2-Chloroethoxy)methane	2015-10	ug/L	< 11.8		< 10.3					< 11							
bis(2-Chloroethoxy)methane	2016-03	ug/L					< 10.9			< 11.2							
bis(2-Chloroethoxy)methane	2016-06	ug/L															
bis(2-Chloroethoxy)methane	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
bis(2-Chloroethoxy)methane	2023-01	ug/L															
bis(2-Chloroethoxy)methane	2023-03	ug/L					< 10			< 10							
bis(2-Chloroethyl)ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
bis(2-Chloroethyl)ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
bis(2-Chloroethyl)ether	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
bis(2-Chloroethyl)ether	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethyl)ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethyl)ether	2010-09	ug/L	< 10.0	**0.324 J**	< 10.0	< 10.0	< 10.0										
bis(2-Chloroethyl)ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
bis(2-Chloroethyl)ether	2011-09	ug/L		< 10.0			< 10.0										
bis(2-Chloroethyl)ether	2012-03	ug/L		**0.191 J**			< 10.0										
bis(2-Chloroethyl)ether	2012-09	ug/L		< 10.0			< 10.0										
bis(2-Chloroethyl)ether	2013-03	ug/L		< 10.5			< 11.8										
bis(2-Chloroethyl)ether	2013-09	ug/L		< 10.1													
bis(2-Chloroethyl)ether	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
bis(2-Chloroethyl)ether	2015-10	ug/L	< 11.8		< 10.3					< 11							
bis(2-Chloroethyl)ether	2016-03	ug/L					< 10.9			< 11.2							
bis(2-Chloroethyl)ether	2016-06	ug/L															
bis(2-Chloroethyl)ether	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
bis(2-Chloroethyl)ether	2023-01	ug/L															< 10.9	
bis(2-Chloroethyl)ether	2023-03	ug/L															< 10.4	
bis(2-Ethylhexyl)phthalate	2008-08	ug/L	**3.9 J**	**7.2 J**	**3.47 J**	**12.9**	< 10	**10.3**	< 10	< 10	< 11.1	< 10	< 10	< 10	**2.47 J**	**14.9**	**28**	< 10
bis(2-Ethylhexyl)phthalate	2009-03	ug/L	**17**	**29.1**	**23.5**	< 10	**6.03 J**	**13.7**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**6.89 J**	< 10	< 10
bis(2-Ethylhexyl)phthalate	2009-07	ug/L	**6.99 J**	**5.83 J**	**18.0**	**11.6**		**5.14 J**		< 10			**0.385 J**		< 10	**6.65 J**	**1.14 J**	**0.512 J**
bis(2-Ethylhexyl)phthalate	2009-09	ug/L	< 10	**23.0**	**11.6**	< 10.0		**26.9**		**0.445 J**			**0.578 J**		< 10	**3.03 J**	**28**	**1.23 J**
bis(2-Ethylhexyl)phthalate	2010-03	ug/L	< 10.0	**0.415 J**	**0.419 J**	**0.552 J**	**1.64 J**	< 10.0		< 10.0			< 10.0		**0.458 J**	**3.66 J**	**1.68 J**	**1.10 J**
bis(2-Ethylhexyl)phthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	**1.30 J**	**1.04 J**	
bis(2-Ethylhexyl)phthalate	2011-03	ug/L	< 10.0 UJ	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	**0.489 J**		< 10.0	**0.681 J**	**0.960 J**	
bis(2-Ethylhexyl)phthalate	2011-09	ug/L	< 10.0	< 10.0				< 10.0		< 10.0			< 10.0		< 10.0	**1.76 J**	< 10.0	
bis(2-Ethylhexyl)phthalate	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	**1.21 J**	**0.885 J**	**0.568 J**
bis(2-Ethylhexyl)phthalate	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			**1.58 J**		< 10.0	**1.50 J**	**0.689 J**	**0.823 J**
bis(2-Ethylhexyl)phthalate	2013-03	ug/L	< 10.9 J	< 10.2 J		< 11.0 J	< 11.0 J			**0.904 J**			< 10.5 J		< 10.5 J	< 11.0 J	< 10.6 J	< 10.2 J
bis(2-Ethylhexyl)phthalate	2013-05	ug/L			< 11.2 J			< 10.2 J										
bis(2-Ethylhexyl)phthalate	2013-09	ug/L	< 11.0	< 10.2	< 10.2	**0.489 J**	**0.507 J**	< 10.2 J		< 10.4 J			< 10.3		< 11.4	< 11.2 J	< 12.8 J	< 10.2 J
bis(2-Ethylhexyl)phthalate	2014-03	ug/L	< 10.3	< 10.4				< 10.2								**13.7**	**0.684 J**	
bis(2-Ethylhexyl)phthalate	2014-09	ug/L	< 10.2	< 10				< 10								**1.97 J**	< 10	
bis(2-Ethylhexyl)phthalate	2015-03	ug/L	< 11.1 J	< 11 J				< 11.2								< 11 J	< 10.9 J	
bis(2-Ethylhexyl)phthalate	2015-09	ug/L	< 11.4 J	< 11.1 J			< 11.1 J	< 11.6 J			< 10.9 J	**11.1**	< 10.9 J	< 11.2 J		< 11.4 J	< 10.5 J	
bis(2-Ethylhexyl)phthalate	2015-10	ug/L							< 10.4 J	< 10.5 J					< 11.8 J			< 11.8 J
bis(2-Ethylhexyl)phthalate	2016-03	ug/L	< 11.1 J	< 11 J	< 11.1 J	**11.9**		< 11.1 J				< 10.6 J				< 10.3 J	< 11.2 J	
bis(2-Ethylhexyl)phthalate	2016-06	ug/L			< 11.4	< 11.4												
bis(2-Ethylhexyl)phthalate	2016-08	ug/L	< 11.2	< 10.4	< 11.2	< 11.4		< 11.4				< 11.4				< 11	< 11.1	
bis(2-Ethylhexyl)phthalate	2017-03	ug/L	< 10.4	< 10.3	< 10.5	< 10.3		< 10.4				< 11.1				< 10.5	< 10.5	
bis(2-Ethylhexyl)phthalate	2017-08	ug/L	< 11.1	< 10.5	< 10.5	< 11.1		< 11.1				< 11.1				**0.699 J**	< 11.1	
bis(2-Ethylhexyl)phthalate	2018-03	ug/L	< 11.5	< 11.6	< 11.8	< 12		**3.45 J**				< 11				< 15.5	< 11.5	
bis(2-Ethylhexyl)phthalate	2018-08	ug/L	< 11	< 12	< 11	< 11		< 11.4				< 11.4				< 11.1	< 11.1	
bis(2-Ethylhexyl)phthalate	2019-03	ug/L	< 11.8	< 11.4	< 11.6	< 10.5		< 10.9				< 11				< 11.2	< 11.8	
bis(2-Ethylhexyl)phthalate	2019-08	ug/L	< 10.6	< 10.6	< 10.6	< 10.8		< 10.6				< 10.8				**2.72 J**	< 10.8	
bis(2-Ethylhexyl)phthalate	2020-03	ug/L	< 11.1	< 11.2	< 11.1			< 10.8				< 10.9				< 10.8	< 10.9	
bis(2-Ethylhexyl)phthalate	2020-04	ug/L				< 10.9												
bis(2-Ethylhexyl)phthalate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
bis(2-Ethylhexyl)phthalate	2021-03	ug/L										< 12.3						
bis(2-Ethylhexyl)phthalate	2021-08	ug/L	< 11.4	< 11.9	< 11.9	< 11.9		< 11.8				< 11.6				< 11.9	< 12	
bis(2-Ethylhexyl)phthalate	2022-03	ug/L										< 11.9						
bis(2-Ethylhexyl)phthalate	2022-08	ug/L	< 10.2	< 10.2	< 10.4	< 10.4						< 10				< 11.1		
bis(2-Ethylhexyl)phthalate	2023-01	ug/L															< 10.9	
bis(2-Ethylhexyl)phthalate	2023-03	ug/L										**7.09 J**					< 10.4	
bis(2-Ethylhexyl)phthalate	2023-08	ug/L	< 10.2	< 11.6	< 9.43	< 10.4						< 10				< 9.8	< 9.43	
Bromochloromethane	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
Bromochloromethane	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
Bromochloromethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2010-09	ug/L	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	
Bromochloromethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2013-03	ug/L	< 5.00	< 5		< 5.00	< 5.00		< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5
Bromochloromethane	2013-05	ug/L			< 5.00			< 5.00										
Bromochloromethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2013-11	ug/L																
Bromochloromethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2014-06	ug/L																
Bromochloromethane	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2015-03	ug/L	< 5	< 5	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	< 5.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
bis(2-Chloroethyl)ether	2023-01	ug/L															
bis(2-Chloroethyl)ether	2023-03	ug/L					< 10			< 10							
bis(2-Ethylhexyl)phthalate	2008-08	ug/L	**4.98 J**	< 10	**28**	**2.32 J**	< 10	**15.8**	**2.02 J**								
bis(2-Ethylhexyl)phthalate	2009-03	ug/L	**2.95 J**	< 10	**10.2**	< 10	< 10	**7.4 J**	< 10								
bis(2-Ethylhexyl)phthalate	2009-07	ug/L	< 10.0	**9.13 J**	**15.1**	**3.42 J**	< 10.0	< 11.4	**0.920 J**								
bis(2-Ethylhexyl)phthalate	2009-09	ug/L	**17.6**	**11.9**	**20.0**	< 10.0	< 10.0	**29.7**	**1.14 J**								
bis(2-Ethylhexyl)phthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**0.734 J**								
bis(2-Ethylhexyl)phthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	**0.413 J**										
bis(2-Ethylhexyl)phthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
bis(2-Ethylhexyl)phthalate	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
bis(2-Ethylhexyl)phthalate	2012-03	ug/L	< 10.0	< 10.0	< 10.0	**1.88 J**	**0.500 J**	< 10.0	**1.73 J**								
bis(2-Ethylhexyl)phthalate	2012-09	ug/L	**0.566 J**	< 10.0	< 10.0	< 10.0	**0.409 J**	< 10.0	**3.63 J**								
bis(2-Ethylhexyl)phthalate	2013-03	ug/L	< 10.2 J	< 10.5 J	< 10.6 J		< 11.8 J	< 11.1 J	< 10 J								
bis(2-Ethylhexyl)phthalate	2013-05	ug/L															
bis(2-Ethylhexyl)phthalate	2013-09	ug/L	< 10.4	**0.597 J**	**0.532 J**	**0.652 J**	< 10.6 J	< 10.1	< 11.2 J								
bis(2-Ethylhexyl)phthalate	2014-03	ug/L	< 10.2	< 10.2	< 10.9		< 11.2	< 10.4									
bis(2-Ethylhexyl)phthalate	2014-09	ug/L	< 10.2	< 11.1	< 10		< 11	< 10.2									
bis(2-Ethylhexyl)phthalate	2015-03	ug/L	< 10.8	< 10.6	< 10.3		< 11 J	< 10.5 J									
bis(2-Ethylhexyl)phthalate	2015-09	ug/L		< 11 J		< 11.2 J	< 11.6 J	**13.9**	**13.9**								
bis(2-Ethylhexyl)phthalate	2015-10	ug/L	< 11.8 J		< 10.3 J					< 11 J							
bis(2-Ethylhexyl)phthalate	2016-03	ug/L	< 11.2 J	< 10.2 J	< 10 J		< 10.9 J	< 11.9 J	< 10.3 J	< 11.2 J							
bis(2-Ethylhexyl)phthalate	2016-06	ug/L															
bis(2-Ethylhexyl)phthalate	2016-08	ug/L	< 10	< 24.1	< 10		< 11.8	< 10	< 11	< 10.6							
bis(2-Ethylhexyl)phthalate	2017-03	ug/L	< 10.5	< 10.3	< 11		< 10.5	< 10.5	< 10.5	< 10.9							
bis(2-Ethylhexyl)phthalate	2017-08	ug/L	< 11.1	< 10.9	< 10.8 J		< 10.6	< 10.9	< 11.1	< 10.4							
bis(2-Ethylhexyl)phthalate	2018-03	ug/L	< 11.1	< 11.1	< 10.8		< 12.5	< 11.1	< 11.5	< 12.3							
bis(2-Ethylhexyl)phthalate	2018-08	ug/L	< 11.6	< 11	< 11		< 13.2	< 11	< 11	< 10.6							
bis(2-Ethylhexyl)phthalate	2019-03	ug/L	< 11	< 11	< 10.9		< 13	< 11.1	< 11.5	< 11.1							
bis(2-Ethylhexyl)phthalate	2019-08	ug/L	< 10.6	< 10.9	< 10.8		< 10.8	< 10.8	< 10.6	< 10.9							
bis(2-Ethylhexyl)phthalate	2020-03	ug/L	< 10.8	< 10.9			< 13.7	< 11.1	< 11.4	< 12.5							
bis(2-Ethylhexyl)phthalate	2020-04	ug/L			< 10.9												
bis(2-Ethylhexyl)phthalate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
bis(2-Ethylhexyl)phthalate	2021-03	ug/L		< 11.8			< 11.1			< 12.2							
bis(2-Ethylhexyl)phthalate	2021-08	ug/L	< 11.2	< 11.2	< 11.4		< 12.5	< 11.8	< 11	< 10.8							
bis(2-Ethylhexyl)phthalate	2022-03	ug/L		< 11.4			< 10.9			< 11.9							
bis(2-Ethylhexyl)phthalate	2022-08	ug/L	< 10.9	< 10.6	< 10		< 10.4	< 10.4	< 10.4	< 10							
bis(2-Ethylhexyl)phthalate	2023-01	ug/L															
bis(2-Ethylhexyl)phthalate	2023-03	ug/L		**7.57 J**			< 10			< 10							
bis(2-Ethylhexyl)phthalate	2023-08	ug/L	< 10.2	< 10.4	< 10		< 9.62	< 10.6	< 10.9	< 11.4							
Bromochloromethane	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Bromochloromethane	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Bromochloromethane	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
Bromochloromethane	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
Bromochloromethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00										
Bromochloromethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2013-03	ug/L	< 5	< 5	< 125		< 5.00	< 5	< 5								
Bromochloromethane	2013-05	ug/L															
Bromochloromethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2013-11	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2014-06	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2015-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Bromochloromethane	2015-09	ug/L	< 5	< 5		< 5	< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
Bromochloromethane	2015-10	ug/L			< 5				< 5	< 5					< 5			< 5
Bromochloromethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2016-06	ug/L			< 5	< 5												
Bromochloromethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2017-11	ug/L																
Bromochloromethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2018-06	ug/L																
Bromochloromethane	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromochloromethane	2018-09	ug/L					< 5						< 5	< 5				
Bromochloromethane	2018-11	ug/L																
Bromochloromethane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2020-04	ug/L				< 5	< 5		< 5									
Bromochloromethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2021-03	ug/L							< 5	< 5	< 5	< 5						
Bromochloromethane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2022-03	ug/L							< 5	< 5	< 5	< 5						
Bromochloromethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2023-01	ug/L															< 5	
Bromochloromethane	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
Bromochloromethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Bromodichloromethane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Bromodichloromethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
Bromodichloromethane	2013-05	ug/L			< 1.00			< 1.00										
Bromodichloromethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2013-11	ug/L																
Bromodichloromethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2014-06	ug/L																
Bromodichloromethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Bromodichloromethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Bromodichloromethane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Bromodichloromethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2016-06	ug/L			< 1	< 1												
Bromodichloromethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2017-11	ug/L																
Bromodichloromethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2018-06	ug/L																
Bromodichloromethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Bromodichloromethane	2018-09	ug/L					< 1						< 1	< 1				
Bromodichloromethane	2018-11	ug/L																
Bromodichloromethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Bromochloromethane	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
Bromochloromethane	2015-10	ug/L	< 5		< 5					< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2016-06	ug/L															
Bromochloromethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2017-11	ug/L														< 5	< 5
Bromochloromethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2018-06	ug/L														< 5	< 5
Bromochloromethane	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
Bromochloromethane	2018-09	ug/L													< 5	< 5	< 5
Bromochloromethane	2018-11	ug/L														< 5	< 5
Bromochloromethane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromochloromethane	2020-04	ug/L			< 5									< 5			
Bromochloromethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromochloromethane	2021-03	ug/L		< 5			< 5			< 5							
Bromochloromethane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromochloromethane	2022-03	ug/L		< 5			< 5			< 5							
Bromochloromethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromochloromethane	2023-01	ug/L															
Bromochloromethane	2023-03	ug/L		< 5			< 5			< 5							
Bromochloromethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromodichloromethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Bromodichloromethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Bromodichloromethane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Bromodichloromethane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Bromodichloromethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
Bromodichloromethane	2013-05	ug/L															
Bromodichloromethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Bromodichloromethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2016-06	ug/L															
Bromodichloromethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2017-11	ug/L														< 1	< 1
Bromodichloromethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2018-06	ug/L														< 1	< 1
Bromodichloromethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Bromodichloromethane	2018-09	ug/L													< 1	< 1	< 1
Bromodichloromethane	2018-11	ug/L														< 1	< 1
Bromodichloromethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Bromodichloromethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2020-04	ug/L				< 1	< 1		< 1									
Bromodichloromethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
Bromodichloromethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
Bromodichloromethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2023-01	ug/L															< 1	
Bromodichloromethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Bromodichloromethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
Bromoform	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
Bromoform	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2013-03	ug/L	< 5.00	< 5		< 5.00	< 5.00		< 5	< 5	< 5	< 5	< 5	< 5 J	< 5.00	< 5.00	< 5	< 5 J
Bromoform	2013-05	ug/L			**0.224 J**			< 5.00										
Bromoform	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2013-11	ug/L																
Bromoform	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2014-06	ug/L																
Bromoform	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2015-03	ug/L	< 5	< 5	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	< 5.00
Bromoform	2015-09	ug/L	< 5	< 5		< 5	< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
Bromoform	2015-10	ug/L			< 5				< 5	< 5					< 5			< 5
Bromoform	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2016-06	ug/L			< 5	< 5												
Bromoform	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2017-11	ug/L																
Bromoform	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2018-06	ug/L																
Bromoform	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromoform	2018-09	ug/L					< 5						< 5	< 5				
Bromoform	2018-11	ug/L																
Bromoform	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2020-04	ug/L				< 5	< 5		< 5									
Bromoform	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2021-03	ug/L							< 5	< 5	< 5	< 5						
Bromoform	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2022-03	ug/L							< 5	< 5	< 5	< 5						
Bromoform	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2023-01	ug/L															< 5	
Bromoform	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
Bromoform	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromomethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2009-07	ug/L	< 4	< 4.00		< 4		< 4	< 4	< 4	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Bromodichloromethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Bromodichloromethane	2020-04	ug/L			< 1									< 1			
Bromodichloromethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Bromodichloromethane	2021-03	ug/L		< 1			< 1			< 1							
Bromodichloromethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Bromodichloromethane	2022-03	ug/L		< 1			< 1			< 1							
Bromodichloromethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Bromodichloromethane	2023-01	ug/L															
Bromodichloromethane	2023-03	ug/L		< 1			< 1			< 1							
Bromodichloromethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Bromoform	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Bromoform	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Bromoform	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
Bromoform	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
Bromoform	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2013-03	ug/L	< 5 J	< 5	< 125		< 5.00	< 5	< 5 J								
Bromoform	2013-05	ug/L															
Bromoform	2013-09	ug/L	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2013-11	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2014-06	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
Bromoform	2015-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
Bromoform	2015-10	ug/L	< 5		< 5					< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	2016-06	ug/L															
Bromoform	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	2017-11	ug/L														< 5	< 5
Bromoform	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2018-06	ug/L														< 5	< 5
Bromoform	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
Bromoform	2018-09	ug/L													< 5	< 5	< 5
Bromoform	2018-11	ug/L														< 5	< 5
Bromoform	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromoform	2020-04	ug/L			< 5									< 5			
Bromoform	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromoform	2021-03	ug/L		< 5			< 5			< 5							
Bromoform	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromoform	2022-03	ug/L		< 5			< 5			< 5							
Bromoform	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromoform	2023-01	ug/L															
Bromoform	2023-03	ug/L		< 5			< 5			< 5							
Bromoform	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Bromomethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4								
Bromomethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4								
Bromomethane	2009-07	ug/L	< 4.00	< 4	< 4	< 4	< 4.00										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Bromomethane	2009-09	ug/L	< 4	< 4.00		< 4.00		< 4.00	< 4.00	< 20.0	< 4.00	< 4	< 4	< 4	< 4	< 4	< 4	
Bromomethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 40.0	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 10.0	< 4.00	< 4.00	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 4.00	< 4.00	< 10.0	< 10.0
Bromomethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2013-03	ug/L	< 4.00	< 4		< 4.00	< 4.00		< 4	< 4	< 4	< 4	< 4	< 4	< 4.00	< 4.00	< 4	< 4
Bromomethane	2013-05	ug/L			< 4.00			< 4.00										
Bromomethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**4.03**	**3.96 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2013-11	ug/L																
Bromomethane	2014-03	ug/L	**0.303 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2014-06	ug/L																
Bromomethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2015-03	ug/L	< 4	< 4	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4	< 4.00
Bromomethane	2015-09	ug/L	< 4	< 4		< 4	< 4	< 4			< 4	< 4	< 4	< 4		< 4	< 4	
Bromomethane	2015-10	ug/L			< 4				< 4	< 4					< 4			< 4
Bromomethane	2016-03	ug/L	< 4	**0.24 J**	< 4	< 4 J	< 4 J	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	**0.368 J**	< 4
Bromomethane	2016-06	ug/L			< 4	< 4												
Bromomethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2017-11	ug/L																
Bromomethane	2018-03	ug/L	**0.335 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	**0.318 J**	< 4	< 4	< 4	< 4	< 4
Bromomethane	2018-06	ug/L																
Bromomethane	2018-08	ug/L	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Bromomethane	2018-09	ug/L					< 4						< 4	< 4				
Bromomethane	2018-11	ug/L																
Bromomethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2020-03	ug/L	< 4	< 4	< 4			< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2020-04	ug/L				< 4	< 4		< 4									
Bromomethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2021-03	ug/L							< 4	< 4	< 4	< 4						
Bromomethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 40	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2022-03	ug/L							< 4	< 4	< 4	< 4						
Bromomethane	2022-08	ug/L	< 4	< 4	**3.21 J**	< 4	< 4		< 4	**1.1 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2023-01	ug/L															< 4	
Bromomethane	2023-03	ug/L							< 4	< 4	< 4	< 4					< 4	
Bromomethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Butylbenzylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Butylbenzylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Butylbenzylphthalate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Butylbenzylphthalate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Butylbenzylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Butylbenzylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	**0.570 J**	< 10.0	
Butylbenzylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Butylbenzylphthalate	2011-09	ug/L														< 10.0		
Butylbenzylphthalate	2012-03	ug/L														< 10.0		
Butylbenzylphthalate	2012-09	ug/L														< 10.0		
Butylbenzylphthalate	2013-03	ug/L														< 11.0		
Butylbenzylphthalate	2013-09	ug/L														< 11.2		
Butylbenzylphthalate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Butylbenzylphthalate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Butylbenzylphthalate	2016-03	ug/L			< 11.1	< 11.2												
Butylbenzylphthalate	2016-06	ug/L			< 11.4	< 11.4												
Butylbenzylphthalate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Bromomethane	2009-09	ug/L	< 4.00	< 20.0	< 4.00	< 4.00	< 4.00										
Bromomethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2013-03	ug/L	< 4	< 4	< 100		< 4.00	< 4	< 4								
Bromomethane	2013-05	ug/L															
Bromomethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2013-11	ug/L									< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2014-06	ug/L									< 4.00	< 4.00 J	< 4.00	< 4.00	< 4.00		
Bromomethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4		
Bromomethane	2015-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4	< 4	< 4		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2015-09	ug/L		< 4		< 4	< 4	< 4	< 4								
Bromomethane	2015-10	ug/L	< 4		< 4					< 4	< 4	< 4	< 4	< 4	< 4		
Bromomethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	**0.252 J**	< 4	< 4	< 4	< 4	< 4	< 4 J	< 4 J		
Bromomethane	2016-06	ug/L															
Bromomethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Bromomethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Bromomethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Bromomethane	2017-11	ug/L														**0.575 J**	**1.08 J**
Bromomethane	2018-03	ug/L	< 4	**0.266 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2018-06	ug/L														< 4	< 4
Bromomethane	2018-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4			
Bromomethane	2018-09	ug/L													< 4	< 4	< 4
Bromomethane	2018-11	ug/L														< 4	< 4
Bromomethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2020-03	ug/L	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4
Bromomethane	2020-04	ug/L			< 4									< 4			
Bromomethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Bromomethane	2021-03	ug/L		< 4			< 4			< 4							
Bromomethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Bromomethane	2022-03	ug/L		< 4			< 4			< 4							
Bromomethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Bromomethane	2023-01	ug/L															
Bromomethane	2023-03	ug/L		< 4			< 4			< 4							
Bromomethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Butylbenzylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Butylbenzylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Butylbenzylphthalate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Butylbenzylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Butylbenzylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Butylbenzylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Butylbenzylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**0.699 J**									
Butylbenzylphthalate	2011-09	ug/L					< 10.0	**6.50 J**									
Butylbenzylphthalate	2012-03	ug/L					**0.341 J**	< 10.0									
Butylbenzylphthalate	2012-09	ug/L					< 10.0	< 10.0									
Butylbenzylphthalate	2013-03	ug/L					< 11.8	< 11.1									
Butylbenzylphthalate	2013-09	ug/L					< 10.6	< 10.1									
Butylbenzylphthalate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Butylbenzylphthalate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Butylbenzylphthalate	2016-03	ug/L					< 10.9			< 11.2							
Butylbenzylphthalate	2016-06	ug/L															
Butylbenzylphthalate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Butylbenzylphthalate	2023-01	ug/L															< 10.9	
Butylbenzylphthalate	2023-03	ug/L															< 10.4	
Cadmium	2008-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	2009-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	2009-07	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	2009-09	mg/L	< 0.0005	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2010-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	**0.00133**	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2010-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2011-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2011-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2012-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	**0.000630**	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2012-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	**0.000612**	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2013-03	mg/L	**0.000224 J**	**0.000305 J**		< 0.000500	**0.000221 J**		< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00182**	**0.000295 J**	< 0.000500	< 0.000500	< 0.0005	**0.000338 J**
Cadmium	2013-05	mg/L			< 0.0100			< 0.0100										
Cadmium	2013-09	mg/L	< 0.000500	< 0.000500	< 0.000500	**0.000352 J**	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	**0.000329 J**	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2013-11	mg/L																
Cadmium	2014-03	mg/L	< 0.000500	< 0.000500	< 0.000500	**0.000277 J**	**0.000102 J**	< 0.000500	< 0.000500	**0.00128**	< 0.000500	**0.0000994 J**	< 0.000500	**0.000108 J**	**0.000123 J**	< 0.000500	< 0.000500	< 0.000500
Cadmium	2014-06	mg/L																
Cadmium	2014-09	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000357 J**	**0.000297 J**	< 0.0005	< 0.0005	**0.000183 J**	< 0.0005	< 0.0005	**0.000117 J**	**0.000149 J**	**0.000112 J**	< 0.0005	**0.000144 J**	< 0.0005
Cadmium	2015-03	mg/L	< 0.0005	**0.000416 J**	**0.000137 J**	**0.000280 J**	**0.000155 J**	< 0.000500	< 0.000500	< 0.000500	< 0.0005	< 0.0005	**0.000291 J**	**0.000179 J**	< 0.0005	< 0.0005	< 0.0005	< 0.000500
Cadmium	2015-09	mg/L	< 0.0005	**0.000171 J**		**0.000214 J**	< 0.0005	< 0.0005			< 0.0005	< 0.0005	**0.000167 J**	**0.000142 J**		< 0.0005	< 0.0005	
Cadmium	2015-10	mg/L			< 0.0005				< 0.0005	< 0.0005					< 0.0005			< 0.0005
Cadmium	2016-03	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.00019 J**	**0.000141 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000055 J**	**0.00014 J**	**0.0001 J**	**0.000068 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2016-06	mg/L			< 0.0005	**0.000132 J**												
Cadmium	2016-08	mg/L	**0.000044 J**	**0.00007 J**	**0.000038 J**	**0.000183 J**	**0.000228 J**	< 0.0005	**0.0011**	< 0.0005	< 0.0005	< 0.0005	**0.000168 J**	**0.000202 J**	**0.000159 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2017-03	mg/L	< 0.0005	< 0.0005	**0.000075 J**	**0.00018 J**	**0.000379 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000171 J**	**0.000154 J**	**0.000158 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2017-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000332 J**	**0.000148 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000164 J**	**0.000131 J**	**0.000211 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2017-11	mg/L																
Cadmium	2018-03	mg/L	< 0.0005	**0.000126 J**	**0.000047 J**	**0.000045 J**	**0.0001 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000326 J**	**0.00019 J**	**0.000086 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2018-06	mg/L																
Cadmium	2018-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000186 J**		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			**0.000132 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2018-09	mg/L					**0.000166 J**						< 0.0005	**0.00018 J**				
Cadmium	2018-11	mg/L																
Cadmium	2019-03	mg/L	**0.000086 J**	< 0.0005	**0.000152 J**	**0.000231 J**	**0.000121 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000103 J**	**0.000091 J**	**0.000103 J**	< 0.0005	< 0.0005	< 0.0005
Cadmium	2019-08	mg/L	< 0.0001	< 0.0001	**0.000039 J**	**0.000146**	**0.000066 J**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000213**	**0.000075 J**	**0.000219**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2020-03	mg/L	< 0.0001	**0.000059 J**	**0.000088 J**			< 0.0001		< 0.0001	< 0.0004	< 0.0001	**0.000122**	**0.00018 J**	**0.000168**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2020-04	mg/L				**0.000275**	**0.000267**		< 0.0001									
Cadmium	2020-08	mg/L	**0.000074 J**	< 0.0001	< 0.0001	**0.000354**	**0.000215**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000138**	**0.000117**	**0.000149**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2021-03	mg/L							< 0.0001	< 0.0001	< 0.0001	< 0.0001						
Cadmium	2021-08	mg/L	< 0.0001	**0.00008 J**	**0.000236**	**0.000262**	**0.000116**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000283**	**0.00014**	**0.000075 J**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2022-03	mg/L							< 0.0001	< 0.0004	< 0.0001	< 0.0001						
Cadmium	2022-08	mg/L	**0.000112 J**	< 0.0001	< 0.0001	**0.000265**	**0.000067 J**		< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000162**	**0.000133**	**0.000204**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2023-01	mg/L															< 0.0001	
Cadmium	2023-03	mg/L							< 0.0001	< 0.0001	**0.000134**	< 0.0001					< 0.0001	
Cadmium	2023-08	mg/L	**0.000191 J**	**0.000111 J**	< 0.0002	**0.000148 J**	**0.000219**		< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.000141 J**	< 0.0002	**0.000228**	< 0.0002	< 0.0002	< 0.0002
Carbon Disulfide	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.1**	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Carbon Disulfide	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Carbon Disulfide	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 1.00	< 1.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00
Carbon Disulfide	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**5.23**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1 J
Carbon Disulfide	2013-05	ug/L			< 1.00			< 1.00 J										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Butylbenzylphthalate	2023-01	ug/L															
Butylbenzylphthalate	2023-03	ug/L					< 10			< 10							
Cadmium	2008-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005								
Cadmium	2009-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005								
Cadmium	2009-07	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005								
Cadmium	2009-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500									
Cadmium	2010-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2010-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2011-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2011-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2012-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2012-09	mg/L	< 0.000500	< 0.000500	< 0.000500	**0.000721**	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2013-03	mg/L	< 0.0005	< 0.0005	< 0.000500		< 0.000500	< 0.0005	< 0.0005								
Cadmium	2013-05	mg/L															
Cadmium	2013-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	~~**0.000288 J**~~	< 0.000500	**0.000427 J**	**0.00281**	**0.000410 J**	**0.000272 J**		
Cadmium	2013-11	mg/L								~~**0.000122 J**~~	< 0.000500	< 0.000500	**0.00152**	**0.000458 J**	< 0.000500		
Cadmium	2014-03	mg/L	< 0.000500	< 0.000500	< 0.000500	**0.00192**	< 0.000500	**0.000167 J**	< 0.000500	~~< 0.000500~~	**0.0000793 J**	**0.000115 J**	**0.000843**	**0.000150 J**	**0.000138 J**		
Cadmium	2014-06	mg/L								~~< 0.000500~~	< 0.000500	< 0.000500	**0.00132**	< 0.000500	< 0.000500		
Cadmium	2014-09	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000226 J**	**0.000128 J**	**0.000152 J**	< 0.0005	~~< 0.0005~~	< 0.0005	< 0.0005	**0.000978**	< 0.0005	< 0.0005		
Cadmium	2015-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.0005	**0.000173 J**	< 0.0005	< 0.000500	< 0.000500	< 0.000500	**0.000399 J**	< 0.000500	< 0.000500		
Cadmium	2015-09	mg/L		< 0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005								
Cadmium	2015-10	mg/L	< 0.0005		< 0.0005					< 0.0005	< 0.0005	< 0.0005	**0.000719**	< 0.0005	< 0.0005		
Cadmium	2016-03	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.00004 J**	**0.000111 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000585**	< 0.0005	**0.000042 J**		
Cadmium	2016-06	mg/L															
Cadmium	2016-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000056 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000746**	< 0.0005	**0.000068 J**		
Cadmium	2017-03	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000056 J**	< 0.0005	< 0.0005	**0.000051 J**	< 0.0005	< 0.0005	< 0.0005	**0.000472 J**	< 0.0005	< 0.0005		
Cadmium	2017-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000051 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000665**	< 0.0005	**0.000113 J**		
Cadmium	2017-11	mg/L														< 0.0005	**0.000095 J**
Cadmium	2018-03	mg/L	< 0.0005	**0.000049 J**	< 0.0005	**0.000165 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00034 J**	< 0.0005	**0.000059 J**	**0.000061 J**	< 0.0005
Cadmium	2018-06	mg/L														< 0.0005	< 0.0005
Cadmium	2018-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000078 J**	~~**0.000076 J**~~	< 0.0005	< 0.0005	< 0.0005		< 0.0005	**0.000582**	< 0.0005			
Cadmium	2018-09	mg/L													**0.000108 J**	**0.000306 J**	< 0.0005
Cadmium	2018-11	mg/L														< 0.0005	< 0.0005
Cadmium	2019-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	**0.00051**	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2019-08	mg/L	< 0.0001	< 0.0001	< 0.0001	**0.000149**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000681**	< 0.0001	**0.000092 J**	**0.000111**	**0.000054 J**
Cadmium	2020-03	mg/L	< 0.0001	< 0.0001		**0.000139**	**0.000048 J**	< 0.0001	< 0.0001	< 0.0001	**0.000045 J**	< 0.0001	**0.000584**		**0.000097 J**	**0.00014**	**0.00007 J**
Cadmium	2020-04	mg/L			< 0.0001									< 0.0001			
Cadmium	2020-08	mg/L	< 0.0001	< 0.0001	< 0.0001	**0.000066 J**	< 0.0001	< 0.0001	< 0.0001	< 0.0001			**0.000524**	< 0.0001	**0.000083 J**		**0.000059 J**
Cadmium	2021-03	mg/L		< 0.0001			< 0.0001			< 0.0001							
Cadmium	2021-08	mg/L	< 0.0001	< 0.0001	**0.000067 J**	< 0.0001	**0.000072 J**	< 0.0001	< 0.0001	< 0.0001			**0.000441**	< 0.0001	**0.000203**		< 0.0001
Cadmium	2022-03	mg/L		< 0.0004			**0.000075 J**			< 0.0001							
Cadmium	2022-08	mg/L	< 0.0001	**0.000121**	< 0.0001	**0.00014**	< 0.0001	< 0.0001	< 0.0001	< 0.0001			**0.0004**	< 0.0001	**0.000205**		< 0.0001
Cadmium	2023-01	mg/L															
Cadmium	2023-03	mg/L		< 0.0001			< 0.0001			~~0.000111~~							
Cadmium	2023-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002			**0.000168 J**	< 0.0002	**0.000178 J**		< 0.0002
Carbon Disulfide	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Carbon Disulfide	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Carbon Disulfide	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Carbon Disulfide	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Carbon Disulfide	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00	< 1.00								
Carbon Disulfide	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2012-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2013-03	ug/L	**1.12**	< 1 J	< 25.0		< 1.00	< 1	< 1								
Carbon Disulfide	2013-05	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Carbon Disulfide	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2013-11	ug/L																
Carbon Disulfide	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2014-06	ug/L																
Carbon Disulfide	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.15 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Carbon Disulfide	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Carbon Disulfide	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Carbon Disulfide	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2016-06	ug/L			< 1	< 1												
Carbon Disulfide	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	**0.244 J**	**0.256 J**	**0.293 J**	**0.222 J**	**0.225 J**	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2017-11	ug/L																
Carbon Disulfide	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.152 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2018-06	ug/L																
Carbon Disulfide	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Carbon Disulfide	2018-09	ug/L					< 1						< 1	< 1				
Carbon Disulfide	2018-11	ug/L																
Carbon Disulfide	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	**0.487 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.505 J**
Carbon Disulfide	2020-04	ug/L				< 1	< 1		< 1									
Carbon Disulfide	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2021-03	ug/L							< 1	< 1	< 1	< 1						
Carbon Disulfide	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2022-03	ug/L							< 1	< 1	< 1	< 1						
Carbon Disulfide	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2023-01	ug/L															< 1	
Carbon Disulfide	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Carbon Disulfide	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2009-07	ug/L	< 2	< 2.00		< 2		< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	
Carbon Tetrachloride	2009-09	ug/L	< 2	< 2.00		< 2.00		< 2.00	< 2.00	< 10.0	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	
Carbon Tetrachloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 4.00	< 4.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 4.00	< 5.00	< 5.00	< 5.00	< 5.00	< 4.00
Carbon Tetrachloride	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2012-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2012-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2013-03	ug/L	< 2.00	< 2		< 2.00	< 2.00		< 2	< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2
Carbon Tetrachloride	2013-05	ug/L			< 2.00			< 2.00										
Carbon Tetrachloride	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2013-11	ug/L																
Carbon Tetrachloride	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2014-06	ug/L																
Carbon Tetrachloride	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2015-03	ug/L	< 2	< 2	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	< 2.00
Carbon Tetrachloride	2015-09	ug/L	< 2	< 2		< 2	< 2	< 2			< 2	< 2	< 2	< 2		< 2	< 2	
Carbon Tetrachloride	2015-10	ug/L			< 2				< 2	< 2					< 2			< 2
Carbon Tetrachloride	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2016-06	ug/L			< 2	< 2												
Carbon Tetrachloride	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2017-11	ug/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Carbon Disulfide	2013-09	ug/L	**0.181 J**	< 1.00	< 10.0	**0.153 J**	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2014-03	ug/L	< 1.00	**0.270 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Carbon Disulfide	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2016-06	ug/L															
Carbon Disulfide	2016-08	ug/L	< 1	< 1	**0.289 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2017-03	ug/L	< 1	< 1	< 1	< 1	**0.152 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2017-08	ug/L	< 1	< 1	**0.351 J**	**0.216 J**	**4.5**	**0.245 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2017-11	ug/L					< 1									**0.166 J**	**0.151 J**
Carbon Disulfide	2018-03	ug/L	< 1	< 1	< 1	< 1	**0.175 J**	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2018-06	ug/L														< 1	< 1
Carbon Disulfide	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Carbon Disulfide	2018-09	ug/L													< 1	< 1	< 1
Carbon Disulfide	2018-11	ug/L														< 1	< 1
Carbon Disulfide	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2020-03	ug/L	**0.529 J**	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Carbon Disulfide	2020-04	ug/L			< 1									< 1			
Carbon Disulfide	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Carbon Disulfide	2021-03	ug/L		< 1			< 1			< 1							
Carbon Disulfide	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Carbon Disulfide	2022-03	ug/L		< 1			< 1			< 1							
Carbon Disulfide	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Carbon Disulfide	2023-01	ug/L															
Carbon Disulfide	2023-03	ug/L		< 1			< 1			< 1							
Carbon Disulfide	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Carbon Tetrachloride	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Carbon Tetrachloride	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Carbon Tetrachloride	2009-07	ug/L	< 2.00	< 2	< 2	< 2	< 2.00										
Carbon Tetrachloride	2009-09	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00										
Carbon Tetrachloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 4.00	< 4.00								
Carbon Tetrachloride	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2012-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2012-09	ug/L	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2013-03	ug/L	< 2	< 2	< 50.0		< 2.00	< 2	< 2								
Carbon Tetrachloride	2013-05	ug/L															
Carbon Tetrachloride	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2013-11	ug/L									< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2014-06	ug/L									< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2015-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2	< 2	< 2		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2015-09	ug/L		< 2		< 2	< 2	< 2	< 2								
Carbon Tetrachloride	2015-10	ug/L	< 2		< 2					< 2	< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2016-06	ug/L															
Carbon Tetrachloride	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2017-11	ug/L														< 2	< 2

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Carbon Tetrachloride	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2018-06	ug/L																
Carbon Tetrachloride	2018-08	ug/L	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
Carbon Tetrachloride	2018-09	ug/L					< 2						< 2	< 2				
Carbon Tetrachloride	2018-11	ug/L																
Carbon Tetrachloride	2019-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-03	ug/L	< 2	< 2	< 2			< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-04	ug/L				< 2	< 2		< 2									
Carbon Tetrachloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2021-03	ug/L							< 2	< 2	< 2	< 2						
Carbon Tetrachloride	2021-08	ug/L	< 2	< 2	< 2	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2022-03	ug/L							< 2	< 2	< 2	< 2						
Carbon Tetrachloride	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2023-01	ug/L															< 2	
Carbon Tetrachloride	2023-03	ug/L							< 2	< 2	< 2	< 2					< 2	
Carbon Tetrachloride	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	2008-08	ug/L	**4.37**	**6.06**	< 1	< 1	< 1	< 1	**9.42**	**5.83**	**1.52**	< 1	< 1	**5.26**	**1.87**	**37**	**4.87**	< 1
Chlorobenzene	2009-03	ug/L	**6.78**	**3.45**	< 1	< 1	< 1	< 1	**2.82**	**4.87**	**1.34**	< 1	< 1	**2.43**	**1.3**	**32.3**	**3.98**	< 1
Chlorobenzene	2009-07	ug/L	**9.11**	**4.41**		< 1		< 1	**6.43**	**5.68**	**1.13**	< 1	< 1.00	**1.77**	< 1	**26.4**	**4.06**	
Chlorobenzene	2009-09	ug/L	**9.17**	**3.58**		< 1.00		< 1.00	**7.63**	**6.15**	< 1.00	< 1	< 1	**1.78**	< 1	**25.6**	**5.49**	
Chlorobenzene	2010-03	ug/L	**1.18**	**3.02**	< 1.00	< 1.00	< 1.00	< 1.00	**6.09**	**5.99**	**1.28**	< 1.00	< 1.00	< 1.00	< 1.00	**36.2**	**2.77**	< 1.00
Chlorobenzene	2010-09	ug/L	**12.1**	**2.66**	< 1.00	< 1.00	< 1.00	< 1.00	**9.25**	**6.91**	**1.38**	< 1.00	< 1.00	**2.80**	< 1.00	**34.2**	**3.50**	< 1.00
Chlorobenzene	2011-03	ug/L	**5.55**	**2.84**	< 1.00	< 1.00	< 10.0	< 1.00	**2.66**	**5.87**	**1.59**	< 1.00	< 1.00	**1.99**	< 1.00	**29.9**	**2.70**	< 1.00
Chlorobenzene	2011-09	ug/L	**8.25**	**2.74**	< 1.00	< 1.00	< 1.00	< 1.00	**3.99**	**7.05**	**1.39**	< 1.00	< 1.00	**2.72**	< 1.00	**30.4**	**2.18**	< 1.00
Chlorobenzene	2012-03	ug/L	**5.00**	**2.81**	< 1.00	< 1.00	< 1.00	< 1.00	**1.94**	**6.44**	**1.33**	< 1.00	< 1.00	**1.82**	< 1.00	**31.2**	**1.89**	< 1.00
Chlorobenzene	2012-09	ug/L	**5.76**	**2.24**	< 1.00	< 1.00	< 1.00	< 1.00	**2.87**	**6.01**	**1.07**	< 1.00	< 1.00	**3.42**	< 1.00	**37.6**	**2.49**	< 1.00
Chlorobenzene	2013-03	ug/L	**3.79**	**1.96**		< 1.00	< 1.00		**2.38**	**5.85**	**2.4**	< 1	< 1	**1.04**	< 1.00	**35.3**	**1.78**	< 1
Chlorobenzene	2013-05	ug/L			< 1.00			< 1.00										
Chlorobenzene	2013-09	ug/L	**11.0**	**2.28**	< 1.00	< 1.00	< 1.00	**0.289 J**	**6.00**	**5.36**	**1.68**	< 1.00	< 1.00	**3.08**	< 1.00	**25.4**	**2.67**	< 1.00
Chlorobenzene	2013-11	ug/L																
Chlorobenzene	2014-03	ug/L	**8.13**	< 1.00	< 1.00	< 1.00	< 1.00	**2.88**	**2.11**	**3.85**	**0.904 J**	< 1.00	< 1.00	**3.73**	**2.31**	**36.9**	< 1.00	< 1.00
Chlorobenzene	2014-06	ug/L																
Chlorobenzene	2014-09	ug/L	**12.5**	**1.92**	< 1	< 1	< 1	**0.236 J**	**6.38**	**5.11**	**1.76**	< 1	< 1	**2.53**	< 1	**26.8**	**1.86**	< 1
Chlorobenzene	2015-03	ug/L	**7.95**	**1.62**	< 1.00	< 1.00	< 1.00	< 1.00	**2.10**	**4.90**	**0.798 J**	< 1	< 1.00	**1.41**	< 1	**28.7**	**0.929 J**	< 1.00
Chlorobenzene	2015-09	ug/L	**5.44**	**1.54**		< 1	< 1	< 1			**2.18**	< 1	< 1	**1.86**		**22.6**	**1.08**	
Chlorobenzene	2015-10	ug/L			< 1				**4.02**	< 1					< 1			< 1
Chlorobenzene	2016-03	ug/L	**9.04**	**1.94**	< 1	< 1	< 1	< 1	**9.55**	**4.64**	**3.1**	< 1	< 1	< 1	< 1	**18.7**	< 1	< 1
Chlorobenzene	2016-06	ug/L			< 1	< 1												
Chlorobenzene	2016-08	ug/L	**10.8**	< 1	< 1	< 1	< 1	< 1	**8.01**	**4.88**	**4.01**	< 1	**0.592 J**	< 1	< 1	**27.4**	< 1	< 1
Chlorobenzene	2017-03	ug/L	**2.12**	**2.32**	< 1	< 1	< 1	< 1	**7.4**	**4.17**	< 1	< 1	< 1	**0.499 J**	< 1	**59.9**	**0.978 J**	< 1
Chlorobenzene	2017-08	ug/L	**5.77**	**1.3**	< 1	< 1	< 1	< 1	**3.54**	**4.16**	**2.59**	< 1	< 1	**1.12**	< 1	**53.1**	**0.757 J**	< 1
Chlorobenzene	2017-11	ug/L																
Chlorobenzene	2018-03	ug/L	**5.31**	**1.64**	< 1	< 1	< 1	< 1	**2.19**	**4.53**	**3.7**	< 1	< 1	**0.286 J**	< 1	**59.8**	**0.617 J**	< 1
Chlorobenzene	2018-06	ug/L																
Chlorobenzene	2018-08	ug/L	**4.11**	**1.57**	< 1	< 1		< 1	**3.45**	**4.56**	**2.58**	< 1			< 1	**26.3**	< 1	< 1
Chlorobenzene	2018-09	ug/L					< 1						**1.81**	< 1				
Chlorobenzene	2018-11	ug/L																
Chlorobenzene	2019-03	ug/L	**1.54**	**1.81**	< 1	< 1	< 1	< 1	**5.21**	**3.97**	< 1	< 1	< 1	< 1	< 1	**52.7**	**0.97 J**	< 1
Chlorobenzene	2019-08	ug/L	**11.1**	**0.468 J**	< 1	< 1	< 1	< 1	**9.14**	**3.7**	**0.956 J**	< 1	< 1	**1.78**	< 1	**58**	**1.62**	< 1
Chlorobenzene	2020-03	ug/L	**1.39**	**2.58**	< 1			< 1		**5.46**	**1.83**	< 1	< 1	**1.19**	< 1	**73.8**	**0.906 J**	< 1
Chlorobenzene	2020-04	ug/L				< 1	< 1		**6.38**									
Chlorobenzene	2020-08	ug/L	**7.47**	**3.12**	< 1	< 1	< 1	< 1	**7.17**	**4.46**	**2.18**	< 1	< 1	**1.46**	< 1	**61.3**	< 1	< 1
Chlorobenzene	2021-03	ug/L							**3.95**	**3.58**	**1.87**	< 1						
Chlorobenzene	2021-08	ug/L	< 1	**1.7**	< 1	< 1	< 10	< 1	**2.37**	**3.93**	**1.61**	< 1	< 1	**1.91**	< 1	**43.6**	**0.514 J**	< 1
Chlorobenzene	2022-03	ug/L							**1.86**	**2.85**	**1.85**	< 1						
Chlorobenzene	2022-08	ug/L	**5.04**	**1.69**	< 1	< 1	< 1		**2.45**	**4**	**1.86**	< 1	< 1	**1.98**	< 1	**53.9**	**0.438 J**	< 1

Table 14

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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Carbon Tetrachloride	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2018-06	ug/L														< 2	< 2
Carbon Tetrachloride	2018-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2			
Carbon Tetrachloride	2018-09	ug/L													< 2	< 2	< 2
Carbon Tetrachloride	2018-11	ug/L														< 2	< 2
Carbon Tetrachloride	2019-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-03	ug/L	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2
Carbon Tetrachloride	2020-04	ug/L			< 2									< 2			
Carbon Tetrachloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
Carbon Tetrachloride	2021-03	ug/L		< 2			< 2			< 2							
Carbon Tetrachloride	2021-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
Carbon Tetrachloride	2022-03	ug/L		< 2			< 2			< 2							
Carbon Tetrachloride	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
Carbon Tetrachloride	2023-01	ug/L															
Carbon Tetrachloride	2023-03	ug/L		< 2			< 2			< 2							
Carbon Tetrachloride	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2		< 2
Chlorobenzene	2008-08	ug/L	< 1	**11.3**	**5.44**	< 1	< 1	< 1	< 1								
Chlorobenzene	2009-03	ug/L	< 1	**11.8**	**3.24**	**1.11**	< 1	< 1	< 1								
Chlorobenzene	2009-07	ug/L	< 1.00	**10.7**	**4.26**	**6.59**	< 1.00										
Chlorobenzene	2009-09	ug/L	< 1.00	**9.55**	**5.75**	< 1.00	< 1.00										
Chlorobenzene	2010-03	ug/L	< 1.00	**14.9**	**7.67**	**1.52**	< 1.00	< 1.00	< 1.00								
Chlorobenzene	2010-09	ug/L	**1.15**	**11.5**	**4.29**	< 1.00	< 1.00	< 1.00	< 1.00								
Chlorobenzene	2011-03	ug/L	< 1.00	**13.1**	**3.17**	< 1.00	< 1.00	< 1.00	< 1.00								
Chlorobenzene	2011-09	ug/L	**1.13**	**11.8**	**3.11**	< 1.00	< 1.00	< 1.00	< 1.00								
Chlorobenzene	2012-03	ug/L	< 1.00	**15.1**	**4.34**	< 1.00	< 1.00	< 1.00	< 1.00								
Chlorobenzene	2012-09	ug/L	< 1.00	**15.4**	**6.93**	< 1.00	< 1.00	**1.29**	< 1.00								
Chlorobenzene	2013-03	ug/L	< 1	**11.5**	< 25.0		< 1.00	**0.535 J**	< 1								
Chlorobenzene	2013-05	ug/L															
Chlorobenzene	2013-09	ug/L	**1.47**	**14.5**	**5.02**	**0.541 J**	< 1.00	**1.43**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2014-03	ug/L	**0.804 J**	**13.6**	**7.58**	< 1.00	< 1.00	**1.19**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2014-09	ug/L	**1.5**	**14.2**	**5.13**	**0.35 J**	< 1	**0.468 J**	< 1		< 1	< 1	< 1	< 1	< 1		
Chlorobenzene	2015-03	ug/L	**0.760 J**	**7.98**	**5.10**	< 1.00	< 1	**0.309 J**	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2015-09	ug/L		**9.43**		< 1	< 1	< 1	< 1								
Chlorobenzene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Chlorobenzene	2016-03	ug/L	**0.501 J**	**10.4**	**4.29**	**0.621 J**	< 1	**0.595 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chlorobenzene	2016-06	ug/L															
Chlorobenzene	2016-08	ug/L	< 1	**11.3**	**3.55**	< 1	< 1	**0.451 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chlorobenzene	2017-03	ug/L	**0.493 J**	**10.1**	**3.5**	**0.728 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chlorobenzene	2017-08	ug/L	**1.07**	**8.4**	**2.72**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.209 J**		
Chlorobenzene	2017-11	ug/L														< 1	< 1
Chlorobenzene	2018-03	ug/L	**0.309 J**	**9.14**	**2.45**	**0.236 J**	< 1	**0.852 J**	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	2018-06	ug/L														< 1	< 1
Chlorobenzene	2018-08	ug/L	< 1	**9.05**	< 1	< 1	< 1	**5.75**	< 1	< 1		< 1	< 1	< 1			
Chlorobenzene	2018-09	ug/L													< 1	< 1	< 1
Chlorobenzene	2018-11	ug/L														< 1	< 1
Chlorobenzene	2019-03	ug/L	**0.565 J**	**4.34**	**3.64**	< 1	< 1	**3.35**	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	2019-08	ug/L	**2.79**	**8.18**	**3.53**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	2020-03	ug/L	**2.26**	**7.68**		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Chlorobenzene	2020-04	ug/L			**2.31**									< 1			
Chlorobenzene	2020-08	ug/L	**3.06**	**8.27**	**3.33**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Chlorobenzene	2021-03	ug/L		**6.12**			< 1			< 1							
Chlorobenzene	2021-08	ug/L	**1.58 J+**	**7.96**	**2.06**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	**1.42**		< 1
Chlorobenzene	2022-03	ug/L		**1.96**			< 1			< 1							
Chlorobenzene	2022-08	ug/L	**0.91 J**	**6.73**	**2.74**	< 1	< 1	**0.911 J**	< 1	< 1			< 1	< 1	< 1		< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Chlorobenzene	2023-01	ug/L															< 1	
Chlorobenzene	2023-03	ug/L							**4.12**	**4.31**	**1.75**	< 1					< 1	
Chlorobenzene	2023-08	ug/L	**4.09**	**1.57**	< 1	< 1	< 1		**2.23**	**3.49**	**2.02**	< 1	< 1	**2.14**	< 1	**68**	**0.555 J**	< 1
Chlorobenzilate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Chlorobenzilate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chlorobenzilate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Chlorobenzilate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Chlorobenzilate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Chlorobenzilate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Chlorobenzilate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Chlorobenzilate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Chlorobenzilate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Chlorobenzilate	2016-03	ug/L			< 11.1	< 11.2												
Chlorobenzilate	2016-06	ug/L			< 11.4	< 11.4												
Chlorobenzilate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Chlorobenzilate	2023-01	ug/L															< 10.9	
Chlorobenzilate	2023-03	ug/L															< 10.4	
Chlorodibromomethane	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
Chlorodibromomethane	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
Chlorodibromomethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00
Chlorodibromomethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2013-03	ug/L	< 5.00	< 5		< 5.00	< 5.00		< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5
Chlorodibromomethane	2013-05	ug/L			< 5.00			< 5.00										
Chlorodibromomethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2013-11	ug/L																
Chlorodibromomethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2014-06	ug/L																
Chlorodibromomethane	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2015-03	ug/L	< 5	< 5	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	< 5.00
Chlorodibromomethane	2015-09	ug/L	< 5	< 5		< 5	< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
Chlorodibromomethane	2015-10	ug/L			< 5				< 5	< 5					< 5			< 5
Chlorodibromomethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2016-06	ug/L			< 5	< 5												
Chlorodibromomethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2017-11	ug/L																
Chlorodibromomethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2018-06	ug/L																
Chlorodibromomethane	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Chlorodibromomethane	2018-09	ug/L					< 5						< 5	< 5				
Chlorodibromomethane	2018-11	ug/L																
Chlorodibromomethane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-04	ug/L				< 5	< 5		< 5									
Chlorodibromomethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2021-03	ug/L							< 5	< 5	< 5	< 5						
Chlorodibromomethane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2022-03	ug/L							< 5	< 5	< 5	< 5						
Chlorodibromomethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

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Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Chlorobenzene	2023-01	ug/L															
Chlorobenzene	2023-03	ug/L		**8.93**			< 1			< 1							
Chlorobenzene	2023-08	ug/L	< 1	**8.06**	**2.41**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Chlorobenzilate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Chlorobenzilate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Chlorobenzilate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Chlorobenzilate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Chlorobenzilate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Chlorobenzilate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Chlorobenzilate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Chlorobenzilate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Chlorobenzilate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Chlorobenzilate	2016-03	ug/L					< 10.9			< 11.2							
Chlorobenzilate	2016-06	ug/L															
Chlorobenzilate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Chlorobenzilate	2023-01	ug/L															
Chlorobenzilate	2023-03	ug/L					< 10			< 10							
Chlorodibromomethane	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Chlorodibromomethane	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Chlorodibromomethane	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
Chlorodibromomethane	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
Chlorodibromomethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00								
Chlorodibromomethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2013-03	ug/L	< 5	< 5	< 125		< 5.00	< 5	< 5								
Chlorodibromomethane	2013-05	ug/L															
Chlorodibromomethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2013-11	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2014-06	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2015-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
Chlorodibromomethane	2015-10	ug/L	< 5		< 5					< 5	< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2016-06	ug/L															
Chlorodibromomethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2017-11	ug/L														< 5	< 5
Chlorodibromomethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2018-06	ug/L														< 5	< 5
Chlorodibromomethane	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
Chlorodibromomethane	2018-09	ug/L													< 5	< 5	< 5
Chlorodibromomethane	2018-11	ug/L														< 5	< 5
Chlorodibromomethane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
Chlorodibromomethane	2020-04	ug/L			< 5									< 5			
Chlorodibromomethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Chlorodibromomethane	2021-03	ug/L		< 5			< 5			< 5							
Chlorodibromomethane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Chlorodibromomethane	2022-03	ug/L		< 5			< 5			< 5							
Chlorodibromomethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Chlorodibromomethane	2023-01	ug/L															< 5	
Chlorodibromomethane	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
Chlorodibromomethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**8.5**	< 4	**4.21**	**5.82**	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	**4.84**	< 4	**4.82**	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2009-07	ug/L	< 4	< 4.00		< 4		< 4	**4.45**	**5.34**	**8.89**	**5.52**	< 4.00	< 4.00	< 4	< 4	< 4	
Chloroethane	2009-09	ug/L	< 4	< 4.00		< 4.00		< 4.00	**4.27**	< 20.0	**10.4**	< 4	< 4	< 4	< 4	< 4	< 4	
Chloroethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**5.56**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**4.57**	**4.46**	**4.89**	**4.59**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 40.0	< 4.00	< 4.00	**5.80**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**4.04**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**6.72**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2013-03	ug/L	< 4.00	< 4		< 4.00	< 4.00		**1.36 J**	**2.71 J**	**2.15 J**	**1.76 J**	< 4	< 4	< 4.00	**2.06 J**	< 4	**0.623 J**
Chloroethane	2013-05	ug/L			< 4.00			**0.448 J**										
Chloroethane	2013-09	ug/L	< 4.00	**0.442 J**	< 4.00	< 4.00	< 4.00	< 4.00	**2.25 J**	< 4.00	**3.51 J**	**3.10 J**	< 4.00	< 4.00	< 4.00	**1.85 J**	< 4.00	< 4.00
Chloroethane	2013-11	ug/L																
Chloroethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**4.19**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2014-06	ug/L																
Chloroethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.39 J**	**3.79 J**	**2.82 J**	**1.52 J**	< 4	< 4	< 4	**1.07 J**	< 4	< 4
Chloroethane	2015-03	ug/L	< 4	< 4	< 4.00	< 4.00	< 4.00	< 4.00	**1.40 J**	**2.60 J**	**3.32 J**	< 4	< 4.00	< 4.00	< 4	**0.891 J**	< 4	< 4.00
Chloroethane	2015-09	ug/L	< 4	< 4		< 4	< 4	**0.334 J**			**3.74 J**	**1.29 J**	< 4	< 4		**1.33 J**	< 4	
Chloroethane	2015-10	ug/L			< 4				**1.36 J**	**2.35 J**					< 4			< 4
Chloroethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.4 J**	**2.98 J**	**1 J**	**1.18 J**	< 4	< 4	< 4	**1.09 J**	< 4	< 4
Chloroethane	2016-06	ug/L			< 4	< 4												
Chloroethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.16 J**	**3.75 J**	< 4	< 4	< 4	< 4	< 4	**1.63 J**	< 4	< 4
Chloroethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**1.99 J**	**2.95 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.51 J**	**2.47 J**	**0.997 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2017-11	ug/L																
Chloroethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	**1.33 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2018-06	ug/L																
Chloroethane	2018-08	ug/L	< 4	< 4	< 4	< 4		< 4	**2.72 J**	**4.13**	**2.02 J**	< 4			< 4	**0.949 J**	< 4	< 4
Chloroethane	2018-09	ug/L					< 4						< 4	< 4				
Chloroethane	2018-11	ug/L																
Chloroethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.09 J**	**2.21 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	**2.23 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2020-03	ug/L	< 4	< 4	< 4			< 4		**3.69 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2020-04	ug/L				< 4	< 4		**1.68 J**									
Chloroethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	**2.91 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2021-03	ug/L							**1.29 J**	**3.03 J**	< 4	< 4						
Chloroethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 40	< 4	**1.88 J**	**11.1**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2022-03	ug/L							< 4	**1.97 J**	< 4	< 4						
Chloroethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4		**1.33 J**	**2.24 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2023-01	ug/L															< 4	
Chloroethane	2023-03	ug/L							< 4	**2.33 J**	< 4	< 4					< 4	
Chloroethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4		< 4	**3.19 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroform	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Chloroform	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Chloroform	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2012-09	ug/L	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Chlorodibromomethane	2023-01	ug/L															
Chlorodibromomethane	2023-03	ug/L		< 5			< 5			< 5							
Chlorodibromomethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Chloroethane	2008-08	ug/L	**10**	**5.3**	**4.12**	< 4	< 4	< 4	< 4								
Chloroethane	2009-03	ug/L	**10.5**	< 4	< 4	< 4	< 4	< 4	< 4								
Chloroethane	2009-07	ug/L	**10.4**	**5.57**	**4.41**	**5.45**	< 4.00										
Chloroethane	2009-09	ug/L	**8.01**	< 20.0	**4.04**	**6.22**	< 4.00										
Chloroethane	2010-03	ug/L	**10.4**	**6.45**	**4.31**	**4.82**	< 4.00	< 4.00	< 4.00								
Chloroethane	2010-09	ug/L	**12.6**	< 4.00	< 4.00	**5.75**	< 4.00	< 4.00	< 4.00								
Chloroethane	2011-03	ug/L	**11.2**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Chloroethane	2011-09	ug/L	**11.5**	**4.53**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Chloroethane	2012-03	ug/L	**8.46**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Chloroethane	2012-09	ug/L	**14.3**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Chloroethane	2013-03	ug/L	**6.11**	**1.72 J**	< 100		< 4.00	< 4	< 4								
Chloroethane	2013-05	ug/L															
Chloroethane	2013-09	ug/L	**9.16**	**3.33 J**	**5.23**	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2013-11	ug/L									< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2014-03	ug/L	**9.46**	**2.23 J**	**2.98 J**	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2014-06	ug/L									< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2014-09	ug/L	**13.9**	**2.88 J**	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4		
Chloroethane	2015-03	ug/L	**11.1**	**2.31 J**	**3.23 J**	< 4.00	< 4	< 4	< 4		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2015-09	ug/L		**2.17 J**		< 4	< 4	< 4	< 4								
Chloroethane	2015-10	ug/L	**9.56**		< 4					< 4	< 4	< 4	< 4	< 4	< 4		
Chloroethane	2016-03	ug/L	**11.8**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Chloroethane	2016-06	ug/L															
Chloroethane	2016-08	ug/L	**11.2**	**1.22 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Chloroethane	2017-03	ug/L	**10.3**	**1.36 J**	**4.49**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Chloroethane	2017-08	ug/L	**11.6**	**3.02 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Chloroethane	2017-11	ug/L														< 4	< 4
Chloroethane	2018-03	ug/L	**9.03**	< 4	**2.56 J**	< 4	< 4	< 4	< 4	< 40	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2018-06	ug/L														< 4	< 4
Chloroethane	2018-08	ug/L	**14.1**	**1.67 J**	**2.79 J**	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4			
Chloroethane	2018-09	ug/L													< 4	< 4	< 4
Chloroethane	2018-11	ug/L														< 4	< 4
Chloroethane	2019-03	ug/L	**7.08**	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2019-08	ug/L	**18.8**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2020-03	ug/L	**9.46**	< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4
Chloroethane	2020-04	ug/L			**2.26 J**									< 4			
Chloroethane	2020-08	ug/L	**16**	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Chloroethane	2021-03	ug/L		< 4			< 4			< 4							
Chloroethane	2021-08	ug/L	**8.91 J+**	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Chloroethane	2022-03	ug/L		< 4			< 4			< 4							
Chloroethane	2022-08	ug/L	**12.5**	< 4	**1.48 J**	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Chloroethane	2023-01	ug/L															
Chloroethane	2023-03	ug/L		< 4			< 4			< 4							
Chloroethane	2023-08	ug/L	**8.67**	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Chloroform	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Chloroform	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Chloroform	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Chloroform	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Chloroform	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroform	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroform	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroform	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroform	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroform	2012-09	ug/L	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 2.00	< 2.00								
Chloroform	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Chloroform	2013-05	ug/L			< 1.00			< 1.00										
Chloroform	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2013-11	ug/L																
Chloroform	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2014-06	ug/L																
Chloroform	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	**0.344 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Chloroform	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Chloroform	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Chloroform	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2016-06	ug/L			< 1	< 1												
Chloroform	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2017-11	ug/L																
Chloroform	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2018-06	ug/L																
Chloroform	2018-08	ug/L	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloroform	2018-09	ug/L					< 3						< 3	< 3				
Chloroform	2018-11	ug/L																
Chloroform	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2020-03	ug/L	< 3	< 3	< 3			< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2020-04	ug/L				< 3	< 3		< 3									
Chloroform	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2021-03	ug/L							< 3	< 3	< 3	< 3						
Chloroform	2021-08	ug/L	< 3	< 3	< 3	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2022-03	ug/L							< 3	< 3	< 3	< 3						
Chloroform	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2023-01	ug/L															< 3	
Chloroform	2023-03	ug/L							< 3	< 3	< 3	< 3					< 3	
Chloroform	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2009-07	ug/L	< 3	< 3.00		< 3		< 3	< 3	< 3	< 3	< 3	< 3.00	< 3.00	< 3	< 3	< 3	
Chloromethane	2009-09	ug/L	< 3	< 3.00		< 3.00		< 3.00	< 3.00	< 15.0	< 3.00	< 3	< 3	< 3	< 3	< 3	< 3	
Chloromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 30.0	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2011-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2012-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2012-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2013-03	ug/L	< 3.00	< 3		< 3.00	< 3.00		< 3	< 3	< 3	< 3	< 3	< 3	< 3.00	< 3.00	< 3	< 3
Chloromethane	2013-05	ug/L			< 3.00			< 3.00										
Chloromethane	2013-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2013-11	ug/L																
Chloromethane	2014-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2014-06	ug/L																
Chloromethane	2014-09	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2015-03	ug/L	< 3	< 3	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3	< 3	< 3.00	< 3.00	< 3	< 3	< 3	< 3.00
Chloromethane	2015-09	ug/L	< 3	< 3		< 3	< 3	< 3			< 3	< 3	< 3	< 3		< 3	< 3	
Chloromethane	2015-10	ug/L			< 3				< 3	< 3					< 3			< 3
Chloromethane	2016-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2016-06	ug/L			< 3	< 3												
Chloromethane	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2017-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2017-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Chloroform	2013-05	ug/L															
Chloroform	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		**0.300 J**	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2013-11	ug/L									**0.454 J**	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2014-06	ug/L									**0.464 J**	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Chloroform	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Chloroform	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Chloroform	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chloroform	2016-06	ug/L															
Chloroform	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chloroform	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chloroform	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Chloroform	2017-11	ug/L														< 1	< 1
Chloroform	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2018-06	ug/L														< 3	< 3
Chloroform	2018-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3			
Chloroform	2018-09	ug/L													< 3	< 3	< 3
Chloroform	2018-11	ug/L														< 3	< 3
Chloroform	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2020-03	ug/L	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3
Chloroform	2020-04	ug/L			< 3									< 3			
Chloroform	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloroform	2021-03	ug/L		< 3			< 3			< 3							
Chloroform	2021-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloroform	2022-03	ug/L		< 3			< 3			< 3							
Chloroform	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloroform	2023-01	ug/L															
Chloroform	2023-03	ug/L		< 3			< 3			< 3							
Chloroform	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloromethane	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3								
Chloromethane	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3								
Chloromethane	2009-07	ug/L	< 3.00	< 3	< 3	< 3	< 3.00										
Chloromethane	2009-09	ug/L	< 3.00	< 15.0	< 3.00	< 3.00	< 3.00										
Chloromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2011-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2012-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2012-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2013-03	ug/L	< 3	< 3	< 75.0		< 3.00	< 3	< 3								
Chloromethane	2013-05	ug/L															
Chloromethane	2013-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2013-11	ug/L									< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2014-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2014-06	ug/L									< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2014-09	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3		
Chloromethane	2015-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3	< 3	< 3		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2015-09	ug/L		< 3		< 3	< 3	< 3	< 3								
Chloromethane	2015-10	ug/L	< 3		< 3					< 3	< 3 J	< 3	< 3	< 3	< 3		
Chloromethane	2016-03	ug/L	< 3	< 3	< 3	< 3	**0.311 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		
Chloromethane	2016-06	ug/L															
Chloromethane	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		
Chloromethane	2017-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		
Chloromethane	2017-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Chloromethane	2017-11	ug/L																
Chloromethane	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2018-06	ug/L																
Chloromethane	2018-08	ug/L	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloromethane	2018-09	ug/L					< 3						< 3	< 3				
Chloromethane	2018-11	ug/L																
Chloromethane	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2020-03	ug/L	< 3	< 3	< 3			< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2020-04	ug/L				< 3	< 3		< 3									
Chloromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2021-03	ug/L							< 3	< 3	< 3	< 3						
Chloromethane	2021-08	ug/L	< 3	< 3	< 3	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2022-03	ug/L							< 3	< 3	< 3	< 3						
Chloromethane	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2023-01	ug/L															< 3	
Chloromethane	2023-03	ug/L							< 3	< 3	< 3	< 3					< 3	
Chloromethane	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroprene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroprene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroprene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Chloroprene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Chloroprene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroprene	2010-09	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	
Chloroprene	2011-03	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Chloroprene	2012-09	ug/L														< 4.00		
Chloroprene	2015-09	ug/L	< 1	< 1			< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Chloroprene	2015-10	ug/L							< 1	< 1					< 1			< 1
Chloroprene	2016-03	ug/L			< 1	< 1												
Chloroprene	2016-06	ug/L			< 1	< 1												
Chloroprene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroprene	2023-01	ug/L															< 1	
Chloroprene	2023-03	ug/L															< 1	
Chromium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	2009-09	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2013-03	mg/L	< 0.0200	< 0.02		< 0.0200	< 0.0200		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.02	< 0.02
Chromium	2013-05	mg/L			< 0.0200			< 0.0200										
Chromium	2013-09	mg/L	**0.00233 J**	**0.00151 J**	**0.00405 J**	< 0.0200	**0.00252 J**	**0.00425 J**	**0.00236 J**	**0.00236 J**	**0.00728 J**	**0.00429 J**	**0.00345 J**	**0.00176 J**	< 0.0200	**0.00217 J**	**0.00167 J**	**0.00369 J**
Chromium	2013-11	mg/L																
Chromium	2014-03	mg/L	**0.00265 J**	< 0.0200	< 0.0200	**0.00264 J**	**0.00227 J**	**0.00304 J**	**0.00365 J**	**0.00294 J**	**0.00368 J**	**0.00248 J**	**0.00301 J**	< 0.0200	**0.00242 J**	**0.00168 J**	**0.00153 J**	**0.00703 J**
Chromium	2014-06	mg/L																
Chromium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00124 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2015-03	mg/L	< 0.005	< 0.005	< 0.00500	< 0.00500	**0.00151 J**	< 0.00500	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.005	< 0.00500
Chromium	2015-09	mg/L	< 0.005	< 0.005		< 0.005	**0.00208 J**	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	
Chromium	2015-10	mg/L			< 0.005				< 0.005	< 0.005					< 0.005			< 0.005
Chromium	2016-03	mg/L	< 0.005	< 0.005	< 0.005	**0.000713 J**	**0.00127 J**	< 0.005	**0.000457 J**	**0.000499 J**	< 0.005	**0.000369 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.000556 J**	< 0.005
Chromium	2016-06	mg/L			< 0.005	< 0.005												
Chromium	2016-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00125 J**	**0.00191 J**	< 0.005	**0.00263 J**	**0.000515 J**	< 0.005	< 0.005	**0.000873 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00135 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Chloromethane	2017-11	ug/L														< 3	< 3
Chloromethane	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2018-06	ug/L														< 3	< 3
Chloromethane	2018-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3			
Chloromethane	2018-09	ug/L													< 3	< 3	< 3
Chloromethane	2018-11	ug/L														< 3	< 3
Chloromethane	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2020-03	ug/L	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3
Chloromethane	2020-04	ug/L			< 3									< 3			
Chloromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloromethane	2021-03	ug/L		< 3			< 3			< 3							
Chloromethane	2021-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloromethane	2022-03	ug/L		< 3			< 3			< 3							
Chloromethane	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloromethane	2023-01	ug/L															
Chloromethane	2023-03	ug/L		< 3			< 3			< 3							
Chloromethane	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Chloroprene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Chloroprene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Chloroprene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Chloroprene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Chloroprene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroprene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00										
Chloroprene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00									
Chloroprene	2012-09	ug/L				< 4.00											
Chloroprene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Chloroprene	2015-10	ug/L	< 1		< 1					< 1							
Chloroprene	2016-03	ug/L					< 1			< 1							
Chloroprene	2016-06	ug/L															
Chloroprene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1							
Chloroprene	2023-01	ug/L															
Chloroprene	2023-03	ug/L					< 1			< 1							
Chromium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Chromium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Chromium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Chromium	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200									
Chromium	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Chromium	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Chromium	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Chromium	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Chromium	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Chromium	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Chromium	2013-03	mg/L	< 0.02	< 0.02	< 0.0200		< 0.0200	< 0.02	< 0.02								
Chromium	2013-05	mg/L															
Chromium	2013-09	mg/L	**0.00415 J**	**0.00177 J**	**0.00219 J**	**0.00260 J**	**0.00393 J**	**0.00211 J**	**0.00323 J**	~~< 0.0200~~	< 0.0200	**0.00510 J**	< 0.0200	< 0.0200	**0.00634 J**		
Chromium	2013-11	mg/L								**~~0.00412 J~~**	**0.00268 J**	**0.00223 J**	< 0.0200	**0.00197 J**	**0.00157 J**		
Chromium	2014-03	mg/L	**0.00162 J**	**0.00408 J**	< 0.0200	**0.00891 J**	< 0.0200	< 0.0200	**0.00165 J**	**~~0.00422 J~~**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.00236 J**		
Chromium	2014-06	mg/L								~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Chromium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	~~< 0.005~~	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Chromium	2015-03	mg/L	< 0.00500	< 0.00500	**0.00136 J**	< 0.00500	< 0.005	**0.00165 J**	< 0.005	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500		
Chromium	2015-09	mg/L		< 0.005		< 0.005	< 0.005	< 0.005	< 0.005								
Chromium	2015-10	mg/L	< 0.005		**0.00149 J**					< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Chromium	2016-03	mg/L	< 0.005	**0.000951 J**	**0.00135 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.000904 J**	**0.00108 J**	**0.00101 J**	< 0.005	**0.00051 J**	< 0.005		
Chromium	2016-06	mg/L															
Chromium	2016-08	mg/L	< 0.005	**0.000923 J**	**0.0013 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00102 J**	**0.00093 J**	**0.00129 J**	< 0.005	**0.00108 J**	**0.000362 J**		
Chromium	2017-03	mg/L	< 0.005	**0.000974 J**	**0.00105 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.000751 J**	< 0.005	< 0.005	< 0.005		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Chromium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.000953 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2017-11	mg/L																
Chromium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	**0.000825 J**	**0.00195 J**	< 0.005	**0.000828 J**	**0.00263 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2018-06	mg/L																
Chromium	2018-08	mg/L	< 0.005	< 0.005	< 0.005	**0.000835 J**		< 0.005	**0.000808 J**	< 0.005	**0.00127 J**	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2018-09	mg/L					**0.00155 J**						**0.000824 J**	< 0.005				
Chromium	2018-11	mg/L																
Chromium	2019-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00103 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00155 J**	< 0.005	**0.191 J**	**0.00407 J**	**0.00176 J**	< 0.005	**0.00257 J**	**0.0547**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2020-03	mg/L	< 0.005	< 0.005	< 0.005			< 0.005		< 0.005	< 0.02	< 0.005	< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2020-04	mg/L				< 0.005	< 0.005		< 0.005									
Chromium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00145 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2021-03	mg/L							< 0.005	< 0.005	< 0.005	< 0.005						
Chromium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00875**	**0.00115 J**	< 0.005	< 0.005	< 0.005	**0.00112 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2022-03	mg/L							< 0.005	< 0.02	< 0.005	< 0.005						
Chromium	2022-08	mg/L	< 0.005 J	< 0.005	< 0.005	**0.00198 J**	**0.00224 J**		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0011 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2023-01	mg/L															< 0.005	
Chromium	2023-03	mg/L							< 0.005	< 0.005	< 0.005	< 0.005					< 0.005	
Chromium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.0026 J**		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chrysene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Chrysene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Chrysene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Chrysene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Chrysene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Chrysene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Chrysene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Chrysene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Chrysene	2016-03	ug/L			< 11.1	< 11.2												
Chrysene	2016-06	ug/L			< 11.4	< 11.4												
Chrysene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Chrysene	2023-01	ug/L															< 10.9	
Chrysene	2023-03	ug/L															< 10.4	
cis-1,2-Dichloroethene	2008-08	ug/L	< 1	**5.35**	< 1	< 1	< 1	**1.63**	**24.6**	**26.9**	**12.1**	< 1	< 1	**2.95**	< 1	**2.38**	< 1	< 1
cis-1,2-Dichloroethene	2009-03	ug/L	**1.35**	**5.97**	< 1	< 1	< 1	**2.5**	**14.3**	**9.34**	**14.7**	< 1	< 1	**1.45**	**1.06**	**2.56**	< 1	< 1
cis-1,2-Dichloroethene	2009-07	ug/L	**1.16**	**5.11**		< 1		**1.2**	**17.2**	**7.98**	**12.5**	< 1	< 1.00	**1.10**	< 1	**2.17**	< 1	
cis-1,2-Dichloroethene	2009-09	ug/L	< 1	**5.48**		< 1.00		**3.15**	**26.7**	**8.25**	**13.1**	< 1	< 1	**1.12**	< 1	**2.79**	< 1	
cis-1,2-Dichloroethene	2010-03	ug/L	< 1.00	**5.88**	< 1.00	< 1.00	< 1.00	< 1.00	**21.4**	**6.63**	**9.31**	< 1.00	< 1.00	< 1.00	< 1.00	**2.95**	< 1.00	< 1.00
cis-1,2-Dichloroethene	2010-09	ug/L	**1.11**	**4.57**	< 1.00	< 1.00	< 1.00	**2.19**	**16.6**	**3.07**	**10.7**	< 1.00	< 1.00	**1.95**	< 1.00	**2.96**	< 1.00	< 1.00
cis-1,2-Dichloroethene	2011-03	ug/L	**1.49**	**4.31**	< 1.00	< 1.00	< 10.0	< 1.00	**10.7**	**6.51**	**9.56**	< 1.00	< 1.00	**1.11**	< 1.00	**2.53**	< 1.00	< 1.00
cis-1,2-Dichloroethene	2011-09	ug/L	**1.32**	**4.56**	< 1.00	< 1.00	< 1.00	**2.57**	**12.0**	**1.04**	**6.35**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2012-03	ug/L	**1.92**	**4.58**	< 1.00	< 1.00	< 1.00	**2.39**	**8.06**	**1.16**	**6.56**	< 1.00	< 1.00	< 1.00	< 1.00	**1.71**	< 1.00	< 1.00
cis-1,2-Dichloroethene	2012-09	ug/L	**2.48**	**6.85**	< 1.00	< 1.00	< 1.00	**1.14**	**9.40**	**4.06**	**6.93**	< 1.00	< 1.00	**1.21**	< 1.00	**1.46**	< 1.00	< 1.00
cis-1,2-Dichloroethene	2013-03	ug/L	**2.18**	**5.62**		< 1.00	< 1.00		**7.92**	**1.05**	**4.97**	**0.927 J**	**0.51 J**	**0.493 J**	**0.664 J**	**0.789 J**	< 1	< 1
cis-1,2-Dichloroethene	2013-05	ug/L			< 1.00			**0.822 J**										
cis-1,2-Dichloroethene	2013-09	ug/L	**1.24**	**6.30**	**0.165 J**	< 1.00	< 1.00	**2.37**	**10.6**	**0.988 J**	**3.65**	**0.375 J**	**0.194 J**	**1.19**	**0.606 J**	**2.71**	< 1.00	< 1.00
cis-1,2-Dichloroethene	2013-11	ug/L																
cis-1,2-Dichloroethene	2014-03	ug/L	**1.87**	**0.789 J**	< 1.00	< 1.00	< 1.00	**3.62**	**7.29**	**1.61**	**3.90**	< 1.00	< 1.00	**1.08**	**5.87**	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2014-06	ug/L																
cis-1,2-Dichloroethene	2014-09	ug/L	**0.84 J**	**5.71**	< 1	< 1	< 1	**1.79**	**8.14**	**0.678 J**	**3.07**	**0.186 J**	< 1	< 1	< 1	**3.14**	< 1	< 1
cis-1,2-Dichloroethene	2015-03	ug/L	**1.08**	**5.34**	< 1.00	< 1.00	< 1.00	**0.636 J**	**6.92**	**1.94**	**3.68**	< 1	< 1.00	**0.829 J**	**0.411 J**	**2.69**	< 1	< 1.00
cis-1,2-Dichloroethene	2015-09	ug/L	**0.736 J**	**4.99**		< 1	< 1	**1.13**			**2.77**	< 1	< 1	**0.593 J**		**2.75**	< 1	
cis-1,2-Dichloroethene	2015-10	ug/L			< 1				**6.51**	**0.709 J**					**0.2 J**			< 1
cis-1,2-Dichloroethene	2016-03	ug/L	**1.1**	**4.62**	**0.163 J**	< 1	< 1	**0.593 J**	**5.96**	**0.359 J**	**2.63**	< 1	< 1	**0.256 J**	**0.153 J**	**2.68**	< 1	< 1
cis-1,2-Dichloroethene	2016-06	ug/L			< 1	< 1												
cis-1,2-Dichloroethene	2016-08	ug/L	**0.909 J**	**3.91**	**0.258 J**	< 1	< 1	**0.674 J**	**5.74**	**0.297 J**	**1.42**	< 1	**0.599 J**	**0.328 J**	< 1	**2.72**	< 1	< 1
cis-1,2-Dichloroethene	2017-03	ug/L	**0.759 J**	**3.03**	< 1	< 1	< 1	**0.656 J**	**5.35**	< 1	**0.29 J**	< 1	< 1	< 1	**0.212 J**	**1.49**	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Chromium	2017-08	mg/L	< 0.005	**0.000845 J**	**0.00128 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.000747 J**	**0.000829 J**	< 0.005	< 0.005	< 0.005		
Chromium	2017-11	mg/L														< 0.005	< 0.005
Chromium	2018-03	mg/L	< 0.005	**0.00113 J**	**0.00182 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00103 J**	**0.000967 J**	**0.000933 J**	< 0.005	< 0.005	< 0.005	**0.00166 J**	**0.00124 J**
Chromium	2018-06	mg/L														< 0.005	< 0.005
Chromium	2018-08	mg/L	< 0.005	**0.0012 J**	**0.00158 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005			
Chromium	2018-09	mg/L													< 0.005	< 0.005	< 0.005
Chromium	2018-11	mg/L														**0.0013 J**	< 0.005
Chromium	2019-03	mg/L	< 0.005	< 0.005	**0.00129 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2019-08	mg/L	**0.0351**	< 0.005	**0.0201**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00348 J**	**0.00311 J**	**0.00184 J**	**0.00254 J**	< 0.005	**0.00271 J**	< 0.005
Chromium	2020-03	mg/L	< 0.005	**0.00125 J**		< 0.005	< 0.005	< 0.005	< 0.005	**0.00125 J**	< 0.005	< 0.005	< 0.005		< 0.005	**0.00128 J**	< 0.005
Chromium	2020-04	mg/L			< 0.005									< 0.005			
Chromium	2020-08	mg/L	< 0.005	< 0.005	**0.00132 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	**0.00117 J**	< 0.005		< 0.005
Chromium	2021-03	mg/L		< 0.005			< 0.005			**0.00241 J**							
Chromium	2021-08	mg/L	< 0.005	**0.00111 J**	**0.00158 J**	< 0.005	**0.00442 J**	< 0.005	**0.00323 J**	< 0.005			< 0.005	**0.00112 J**	< 0.005		< 0.005
Chromium	2022-03	mg/L		< 0.02			< 0.005			< 0.005							
Chromium	2022-08	mg/L	< 0.005	< 0.005	**0.00193 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005		< 0.005
Chromium	2023-01	mg/L															
Chromium	2023-03	mg/L		< 0.005			< 0.005			< 0.005							
Chromium	2023-08	mg/L	< 0.005	**0.00119 J**	**0.00131 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005		< 0.005
Chrysene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Chrysene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Chrysene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Chrysene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Chrysene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Chrysene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Chrysene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Chrysene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Chrysene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Chrysene	2016-03	ug/L					< 10.9			< 11.2							
Chrysene	2016-06	ug/L															
Chrysene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Chrysene	2023-01	ug/L															
Chrysene	2023-03	ug/L					< 10			< 10							
cis-1,2-Dichloroethene	2008-08	ug/L	**4.61**	**1.83**	**32.7**	< 1	< 1	< 1	< 1								
cis-1,2-Dichloroethene	2009-03	ug/L	**5.7**	< 1	**59.2**	< 1	< 1	< 1	< 1								
cis-1,2-Dichloroethene	2009-07	ug/L	**5.27**	< 1	**42.7**	**1.18**	< 1.00										
cis-1,2-Dichloroethene	2009-09	ug/L	**7.16**	< 5.00	**35.6**	**1.14**	< 1.00										
cis-1,2-Dichloroethene	2010-03	ug/L	**7.17**	**1.12**	**28.2**	**1.96**	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2010-09	ug/L	**6.15**	< 1.00	**43.5**	**2.04**	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2011-03	ug/L	**5.72**	< 1.00	**15.1**	**1.07**	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2011-09	ug/L	**6.04**	< 1.00	**30.4**	**2.25**	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2012-03	ug/L	**6.33**	< 1.00	**22.4**	< 1.00	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2012-09	ug/L	**7.28**	< 1.00	**4.86**	< 1.00	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2013-03	ug/L	**6.15**	**0.137 J**	< 25.0		< 1.00	**0.289 J**	< 1								
cis-1,2-Dichloroethene	2013-05	ug/L															
cis-1,2-Dichloroethene	2013-09	ug/L	**4.04**	**0.270 J**	**13.0**	**0.359 J**	< 1.00	**0.405 J**	< 1.00		< 1.00	< 1.00	< 1.00	**0.310 J**	**1.08**		
cis-1,2-Dichloroethene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2014-03	ug/L	**5.58**	< 1.00	**5.26**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2014-09	ug/L	**3.82**	**0.387 J**	**4.17**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	**0.332 J**		
cis-1,2-Dichloroethene	2015-03	ug/L	**5.89**	**0.137 J**	**14.1**	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2015-09	ug/L		**0.526 J**		< 1	< 1	< 1	< 1								
cis-1,2-Dichloroethene	2015-10	ug/L	**5.72**		**15.4**					< 1	< 1	< 1	< 1	< 1	**0.397 J**		
cis-1,2-Dichloroethene	2016-03	ug/L	**7.17**	**0.253 J**	**5.24**	< 1	< 1	**0.133 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.719 J**		
cis-1,2-Dichloroethene	2016-06	ug/L															
cis-1,2-Dichloroethene	2016-08	ug/L	**5.91**	< 1	**8.48**	< 1	< 1	**0.298 J**	< 1	< 1	< 1	< 1	< 1	< 1	**1.12**		
cis-1,2-Dichloroethene	2017-03	ug/L	**6.52**	< 1	**3.35**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
cis-1,2-Dichloroethene	2017-08	ug/L	0.589 J	2.98	< 1	< 1	< 1	0.647 J	4.79	0.228 J	0.653 J	0.164 J	< 1	0.499 J	< 1	1.82	< 1	< 1
cis-1,2-Dichloroethene	2017-11	ug/L																
cis-1,2-Dichloroethene	2018-03	ug/L	0.911 J	2.85	< 1	< 1	< 1	0.643 J	5.23	1.55	0.821 J	< 1	< 1	0.301 J	< 1	1.79	< 1	< 1
cis-1,2-Dichloroethene	2018-06	ug/L																
cis-1,2-Dichloroethene	2018-08	ug/L	0.576 J	3.78	< 1	< 1		0.536 J	5.29	0.38 J	0.982 J	< 1			< 1	1.98	< 1	< 1
cis-1,2-Dichloroethene	2018-09	ug/L					< 1						0.699 J	0.53 J				
cis-1,2-Dichloroethene	2018-11	ug/L																
cis-1,2-Dichloroethene	2019-03	ug/L	< 1	3.07	< 1	< 1	< 1	0.597 J	4.23	< 1	< 1	< 1	< 1	< 1	< 1	0.458 J	< 1	< 1
cis-1,2-Dichloroethene	2019-08	ug/L	0.62 J	2.56	0.366 J	< 1	< 1	0.722 J	4.05	0.363 J	1.02	< 1	< 1	1	< 1	0.925 J	0.269 J	< 1
cis-1,2-Dichloroethene	2020-03	ug/L	0.249 J	3.17	< 1			0.593 J		< 1	0.687 J	< 1	< 1	0.338 J	< 1	0.665 J	< 1	< 1
cis-1,2-Dichloroethene	2020-04	ug/L				< 1	< 1		4.11									
cis-1,2-Dichloroethene	2020-08	ug/L	0.674 J	2.64	< 1	< 1	< 1	0.52 J	3.65	< 1	0.833 J	< 1	< 1	0.698 J	< 1	1.29	< 1	< 1
cis-1,2-Dichloroethene	2021-03	ug/L							3.92	< 1	0.514 J	< 1						
cis-1,2-Dichloroethene	2021-08	ug/L	0.833 J+	2.06	< 1	< 1	< 10	< 1	4.15	0.318 J	1.25	< 1	< 1	0.459 J	0.252 J+	0.357 J	< 1	< 1
cis-1,2-Dichloroethene	2022-03	ug/L							4.05	< 1	0.631 J	< 1						
cis-1,2-Dichloroethene	2022-08	ug/L	0.776 J	3.37	< 1	< 1	< 1		3.81	< 1	0.882 J	< 1	< 1	0.596 J	< 1	1.06	< 1	< 1
cis-1,2-Dichloroethene	2023-01	ug/L															< 1	
cis-1,2-Dichloroethene	2023-03	ug/L							3.67	< 1	0.31 J	< 1					< 1	
cis-1,2-Dichloroethene	2023-08	ug/L	0.628 J	2.87	< 1	< 1	< 1		3.55	< 1	0.721 J	< 1	< 1	0.478 J	< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
cis-1,3-Dichloropropene	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00
cis-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2013-03	ug/L	< 5.00	< 5		< 5.00	< 5.00		< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5
cis-1,3-Dichloropropene	2013-05	ug/L			< 5.00			< 5.00										
cis-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2013-11	ug/L																
cis-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2014-06	ug/L																
cis-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2015-03	ug/L	< 5	< 5	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	< 5.00
cis-1,3-Dichloropropene	2015-09	ug/L	< 5	< 5		< 5	< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
cis-1,3-Dichloropropene	2015-10	ug/L			< 5				< 5	< 5					< 5			< 5
cis-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2016-06	ug/L			< 5	< 5												
cis-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2017-11	ug/L																
cis-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-06	ug/L																
cis-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-09	ug/L					< 5						< 5	< 5				
cis-1,3-Dichloropropene	2018-11	ug/L																
cis-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-04	ug/L				< 5	< 5		< 5									
cis-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2021-03	ug/L							< 5	< 5	< 5	< 5						
cis-1,3-Dichloropropene	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

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2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
cis-1,2-Dichloroethene	2017-08	ug/L	**4.19**	**0.198 J**	**13.4**	< 1	**0.229 J**	**0.311 J**	< 1	< 1	< 1	< 1	< 1	**0.323 J**	**0.673 J**		
cis-1,2-Dichloroethene	2017-11	ug/L														< 1	< 1
cis-1,2-Dichloroethene	2018-03	ug/L	**7.77**	**0.231 J**	**6.55**	< 1	< 1	**0.224 J**	< 1	< 10	< 1	< 1	< 1	< 1	**0.298 J**	< 1	< 1
cis-1,2-Dichloroethene	2018-06	ug/L														< 1	< 1
cis-1,2-Dichloroethene	2018-08	ug/L	**5.83**	< 1	**12.1**	< 1	< 1	**0.472 J**	< 1	< 1		< 1	< 1	< 1			
cis-1,2-Dichloroethene	2018-09	ug/L													**0.521 J**	< 1	< 1
cis-1,2-Dichloroethene	2018-11	ug/L														< 1	< 1
cis-1,2-Dichloroethene	2019-03	ug/L	**8.4**	< 1	**1.56**	< 1	< 1	**0.458 J**	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	2019-08	ug/L	**3.41**	**0.213 J**	**8.76**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.236 J**	**0.794 J**	< 1	< 1
cis-1,2-Dichloroethene	2020-03	ug/L	**3.2**	< 1		< 1	< 1	**0.272 J**	< 1	< 1	< 1	< 1	< 1		**0.244 J**	< 1	< 1
cis-1,2-Dichloroethene	2020-04	ug/L			**1.41**									< 1			
cis-1,2-Dichloroethene	2020-08	ug/L	**3.21**	< 1	**7.53**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	**0.498 J**		< 1
cis-1,2-Dichloroethene	2021-03	ug/L		< 1			< 1			< 1							
cis-1,2-Dichloroethene	2021-08	ug/L	**4.45 J+**	< 1	**8.76**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	**0.217 J**		< 1
cis-1,2-Dichloroethene	2022-03	ug/L		< 1			< 1			< 1							
cis-1,2-Dichloroethene	2022-08	ug/L	**4.62**	< 1	**5.2**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
cis-1,2-Dichloroethene	2023-01	ug/L															
cis-1,2-Dichloroethene	2023-03	ug/L		< 1			< 1			< 1							
cis-1,2-Dichloroethene	2023-08	ug/L	**5.56**	< 1	**6.03**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
cis-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
cis-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
cis-1,3-Dichloropropene	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
cis-1,3-Dichloropropene	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
cis-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2013-03	ug/L	< 5	< 5	< 125		< 5.00	< 5	< 5								
cis-1,3-Dichloropropene	2013-05	ug/L															
cis-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2013-11	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2014-06	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2015-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
cis-1,3-Dichloropropene	2015-10	ug/L	< 5		< 5					< 5	< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2016-06	ug/L															
cis-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2017-11	ug/L														< 5	< 5
cis-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-06	ug/L														< 5	< 5
cis-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
cis-1,3-Dichloropropene	2018-09	ug/L													< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-11	ug/L														< 5	< 5
cis-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-04	ug/L			< 5									< 5			
cis-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
cis-1,3-Dichloropropene	2021-03	ug/L		< 5			< 5			< 5							
cis-1,3-Dichloropropene	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
cis-1,3-Dichloropropene	2022-03	ug/L							< 5	< 5	< 5	< 5						
cis-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2023-01	ug/L															< 5	
cis-1,3-Dichloropropene	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
cis-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Cobalt	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	< 0.05
Cobalt	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	< 0.05
Cobalt	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	< 0.05
Cobalt	2009-09	mg/L		< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	~~0.0270~~	< 0.0200	~~0.0263~~	< 0.02	< 0.02	~~< 0.02~~	< 0.02	< 0.02	< 0.02
Cobalt	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	~~0.0359~~	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200
Cobalt	2010-09	mg/L	**0.00358 J**	**0.00288 J**	< 0.0200	**0.00798 J**	~~**0.00721 J**~~	< 0.0200	**0.00577 J**	~~**0.0323**~~	**0.00301 J**	~~**0.0200**~~	**0.00797 J**	**0.00248 J**	~~**0.00450 J**~~	< 0.0200	< 0.0200	< 0.0200
Cobalt	2011-03	mg/L	**0.00386 J**	**0.00374 J**	**0.00479 J**	**0.00186 J**	~~**0.00659 J**~~	**0.00415 J**	**0.00533 J**	~~**0.0230**~~	**0.00523 J**	~~**0.0146 J**~~	**0.00340 J**	< 0.0200	~~**0.00387 J**~~	< 0.0200	< 0.0200	< 0.0200
Cobalt	2011-09	mg/L	**0.00185 J**	**0.00260 J**	< 0.0200	**0.00999 J**	~~**0.0105 J**~~	**0.00159 J**	**0.00483 J**	~~**0.0244**~~	< 0.0200	~~**0.0174 J**~~	**0.00425 J**	**0.00345 J**	~~**0.00458 J**~~	< 0.0200	< 0.0200	< 0.0200
Cobalt	2012-03	mg/L	**0.00206 J**	**0.00252 J**	< 0.0200	**0.00471 J**	~~**0.00869 J**~~	**0.00340 J**	**0.00500 J**	~~**0.0282**~~	**0.00290 J**	~~**0.00922 J**~~	**0.00338 J**	**0.00234 J**	~~**0.00822 J**~~	< 0.0200	< 0.0200	< 0.0200
Cobalt	2012-09	mg/L	< 0.0200	**0.00291 J**	< 0.0200	**0.00988 J**	~~**0.00986 J**~~	< 0.0200	**0.00415 J**	~~**0.0173 J**~~	< 0.0200	~~**0.00882 J**~~	**0.00612 J**	**0.00337 J**	~~**0.0119 J**~~	< 0.0200	< 0.0200	< 0.0200
Cobalt	2013-03	mg/L	**0.00298 J**	**0.00495 J**		**0.00211 J**	~~**0.00679 J**~~		**0.00644 J**	~~**0.0222**~~	**0.00996 J**	~~**0.0149 J**~~	**0.00537 J**	**0.00301 J**	~~**0.0168 J**~~	< 0.0200	**0.00157 J**	**0.00335 J**
Cobalt	2013-05	mg/L			< 0.00700			**0.00276 J**										
Cobalt	2013-09	mg/L	**0.00204 J**	< 0.00700	< 0.00700	**0.00307 J**	~~**0.0120**~~	< 0.00700	**0.00423 J**	~~**0.00236 J**~~	< 0.00700	~~< 0.00700~~	< 0.00700	< 0.00700	~~**0.00991**~~	< 0.00700	< 0.00700	< 0.00700
Cobalt	2013-11	mg/L																
Cobalt	2014-03	mg/L	< 0.00700	**0.00378 J**	< 0.00700	**0.00595 J**	~~**0.0110**~~	< 0.00700	**0.00553 J**	~~**0.0201**~~	< 0.00700	~~**0.0103**~~	**0.00477 J**	**0.00243 J**	~~**0.0118**~~	< 0.00700	< 0.00700	< 0.00700
Cobalt	2014-06	mg/L																
Cobalt	2014-09	mg/L	**0.0018**	**0.00299**	**0.000065 J**	**0.00647**	~~**0.00664**~~	**0.0007**	**0.0052**	~~**0.0179**~~	**0.00423**	~~**0.0116**~~	**0.003**	**0.00231**	~~**0.00971**~~	**0.000337 J**	**0.000236 J**	**0.000079 J**
Cobalt	2015-03	mg/L	**0.00166**	**0.00377**	**0.000216 J**	**0.00277**	~~**0.00632**~~	**0.00178**	**0.00525**	~~**0.00524**~~	**0.00167**	~~**0.00793**~~	**0.00161**	**0.00222**	~~**0.0093**~~	**0.000358 J**	< 0.0005	< 0.000500
Cobalt	2015-09	mg/L	**0.00303**	**0.00291**		**0.00148**	~~**0.00231**~~	**0.00115**			**0.00317**	~~**0.00683**~~	**0.0024**	**0.00139**		**0.000315 J**	< 0.0005	
Cobalt	2015-10	mg/L			**0.000239 J**				**0.00441**	~~**0.00291**~~					~~**0.00758**~~			< 0.0005
Cobalt	2016-03	mg/L	**0.00134**	**0.00292**	**0.000068 J**	**0.000986**	~~**0.00581**~~	**0.0016**	**0.00464**	~~**0.00256**~~	**0.00592**	~~**0.00949**~~	**0.000318 J**	**0.000678**	~~**0.00484**~~	**0.000287 J**	**0.000048 J**	< 0.0005
Cobalt	2016-06	mg/L			**0.000042 J**	**0.001**												
Cobalt	2016-08	mg/L	**0.00141**	**0.00259**	**0.000045 J**	**0.00115**	~~**0.00539**~~	**0.00141**	**0.0049**	**0.00291**	**0.00549**	~~**0.00818**~~	**0.00421**	**0.000957**	**0.00253**	**0.000379 J**	**0.000086 J**	< 0.0005
Cobalt	2017-03	mg/L	**0.00246**	**0.00261**	**0.000064 J**	**0.00145**	~~**0.00483**~~	**0.00232**	**0.00363**	**0.00201**	**0.00195**	~~**0.008**~~	**0.00085**	**0.00134**	**0.00482**	**0.000131 J**	**0.000048 J**	< 0.0005
Cobalt	2017-08	mg/L	**0.00301**	**0.00224**	< 0.0005	**0.00359**	**0.00511**	**0.00114**	**0.00362**	**0.00168**	**0.00349**	**0.00619**	**0.00434**	**0.00312**	**0.00257**	**0.000214 J**	< 0.0005	< 0.0005
Cobalt	2017-11	mg/L																
Cobalt	2018-03	mg/L	**0.0019**	**0.00255**	**0.000047 J**	**0.00102**	**0.0044**	**0.000864**	**0.00429**	**0.00178**	**0.00331**	**0.00744**	**0.00181**	**0.00169**	**0.00494**	**0.00041 J**	**0.000197 J**	< 0.0005
Cobalt	2018-06	mg/L																
Cobalt	2018-08	mg/L	**0.00213**	**0.00213**	**0.000489 J**	**0.00224**		**0.000978**	**0.00399**	**0.00178**	**0.00259**	**0.00496**			**0.00285**	**0.000429 J**	< 0.0005	< 0.0005
Cobalt	2018-09	mg/L					**0.0042**						**0.00222**	**0.00266**				
Cobalt	2018-11	mg/L																
Cobalt	2019-03	mg/L	**0.000521**	**0.00212**	**0.000113 J**	**0.00306**	**0.00457**	**0.00136**	**0.00496**	**0.00499**	**0.0154**	**0.0084**	**0.000116 J**	**0.00075**	**0.000348 J**	**0.00086**	< 0.0005	< 0.0005
Cobalt	2019-08	mg/L	**0.000882**	**0.00184**	< 0.0005	**0.00175**	**0.00181**	**0.000759**	**0.00222**	**0.00251**	**0.00111**	**0.00303**	**0.0012**	**0.0035**	**0.00188**	**0.00013 J**	< 0.0005	< 0.0005
Cobalt	2020-03	mg/L	**0.0018**	**0.00177**	< 0.0005			**0.00185**		**0.00218**	**0.000836 J**	**0.00872**	**0.000107 J**	**0.00262**	**0.00251**	**0.000134 J**	< 0.0005	< 0.0005
Cobalt	2020-04	mg/L				**0.00226**	**0.00824**		**0.00343**									
Cobalt	2020-08	mg/L	**0.00156**	**0.0019**	< 0.0005	**0.00616**	**0.00638**	**0.00116**	**0.00316**	**0.00196**	**0.00225**	**0.00399**	**0.00288**	**0.00455**	**0.00369**	**0.000216 J**	< 0.0005	< 0.0005
Cobalt	2021-03	mg/L							**0.00434**	**0.0025**	**0.00117**	**0.00937**						
Cobalt	2021-08	mg/L	**0.00365**	**0.00177**	**0.000274 J**	**0.00373**	**0.00537**	**0.000517**	**0.00406**	**0.00211**	**0.00144**	**0.00669**	**0.00118**	**0.00509**	**0.00688**	**0.000844**	**0.000098 J**	**0.000103 J**
Cobalt	2022-03	mg/L							**0.00386**	**0.00412**	**0.0015**	**0.0131**						
Cobalt	2022-08	mg/L	**0.00191 J**	**0.00154**	< 0.0005	**0.00265**	**0.00228**		**0.00382**	**0.00131**	**0.00313**	**0.00294**	**0.00152**	**0.00394**	**0.00263**	**0.000323 J**	< 0.0005	< 0.0005
Cobalt	2023-01	mg/L															< 0.0005	
Cobalt	2023-03	mg/L							**0.00434**	**0.00204**	**0.000748**	**0.00554**					**0.000334 J**	
Cobalt	2023-08	mg/L	**0.00202**	**0.00177**	< 0.0005	**0.00282**	**0.00292**		**0.00393**	**0.00155**	**0.00182**	**0.00649**	**0.00176**	**0.00424**	**0.00234**	**0.000395 J**	< 0.0005	< 0.0005
Copper	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Copper	2009-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	2009-07	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	2009-09	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0206**	**0.0208**	**0.0254**	< 0.0200	**0.0291**	**0.0271**	**0.0225**	**0.0259**	< 0.0200	**0.0206**	< 0.0200	< 0.0200
Copper	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
cis-1,3-Dichloropropene	2022-03	ug/L		< 5			< 5			< 5							
cis-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
cis-1,3-Dichloropropene	2023-01	ug/L															
cis-1,3-Dichloropropene	2023-03	ug/L		< 5			< 5			< 5							
cis-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Cobalt	2008-08	mg/L	< 0.05	< 0.05	< 0.05	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05								
Cobalt	2009-03	mg/L	< 0.05	< 0.05	< 0.05	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05								
Cobalt	2009-07	mg/L	< 0.05	< 0.05	< 0.05	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05								
Cobalt	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	~~< 0.0200~~	< 0.0200									
Cobalt	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	~~< 0.0200~~	< 0.0200	< 0.0200								
Cobalt	2010-09	mg/L	< 0.0200	**0.00178 J**	< 0.0200	**0.0100 J**	~~< 0.0200~~	< 0.0200	< 0.0200								
Cobalt	2011-03	mg/L	< 0.0200	**0.00225 J**	**0.0128 J**	**0.0127 J**	~~< 0.0200~~	**0.00558 J**	< 0.0200								
Cobalt	2011-09	mg/L	< 0.0200	**0.00170 J**	**0.00294 J**	**0.0106 J**	~~< 0.0200~~	< 0.0200	< 0.0200								
Cobalt	2012-03	mg/L	< 0.0200	< 0.0200	**0.00401 J**	**0.00794 J**	~~< 0.0200~~	< 0.0200	< 0.0200								
Cobalt	2012-09	mg/L	< 0.0200	**0.00202 J**	**0.00441 J**	**0.0185 J**	~~< 0.0200~~	**0.00227 J**	< 0.0200								
Cobalt	2013-03	mg/L	**0.00292 J**	**0.00624 J**	**0.0121 J**		**0.00199 J**	**0.00281 J**	**0.00148 J**								
Cobalt	2013-05	mg/L															
Cobalt	2013-09	mg/L	< 0.00700	< 0.00700	< 0.00700	**0.0162**	~~< 0.00700~~	< 0.00700	< 0.00700	~~**0.00172 J**~~	< 0.00700	< 0.00700	**0.0278**	**0.0259**	< 0.00700		
Cobalt	2013-11	mg/L								~~< 0.00700 J~~	**0.00281 J**	**0.00144 J**	**0.0351**	**0.00259 J**	< 0.00700		
Cobalt	2014-03	mg/L	< 0.00700	**0.00248 J**	**0.00400 J**	**0.0176**	~~< 0.00700~~	< 0.00700	< 0.00700	~~**0.00163 J**~~	< 0.00700	< 0.00700	**0.0326**	**0.00314 J**	< 0.00700		
Cobalt	2014-06	mg/L								~~< 0.00700~~	< 0.00700	< 0.00700	**0.0253**	**0.00589 J**	< 0.00700		
Cobalt	2014-09	mg/L	**0.0012**	**0.00264**	**0.00269**	**0.00887**	**0.008**	**0.000562**	**0.000079 J**	~~**0.000433 J**~~	**0.000728**	**0.00137**	**0.025**	**0.0166**	**0.00075**		
Cobalt	2015-03	mg/L	**0.000835**	**0.00509**	**0.00312**	**0.00660**	**0.000333 J**	**0.000483 J**	**0.000065 J**	**0.000924**	**0.0000970 J**	**0.0000790 J**	**0.0216**	**0.00263**	**0.0000670 J**		
Cobalt	2015-09	mg/L		**0.00236**		**0.00896**	**0.00337**	**0.000162 J**	< 0.0005								
Cobalt	2015-10	mg/L	**0.00211**		**0.00311**					< 0.0005	**0.000064 J**	**0.000098 J**	**0.0245**	**0.0136**	**0.000095 J**		
Cobalt	2016-03	mg/L	**0.00192**	**0.00275**	**0.00302**	**0.0128**	**0.00687**	**0.000103 J**	< 0.0005	< 0.0005	**0.000242 J**	**0.000085 J**	**0.0162**	**0.00917**	**0.000107 J**		
Cobalt	2016-06	mg/L															
Cobalt	2016-08	mg/L	**0.0012**	**0.00252**	**0.00295**	**0.0128**	**0.00192**	**0.00024 J**	< 0.0005	**0.000081 J**	**0.000078 J**	**0.000097 J**	**0.0181**	**0.0224**	**0.000206 J**		
Cobalt	2017-03	mg/L	**0.00176**	**0.00284**	**0.00298**	**0.0136**	**0.00318**	**0.00011 J**	**0.000119 J**	< 0.0005	**0.00007 J**	**0.000281 J**	**0.0099**	**0.0127**	**0.000062 J**		
Cobalt	2017-08	mg/L	**0.000944**	**0.00207**	**0.00291**	**0.00823**	**0.00262**	**0.00009 J**	< 0.0005	< 0.0005	**0.000053 J**	**0.000086 J**	**0.0187**	**0.0208**	**0.000262 J**		
Cobalt	2017-11	mg/L														**0.000103 J**	**0.00143**
Cobalt	2018-03	mg/L	**0.00163**	**0.00477**	**0.0105**	**0.00771**	**0.00199**	**0.000112 J**	< 0.0005	**0.000046 J**	< 0.0005	**0.000063 J**	**0.0177**	**0.00358**	**0.000084 J**	**0.00019 J**	**0.000674**
Cobalt	2018-06	mg/L			**0.00591**											**0.00024 J**	**0.00053**
Cobalt	2018-08	mg/L	**0.00105**	**0.0021**	**0.00356**	**0.00919**	~~**0.00709**~~	**0.000085 J**	< 0.0005	< 0.0005		< 0.0005	**0.0213**	**0.00937**			
Cobalt	2018-09	mg/L													**0.000141 J**	**0.000119 J**	**0.000447 J**
Cobalt	2018-11	mg/L														**0.000096 J**	**0.000287 J**
Cobalt	2019-03	mg/L	**0.00219**	**0.00132**	**0.00292**	**0.00952**	**0.000184 J**	**0.000249 J**	< 0.0005	< 0.0005		< 0.0005	**0.0196**	**0.00222**	**0.000093 J**	**0.00025 J**	**0.000132 J**
Cobalt	2019-08	mg/L	**0.000451 J**	**0.00218**	**0.00278**	**0.0083**	**0.000492 J**	**0.000098 J**	< 0.0005	< 0.0005	**0.00011 J**	**0.000092 J**	**0.0158**	**0.0475**	< 0.0005	< 0.0005	**0.000279 J**
Cobalt	2020-03	mg/L	**0.00073**	**0.00241**		**0.0136**	**0.000272 J**	**0.000206 J**	< 0.0005	**0.000094 J**	**0.000299 J**	< 0.0005	**0.0175**		**0.000146 J**	**0.000726**	**0.000362 J**
Cobalt	2020-04	mg/L			**0.00795**									**0.0059**			
Cobalt	2020-08	mg/L	**0.000304 J**	**0.00265**	**0.00404**	**0.0064**	**0.000338 J**	< 0.0005	< 0.0005	< 0.0005			**0.0143**	**0.0292**	**0.000135 J**		**0.000371 J**
Cobalt	2021-03	mg/L		**0.00395**			**0.000191 J**			**0.000776**							
Cobalt	2021-08	mg/L	**0.00166**	**0.0024**	**0.00486**	**0.00654**	**0.000319 J**	**0.000182 J**	**0.000094 J**	**0.000139 J**			**0.00794**	**0.0271**	**0.00159**		**0.000384 J**
Cobalt	2022-03	mg/L		**0.0146**			**0.000648**			< 0.0005							
Cobalt	2022-08	mg/L	**0.000636**	**0.00262**	**0.00354**	**0.00467**	**0.000251 J**	< 0.0005	< 0.0005	< 0.0005			**0.00471**	**0.0234**	**0.00105**		**0.000522**
Cobalt	2023-01	mg/L															
Cobalt	2023-03	mg/L		**0.00354**			< 0.0005			~~**0.000419 J**~~							
Cobalt	2023-08	mg/L	**0.00074**	**0.00238**	**0.00377**	**0.00535**	< 0.0005	**0.000232 J**	< 0.0005	**0.000387 J**			**0.00445**	**0.00913**	**0.00063**		**0.000296 J**
Copper	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05								
Copper	2009-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02								
Copper	2009-07	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02								
Copper	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200									
Copper	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Copper	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Copper	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Copper	2011-09	mg/L	< 0.0200	**0.0377**	**0.0248**	**0.0364**	**0.0225**	< 0.0200	**0.0301**								
Copper	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Copper	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2013-03	mg/L	< 0.0200	**0.00492 J**		**0.0153 J**	< 0.0200		< 0.02	< 0.02	< 0.02	< 0.02	**0.00272 J**	< 0.02 J	< 0.0200	< 0.0200	< 0.02	< 0.02 J
Copper	2013-05	mg/L			< 0.0200			< 0.0200										
Copper	2013-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200 J	< 0.0200 J	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2013-11	mg/L																
Copper	2014-03	mg/L	< 0.0200	< 0.0200	< 0.0200 J	**0.00885 J**	**0.00168 J**	< 0.0200	< 0.0200	**0.00491 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.00590 J**	**0.0550**	< 0.0200	**0.00243 J**
Copper	2014-06	mg/L																
Copper	2014-09	mg/L	< 0.002	< 0.002	< 0.002	**0.0176**	**0.015**	< 0.002	< 0.002	**0.000836 J**	< 0.002	**0.000502 J**	< 0.002	**0.000899 J**	**0.000837 J**	**0.00644**	**0.00115 J**	**0.000852 J**
Copper	2015-03	mg/L	< 0.002	**0.00398**	< 0.00200 J	**0.0205**	**0.00348**	< 0.00200	< 0.00200 J	< 0.00200 J	< 0.002	< 0.002	**0.00134 J**	**0.00197 J**	< 0.002	**0.00495**	< 0.002	< 0.00200
Copper	2015-09	mg/L	< 0.002	**0.00104 J**		**0.0444**	**0.000961 J**	**0.000895 J**			< 0.002	< 0.002	< 0.002	**0.00103 J**		< 0.002	< 0.002	
Copper	2015-10	mg/L			< 0.002				< 0.002	< 0.002 J					**0.00144 J**			< 0.002
Copper	2016-01	mg/L				**0.0440**												
Copper	2016-03	mg/L	< 0.005	< 0.005	< 0.005	**0.0396**	**0.00275 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00144 J**	< 0.005 J	**0.0013 J**	**0.00192 J**	**0.0013 J**	< 0.005
Copper	2016-06	mg/L			< 0.005	**0.0341**												
Copper	2016-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0983**	**0.00154 J**	< 0.005	**0.00253 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00178 J**	< 0.005	< 0.005
Copper	2017-03	mg/L	< 0.005	< 0.005	< 0.005	**0.0292**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2017-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0234**	**0.00261 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2017-11	mg/L																
Copper	2018-03	mg/L	< 0.005	**0.00459 J**	< 0.005	**0.0452**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2018-06	mg/L																
Copper	2018-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0486**		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Copper	2018-09	mg/L					< 0.005						< 0.005	< 0.005				
Copper	2018-11	mg/L																
Copper	2019-03	mg/L	< 0.005	< 0.005	< 0.005	**0.0339**	**0.00344 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2019-08	mg/L	< 0.005	< 0.005	< 0.005	**0.101**	**0.0112**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-03	mg/L	< 0.005	< 0.005	< 0.005			< 0.005		< 0.005	< 0.02	< 0.005	< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-04	mg/L				**0.0268**	**0.00577**		< 0.005									
Copper	2020-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0424**	**0.00536**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00164 J**	< 0.005	< 0.005	< 0.005
Copper	2021-03	mg/L							< 0.005	< 0.005	< 0.005	< 0.005						
Copper	2021-08	mg/L	< 0.005	**0.00179 J**	< 0.005	**0.0291**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2022-03	mg/L							< 0.005	< 0.02	< 0.005	< 0.005						
Copper	2022-08	mg/L	< 0.005 J	< 0.005	< 0.005	**0.112**	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0037 J**	< 0.005	< 0.005
Copper	2023-01	mg/L															< 0.005	
Copper	2023-03	mg/L							< 0.005	< 0.005	< 0.005	< 0.005					**0.00213 J**	
Copper	2023-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0378**	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0021 J**	< 0.005	< 0.005	< 0.005
Cyanide	2008-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide	2009-03	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide	2010-09	mg/L	< 0.0100	< 0.0100	< 0.0100			< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100		< 0.0100	< 0.0100	< 0.0100	< 0.0100	
Cyanide	2015-09	mg/L	< 0.01	< 0.01			< 0.01	< 0.01			< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	
Cyanide	2015-10	mg/L							< 0.01	< 0.01					< 0.01			< 0.01
Cyanide	2016-03	mg/L			< 0.01	< 0.01												
Cyanide	2016-06	mg/L			< 0.01	**0.00416 J**												
Cyanide	2020-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide	2023-01	mg/L															< 0.01	
Cyanide	2023-03	mg/L															< 0.01	
delta-BHC	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
delta-BHC	2008-09	ug/L		< 0.016	**0.018**												< 0.16	
delta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
delta-BHC	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
delta-BHC	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
delta-BHC	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
delta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
delta-BHC	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
delta-BHC	2012-03	ug/L			< 0.0320													
delta-BHC	2012-09	ug/L			< 0.0320													
delta-BHC	2013-03	ug/L																
delta-BHC	2013-05	ug/L			< 0.0352													

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Copper	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Copper	2013-03	mg/L	< 0.02	**0.00274 J**	**0.0166 J**		< 0.0200	< 0.02 J	< 0.02 J								
Copper	2013-05	mg/L															
Copper	2013-09	mg/L	< 0.0200	< 0.0200 J	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	**0.00288 J**	**0.00876 J**	< 0.0200	**0.00337 J**		
Copper	2013-11	mg/L								~~< 0.0200 J~~	**0.00465 J**	**0.00342 J**	**0.0122 J**	**0.00385 J**	**0.00349 J**		
Copper	2014-03	mg/L	< 0.0200	**0.00376 J**	< 0.0200	**0.00248 J**	< 0.0200	< 0.0200	**0.00229 J**	~~**0.00264 J**~~	**0.00246 J**	< 0.0200	**0.00645 J**	**0.00315 J**	**0.00376 J**		
Copper	2014-06	mg/L								~~< 0.0200~~	< 0.0200	< 0.0200	**0.00958 J**	< 0.0200	< 0.0200		
Copper	2014-09	mg/L	< 0.002	**0.00191 J**	< 0.002	**0.00193 J**	**0.000867 J**	**0.000727 J**	< 0.002	~~< 0.002~~	**0.000903 J**	**0.000506 J**	**0.00612**	**0.000904 J**	**0.00111 J**		
Copper	2015-03	mg/L	< 0.00200	**0.00463**	< 0.00200 J	< 0.00200 J	< 0.002	**0.00387**	< 0.002	< 0.00200 J	< 0.00200 J	< 0.00200 J	**0.00736**	< 0.00200	< 0.00200 J		
Copper	2015-09	mg/L		**0.000512 J**		< 0.002	< 0.002	< 0.002	< 0.002								
Copper	2015-10	mg/L	< 0.002		< 0.002					< 0.002	< 0.002 J	< 0.002 J	**0.00597**	**0.000538 J**	**0.000489 J**		
Copper	2016-01	mg/L															
Copper	2016-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00956**	< 0.005	< 0.005		
Copper	2016-06	mg/L															
Copper	2016-08	mg/L	< 0.005	< 0.005	**0.00136 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00938**	< 0.005	< 0.005		
Copper	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00733**	< 0.005	< 0.005		
Copper	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0101**	< 0.005	< 0.005		
Copper	2017-11	mg/L														< 0.005	< 0.005
Copper	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00463 J**	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2018-06	mg/L														< 0.005	< 0.005
Copper	2018-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	**0.015**	< 0.005			
Copper	2018-09	mg/L													< 0.005	< 0.005	< 0.005
Copper	2018-11	mg/L														< 0.005	< 0.005
Copper	2019-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	**0.00502**	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00905**	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-03	mg/L	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00598**		< 0.005	**0.00475 J**	< 0.005
Copper	2020-04	mg/L			< 0.005									< 0.005			
Copper	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.0101**	< 0.005	< 0.005		< 0.005
Copper	2021-03	mg/L		**0.00199 J**			< 0.005			**0.00144 J**							
Copper	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.0107**	< 0.005	**0.00692**		< 0.005
Copper	2022-03	mg/L		< 0.02			< 0.005			< 0.005							
Copper	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.00826**	< 0.005	< 0.005		< 0.005
Copper	2023-01	mg/L															
Copper	2023-03	mg/L		**0.00222 J**			< 0.005			~~**0.00284 J**~~							
Copper	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.00876**	< 0.005	< 0.005		< 0.005
Cyanide	2008-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01								
Cyanide	2009-03	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01								
Cyanide	2010-09	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100										
Cyanide	2015-09	mg/L		< 0.01		< 0.01	< 0.01	< 0.01	< 0.01								
Cyanide	2015-10	mg/L	< 0.01		< 0.01					< 0.01							
Cyanide	2016-03	mg/L					< 0.01			< 0.01							
Cyanide	2016-06	mg/L															
Cyanide	2020-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01							
Cyanide	2023-01	mg/L															
Cyanide	2023-03	mg/L					< 0.01			< 0.01							
delta-BHC	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
delta-BHC	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
delta-BHC	2009-03	ug/L	< 0.032	< 0.07	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
delta-BHC	2009-07	ug/L					< 0.0320		< 0.0320								
delta-BHC	2009-09	ug/L					< 0.0320		< 0.0320								
delta-BHC	2010-03	ug/L					< 0.0320		< 0.0320								
delta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
delta-BHC	2011-03	ug/L					< 0.0320										
delta-BHC	2012-03	ug/L					< 0.0320		< 0.0320								
delta-BHC	2012-09	ug/L															
delta-BHC	2013-03	ug/L					< 0.0333										
delta-BHC	2013-05	ug/L															

Table 14

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
delta-BHC	2013-09	ug/L			< 0.0327													
delta-BHC	2014-03	ug/L																
delta-BHC	2015-09	ug/L	< 0.036	< 0.0356			**0.00412 J**	< 0.0386			**0.00438 J**	**0.00372 J**	< 0.0333	< 0.036		< 0.0356	< 0.0376	
delta-BHC	2015-10	ug/L							**0.00356 J**	**0.00383 J**					< 0.0386			< 0.0368
delta-BHC	2016-03	ug/L			**0.0103 J**	**0.00264 J**												
delta-BHC	2016-06	ug/L			< 0.0364	**0.00283 J**												
delta-BHC	2016-08	ug/L			< 0.0372													
delta-BHC	2017-03	ug/L			< 0.168													
delta-BHC	2017-08	ug/L			< 0.0337													
delta-BHC	2018-03	ug/L			**0.00694 J**													
delta-BHC	2018-08	ug/L			< 0.00373													
delta-BHC	2019-03	ug/L			< 0.0327													
delta-BHC	2019-08	ug/L			< 0.034													
delta-BHC	2020-03	ug/L			< 0.0368													
delta-BHC	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	**0.00273 J**	< 0.0376	**0.00312 J**	< 0.0376	**0.0085 J**	**0.00525 J**	**0.00308 J**	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
delta-BHC	2021-08	ug/L			< 0.039													
delta-BHC	2022-08	ug/L			< 0.0667													
delta-BHC	2023-01	ug/L															< 0.0727	
delta-BHC	2023-03	ug/L															< 0.0667	
delta-BHC	2023-08	ug/L			< 0.0744													
Diallate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Diallate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diallate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Diallate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Diallate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Diallate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Diallate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Diallate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Diallate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Diallate	2016-03	ug/L			< 11.1	< 11.2												
Diallate	2016-06	ug/L			< 11.4	< 11.4												
Diallate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Diallate	2023-01	ug/L															< 10.9	
Diallate	2023-03	ug/L															< 10.4	
Dibenzo(a,h)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Dibenzo(a,h)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Dibenzo(a,h)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Dibenzo(a,h)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Dibenzo(a,h)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Dibenzo(a,h)anthracene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Dibenzo(a,h)anthracene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Dibenzo(a,h)anthracene	2016-03	ug/L			< 11.1	< 11.2												
Dibenzo(a,h)anthracene	2016-06	ug/L			< 11.4	< 11.4												
Dibenzo(a,h)anthracene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Dibenzo(a,h)anthracene	2023-01	ug/L															< 10.9	
Dibenzo(a,h)anthracene	2023-03	ug/L															< 10.4	
Dibenzofuran	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Dibenzofuran	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Dibenzofuran	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Dibenzofuran	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Dibenzofuran	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Dibenzofuran	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Dibenzofuran	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Dibenzofuran	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8

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delta-BHC	2013-09	ug/L															
delta-BHC	2014-03	ug/L					**0.00415 J**										
delta-BHC	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
delta-BHC	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
delta-BHC	2016-03	ug/L					**0.0189 J**			< 0.0356							
delta-BHC	2016-06	ug/L															
delta-BHC	2016-08	ug/L					< 0.0356			< 0.0356							
delta-BHC	2017-03	ug/L					< 0.0337			< 0.0372							
delta-BHC	2017-08	ug/L					< 0.0356			< 0.0356							
delta-BHC	2018-03	ug/L					< 0.0444			< 0.0372							
delta-BHC	2018-08	ug/L					< 0.0451			< 0.0381							
delta-BHC	2019-03	ug/L					< 0.039			< 0.0395							
delta-BHC	2019-08	ug/L					< 0.0346			< 0.034							
delta-BHC	2020-03	ug/L					< 0.0427			< 0.0376							
delta-BHC	2020-08	ug/L	< 0.039	**0.0115 J**	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
delta-BHC	2021-08	ug/L					< 0.04			< 0.0368							
delta-BHC	2022-08	ug/L					< 0.0667			< 0.0604							
delta-BHC	2023-01	ug/L															
delta-BHC	2023-03	ug/L					< 0.0696			< 0.064							
delta-BHC	2023-08	ug/L					< 0.0604			< 0.0711							
Diallate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Diallate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Diallate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Diallate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Diallate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Diallate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Diallate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Diallate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Diallate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Diallate	2016-03	ug/L					< 10.9			< 11.2							
Diallate	2016-06	ug/L															
Diallate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Diallate	2023-01	ug/L															
Diallate	2023-03	ug/L					< 10			< 10							
Dibenzo(a,h)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Dibenzo(a,h)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Dibenzo(a,h)anthracene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Dibenzo(a,h)anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dibenzo(a,h)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dibenzo(a,h)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Dibenzo(a,h)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Dibenzo(a,h)anthracene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Dibenzo(a,h)anthracene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Dibenzo(a,h)anthracene	2016-03	ug/L					< 10.9			< 11.2							
Dibenzo(a,h)anthracene	2016-06	ug/L															
Dibenzo(a,h)anthracene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Dibenzo(a,h)anthracene	2023-01	ug/L															
Dibenzo(a,h)anthracene	2023-03	ug/L					< 10			< 10							
Dibenzofuran	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Dibenzofuran	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Dibenzofuran	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Dibenzofuran	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dibenzofuran	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dibenzofuran	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Dibenzofuran	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Dibenzofuran	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Dibenzofuran	2015-10	ug/L	< 11.8		< 10.3					< 11							

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Dibenzofuran	2016-03	ug/L			< 11.1	< 11.2												
Dibenzofuran	2016-06	ug/L			< 11.4	< 11.4												
Dibenzofuran	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Dibenzofuran	2023-01	ug/L															< 10.9	
Dibenzofuran	2023-03	ug/L															< 10.4	
Dibromomethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Dibromomethane	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Dibromomethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
Dibromomethane	2013-05	ug/L			< 1.00			< 1.00										
Dibromomethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2013-11	ug/L																
Dibromomethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2014-06	ug/L																
Dibromomethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Dibromomethane	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Dibromomethane	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Dibromomethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2016-06	ug/L			< 1	< 1												
Dibromomethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2017-11	ug/L																
Dibromomethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2018-06	ug/L																
Dibromomethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Dibromomethane	2018-09	ug/L					< 1						< 1	< 1				
Dibromomethane	2018-11	ug/L																
Dibromomethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2020-04	ug/L				< 1	< 1		< 1									
Dibromomethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2021-03	ug/L							< 1	< 1	< 1	< 1						
Dibromomethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2022-03	ug/L							< 1	< 1	< 1	< 1						
Dibromomethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2023-01	ug/L															< 1	
Dibromomethane	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Dibromomethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Dichlorodifluoromethane	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Dichlorodifluoromethane	2009-07	ug/L	< 3	< 3.00		< 3		< 3	< 3	< 3	< 3	< 3	< 3.00	< 3.00	< 3	< 3	< 3	
Dichlorodifluoromethane	2009-09	ug/L	< 3	< 3.00		< 3.00		< 3.00	< 3.00	< 15.0	< 3.00	< 3	< 3	< 3	< 3	< 3	< 3	
Dichlorodifluoromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Dichlorodifluoromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	
Dichlorodifluoromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	
Dichlorodifluoromethane	2012-09	ug/L														< 3.00		
Dichlorodifluoromethane	2015-09	ug/L	< 3	< 3			< 3	< 3			< 3	< 3	< 3	< 3		< 3	< 3	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Dibenzofuran	2016-03	ug/L					< 10.9			< 11.2							
Dibenzofuran	2016-06	ug/L															
Dibenzofuran	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Dibenzofuran	2023-01	ug/L															
Dibenzofuran	2023-03	ug/L					< 10			< 10							
Dibromomethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Dibromomethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Dibromomethane	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Dibromomethane	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Dibromomethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
Dibromomethane	2013-05	ug/L															
Dibromomethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Dibromomethane	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2016-06	ug/L															
Dibromomethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2017-11	ug/L														< 1	< 1
Dibromomethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2018-06	ug/L														< 1	< 1
Dibromomethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Dibromomethane	2018-09	ug/L													< 1	< 1	< 1
Dibromomethane	2018-11	ug/L														< 1	< 1
Dibromomethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Dibromomethane	2020-04	ug/L			< 1									< 1			
Dibromomethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Dibromomethane	2021-03	ug/L		< 1			< 1			< 1							
Dibromomethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Dibromomethane	2022-03	ug/L		< 1			< 1			< 1							
Dibromomethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Dibromomethane	2023-01	ug/L															
Dibromomethane	2023-03	ug/L		< 1			< 1			< 1							
Dibromomethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Dichlorodifluoromethane	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3								
Dichlorodifluoromethane	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3								
Dichlorodifluoromethane	2009-07	ug/L	< 3.00	< 3	< 3	< 3	< 3.00										
Dichlorodifluoromethane	2009-09	ug/L	< 3.00	< 15.0	< 3.00	< 3.00	< 3.00										
Dichlorodifluoromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Dichlorodifluoromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00										
Dichlorodifluoromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00									
Dichlorodifluoromethane	2012-09	ug/L				< 3.00											
Dichlorodifluoromethane	2015-09	ug/L		< 3		< 3	< 3	< 3	< 3								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Dichlorodifluoromethane	2015-10	ug/L							< 3	< 3					< 3			< 3
Dichlorodifluoromethane	2016-03	ug/L			< 3	< 3												
Dichlorodifluoromethane	2016-06	ug/L			< 3	< 3												
Dichlorodifluoromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Dichlorodifluoromethane	2023-01	ug/L															< 3	
Dichlorodifluoromethane	2023-03	ug/L															< 3	
Dieldrin	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	**0.15**	< 0.058	< 0.053		< 0.053
Dieldrin	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Dieldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Dieldrin	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Dieldrin	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Dieldrin	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Dieldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Dieldrin	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Dieldrin	2011-09	ug/L												< 0.0320				
Dieldrin	2012-03	ug/L												< 0.0320				
Dieldrin	2012-09	ug/L												< 0.0320				
Dieldrin	2013-03	ug/L												< 0.036				
Dieldrin	2013-09	ug/L												< 0.0360				
Dieldrin	2014-03	ug/L												< 0.0348				
Dieldrin	2014-09	ug/L												< 0.0348				
Dieldrin	2015-03	ug/L												< 0.0348				
Dieldrin	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			**0.00215 J**	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Dieldrin	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Dieldrin	2016-03	ug/L			< 0.032	< 0.0356								**0.00261 J**				
Dieldrin	2016-06	ug/L			< 0.0364	< 0.0364												
Dieldrin	2016-08	ug/L												< 0.036				
Dieldrin	2017-03	ug/L												< 0.0333				
Dieldrin	2017-08	ug/L												**0.00366 J**				
Dieldrin	2018-03	ug/L												< 0.036				
Dieldrin	2018-08	ug/L																
Dieldrin	2018-09	ug/L												**0.00424 J**				
Dieldrin	2019-03	ug/L												**0.00365 J**				
Dieldrin	2019-08	ug/L												**0.00341 J**				
Dieldrin	2020-03	ug/L												**0.00309 J**				
Dieldrin	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	**0.00437 J**	< 0.0395	< 0.039	< 0.0381	< 0.04
Dieldrin	2021-08	ug/L												< 0.0386				
Dieldrin	2022-08	ug/L												< 0.064				
Dieldrin	2023-01	ug/L															< 0.0727	
Dieldrin	2023-03	ug/L															< 0.0667	
Dieldrin	2023-08	ug/L												< 0.0744				
Diethylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Diethylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diethylphthalate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Diethylphthalate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Diethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Diethylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Diethylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	**0.260**	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Diethylphthalate	2011-09	ug/L									< 10.0 J							
Diethylphthalate	2012-03	ug/L									< 10.0							
Diethylphthalate	2012-09	ug/L									< 10.0							
Diethylphthalate	2013-03	ug/L									< 10.6							
Diethylphthalate	2013-09	ug/L									< 10.6							
Diethylphthalate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Diethylphthalate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Diethylphthalate	2016-03	ug/L			< 11.1	**0.299 J**												
Diethylphthalate	2016-06	ug/L			< 11.4	**0.412 J**												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Dichlorodifluoromethane	2015-10	ug/L	< 3		< 3					< 3							
Dichlorodifluoromethane	2016-03	ug/L					< 3			< 3							
Dichlorodifluoromethane	2016-06	ug/L															
Dichlorodifluoromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3							
Dichlorodifluoromethane	2023-01	ug/L															
Dichlorodifluoromethane	2023-03	ug/L					< 3			< 3							
Dieldrin	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Dieldrin	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Dieldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Dieldrin	2009-07	ug/L					< 0.0320		< 0.0320								
Dieldrin	2009-09	ug/L					< 0.0320		< 0.0320								
Dieldrin	2010-03	ug/L					< 0.0320		< 0.0320								
Dieldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Dieldrin	2011-03	ug/L					< 0.0320										
Dieldrin	2011-09	ug/L					< 0.0320										
Dieldrin	2012-03	ug/L					< 0.0320		< 0.0320								
Dieldrin	2012-09	ug/L															
Dieldrin	2013-03	ug/L					< 0.0333										
Dieldrin	2013-09	ug/L															
Dieldrin	2014-03	ug/L					< 0.0348										
Dieldrin	2014-09	ug/L					< 0.032										
Dieldrin	2015-03	ug/L					< 0.036										
Dieldrin	2015-09	ug/L		**0.00337 J**		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Dieldrin	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Dieldrin	2016-03	ug/L					< 0.0333			< 0.0356							
Dieldrin	2016-06	ug/L															
Dieldrin	2016-08	ug/L					< 0.0356			< 0.0356							
Dieldrin	2017-03	ug/L					< 0.0337			< 0.0372							
Dieldrin	2017-08	ug/L					< 0.0356			< 0.0356							
Dieldrin	2018-03	ug/L					< 0.0444			< 0.0372							
Dieldrin	2018-08	ug/L					< 0.0451			< 0.0381							
Dieldrin	2018-09	ug/L															
Dieldrin	2019-03	ug/L					< 0.039			< 0.0395							
Dieldrin	2019-08	ug/L					< 0.0346			< 0.034							
Dieldrin	2020-03	ug/L					< 0.0427			< 0.0376							
Dieldrin	2020-08	ug/L	< 0.039	**0.00243 J**	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Dieldrin	2021-08	ug/L					< 0.04			< 0.0368							
Dieldrin	2022-08	ug/L					< 0.0667			< 0.0604							
Dieldrin	2023-01	ug/L															
Dieldrin	2023-03	ug/L					< 0.0696			< 0.064							
Dieldrin	2023-08	ug/L					< 0.0604			< 0.0711							
Diethylphthalate	2008-08	ug/L	< 10	**1.52 J**	< 10	< 10	< 10	< 11.1	< 10								
Diethylphthalate	2009-03	ug/L	< 10	**1.4 J**	< 10	< 10	< 10	< 10	< 10								
Diethylphthalate	2009-07	ug/L	< 10.0	**1.74 J**	< 10	< 10	< 10.0	< 11.4	< 10.0								
Diethylphthalate	2009-09	ug/L	< 10.0	**2.63 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Diethylphthalate	2010-03	ug/L	< 10.0	**0.403 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Diethylphthalate	2010-09	ug/L	< 10.0	**2.51 J**	< 10.0	< 10.0	< 10.0										
Diethylphthalate	2011-03	ug/L	< 10.0	**1.71 J**	< 10.0	< 10.0	< 10.0	< 10.0									
Diethylphthalate	2011-09	ug/L		< 10.0 J			< 10.0										
Diethylphthalate	2012-03	ug/L		**0.662 J**			< 10.0										
Diethylphthalate	2012-09	ug/L		**0.584 J**			< 10.0										
Diethylphthalate	2013-03	ug/L		< 10.5			< 11.8										
Diethylphthalate	2013-09	ug/L		< 10.1													
Diethylphthalate	2015-09	ug/L		**0.784 J**		< 11.2	< 11.6	< 11.2	< 11.2								
Diethylphthalate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Diethylphthalate	2016-03	ug/L					< 10.9			< 11.2							
Diethylphthalate	2016-06	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Diethylphthalate	2019-03	ug/L									< 11							
Diethylphthalate	2019-08	ug/L									< 10.6							
Diethylphthalate	2020-03	ug/L									< 10.8							
Diethylphthalate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Diethylphthalate	2022-08	ug/L																
Diethylphthalate	2023-01	ug/L															< 10.9	
Diethylphthalate	2023-03	ug/L															< 10.4	
Dimethoate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Dimethoate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethoate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Dimethoate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Dimethoate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Dimethoate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Dimethoate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Dimethoate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Dimethoate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Dimethoate	2016-03	ug/L			< 11.1	< 11.2												
Dimethoate	2016-06	ug/L			< 11.4	< 11.4												
Dimethoate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Dimethoate	2023-01	ug/L															< 10.9	
Dimethoate	2023-03	ug/L															< 10.4	
Dimethylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Dimethylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethylphthalate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Dimethylphthalate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Dimethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Dimethylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Dimethylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Dimethylphthalate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Dimethylphthalate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Dimethylphthalate	2016-03	ug/L			< 11.1	< 11.2												
Dimethylphthalate	2016-06	ug/L			< 11.4	< 11.4												
Dimethylphthalate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Dimethylphthalate	2023-01	ug/L															< 10.9	
Dimethylphthalate	2023-03	ug/L															< 10.4	
Di-n-butylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	**1.33 J**	< 10	< 10	< 10	< 11.1	< 10
Di-n-butylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	**1.33 J**	< 10	**5.56 J**	< 10	< 10	**1.37 J**	< 10	< 10	< 10	< 10	< 10
Di-n-butylphthalate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Di-n-butylphthalate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Di-n-butylphthalate	2010-03	ug/L	**0.983 J**	**1.05 J**	**0.855 J**	**1.05 J**	**1.49 J**	**0.906 J**		**0.773 J**			**1.17 J**		**0.931 J**	**0.871 J**	**0.939 J**	**1.90 J**
Di-n-butylphthalate	2010-09	ug/L	< 0.844 U	< 0.630 U	< 10.0			< 10.0	< 10.0	< 10.0	< 0.738 U	< 0.824 U		< 1.01 U	< 0.670 U	< 0.700 U	< 0.808 U	
Di-n-butylphthalate	2011-03	ug/L	**0.819 J**	< 10.0	< 10.0			< 10.0		< 10.0	**0.732 J**	**0.559 J**	< 10.0		< 10.0	< 10.0	< 10.0	
Di-n-butylphthalate	2011-09	ug/L	< 10.0 J	< 10.0				< 10.0 J		**0.726 J**	**0.849 J**	**0.887 J**	< 10.0		< 10.0 J	< 10.0 J	**0.564 J**	
Di-n-butylphthalate	2012-03	ug/L	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J		< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J		< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J
Di-n-butylphthalate	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 11.1	< 10.0
Di-n-butylphthalate	2013-03	ug/L	< 10.9	< 10.2 J		< 11.0 J	< 11.0 J			< 10.8	**4.84 J**	< 10.6	< 10.5 J		< 10.5 J	< 11.0	**0.673 J**	< 10.2 J
Di-n-butylphthalate	2013-05	ug/L			**0.594 J**			**1.07 J**										
Di-n-butylphthalate	2013-09	ug/L	< 11.0	< 10.2	< 10.2	< 10.3	< 10.4	< 10.2		< 10.4	< 10.6	< 10.2	< 10.3		< 11.4	< 11.2	< 12.8	< 10.2
Di-n-butylphthalate	2014-03	ug/L																
Di-n-butylphthalate	2014-09	ug/L																
Di-n-butylphthalate	2015-03	ug/L																
Di-n-butylphthalate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Di-n-butylphthalate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Di-n-butylphthalate	2016-03	ug/L			< 11.1	< 11.2												
Di-n-butylphthalate	2016-06	ug/L			< 11.4	< 11.4												
Di-n-butylphthalate	2016-08	ug/L																
Di-n-butylphthalate	2017-03	ug/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Diethylphthalate	2019-03	ug/L															
Diethylphthalate	2019-08	ug/L					< 10.8			< 10.9							
Diethylphthalate	2020-03	ug/L					< 13.7			< 12.5							
Diethylphthalate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Diethylphthalate	2022-08	ug/L					< 10.4			< 10							
Diethylphthalate	2023-01	ug/L															
Diethylphthalate	2023-03	ug/L					< 10			< 10							
Dimethoate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Dimethoate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Dimethoate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Dimethoate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dimethoate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dimethoate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Dimethoate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Dimethoate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Dimethoate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Dimethoate	2016-03	ug/L					< 10.9			< 11.2							
Dimethoate	2016-06	ug/L															
Dimethoate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Dimethoate	2023-01	ug/L															
Dimethoate	2023-03	ug/L					< 10			< 10							
Dimethylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Dimethylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Dimethylphthalate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Dimethylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dimethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dimethylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Dimethylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Dimethylphthalate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Dimethylphthalate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Dimethylphthalate	2016-03	ug/L					< 10.9			< 11.2							
Dimethylphthalate	2016-06	ug/L															
Dimethylphthalate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Dimethylphthalate	2023-01	ug/L															
Dimethylphthalate	2023-03	ug/L					< 10			< 10							
Di-n-butylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Di-n-butylphthalate	2009-03	ug/L	< 10	< 10	**8.17 J**	< 10	< 10	< 10	< 10								
Di-n-butylphthalate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Di-n-butylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Di-n-butylphthalate	2010-03	ug/L	**1.00 J**	**1.12 J**	**0.900 J**	**1.08 J**	**1.47 J**	**0.877 J**	**0.909 J**								
Di-n-butylphthalate	2010-09	ug/L	< 0.781 U	**0.802 J**	< 0.962 U	**0.918 J**	**0.600 J**										
Di-n-butylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**1.01 J**									
Di-n-butylphthalate	2011-09	ug/L	< 10.0 J	**0.596 J**	< 10.0 J	< 10.0 J	< 10.0	**15.1**									
Di-n-butylphthalate	2012-03	ug/L	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J								
Di-n-butylphthalate	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Di-n-butylphthalate	2013-03	ug/L	< 10.2	< 10.5	< 10.6 J		< 11.8 J	< 11.1 J	< 10 J								
Di-n-butylphthalate	2013-05	ug/L															
Di-n-butylphthalate	2013-09	ug/L	< 10.4	< 10.1	< 11.0	< 11.0	< 10.6	< 10.1	< 11.2								
Di-n-butylphthalate	2014-03	ug/L					< 11.2	< 10.4									
Di-n-butylphthalate	2014-09	ug/L					< 11	< 10.2									
Di-n-butylphthalate	2015-03	ug/L					< 11	< 10.5									
Di-n-butylphthalate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Di-n-butylphthalate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Di-n-butylphthalate	2016-03	ug/L					< 10.9	< 11.9		< 11.2							
Di-n-butylphthalate	2016-06	ug/L															
Di-n-butylphthalate	2016-08	ug/L					< 11.8	< 10		< 10.6							
Di-n-butylphthalate	2017-03	ug/L					< 10.5	< 10.5		< 10.9							

Table 14
Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Upper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Di-n-butylphthalate	2017-08	ug/L																
Di-n-butylphthalate	2018-03	ug/L																
Di-n-butylphthalate	2018-08	ug/L																
Di-n-butylphthalate	2019-03	ug/L																
Di-n-butylphthalate	2019-08	ug/L																
Di-n-butylphthalate	2020-03	ug/L																
Di-n-butylphthalate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Di-n-butylphthalate	2021-08	ug/L																
Di-n-butylphthalate	2022-08	ug/L																
Di-n-butylphthalate	2023-01	ug/L															< 10.9	
Di-n-butylphthalate	2023-03	ug/L															< 10.4	
Di-n-butylphthalate	2023-08	ug/L																
Di-n-octylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Di-n-octylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Di-n-octylphthalate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Di-n-octylphthalate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Di-n-octylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	**0.624 J**
Di-n-octylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Di-n-octylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Di-n-octylphthalate	2011-09	ug/L																
Di-n-octylphthalate	2012-03	ug/L																< 10.0
Di-n-octylphthalate	2012-09	ug/L																< 10.0
Di-n-octylphthalate	2013-03	ug/L																< 20.4
Di-n-octylphthalate	2013-09	ug/L																< 20.4
Di-n-octylphthalate	2015-09	ug/L	< 22.7	< 22.2			**2.14 J**	< 23.3			< 21.7	< 22.2	< 21.7	< 22.5		< 22.7	< 21.1	
Di-n-octylphthalate	2015-10	ug/L							< 20.8	< 21.1					< 23.5			< 23.5
Di-n-octylphthalate	2016-03	ug/L			< 22.2 J	< 22.5 J												
Di-n-octylphthalate	2016-06	ug/L			< 22.7 J	< 22.7												
Di-n-octylphthalate	2020-08	ug/L	< 23.5	< 23.3	< 24.4	< 23.5	< 23.5	< 23.5	< 23	< 21.7	< 22.7	< 23.5	< 23.3	< 22.2	< 23.8	< 23.3	< 23.8	< 23.3
Di-n-octylphthalate	2023-01	ug/L															< 21.7	
Di-n-octylphthalate	2023-03	ug/L															< 20.8	
Dinoseb	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Dinoseb	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dinoseb	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Dinoseb	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Dinoseb	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Dinoseb	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Dinoseb	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Dinoseb	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Dinoseb	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Dinoseb	2016-03	ug/L			< 11.1	< 11.2												
Dinoseb	2016-06	ug/L			< 11.4	< 11.4												
Dinoseb	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Dinoseb	2023-01	ug/L															< 10.9	
Dinoseb	2023-03	ug/L															< 10.4	
Diphenylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Diphenylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diphenylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Diphenylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Diphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Diphenylamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R			< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R		< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R	
Diphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Diphenylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Diphenylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Diphenylamine	2016-03	ug/L			< 11.1	< 11.2												
Diphenylamine	2016-06	ug/L			< 11.4	< 11.4												
Diphenylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Di-n-butylphthalate	2017-08	ug/L					< 10.6	< 10.9		< 10.4							
Di-n-butylphthalate	2018-03	ug/L					< 12.5	< 11.1		< 12.3							
Di-n-butylphthalate	2018-08	ug/L					< 13.2	< 11		< 10.6							
Di-n-butylphthalate	2019-03	ug/L					< 13	< 11.1		< 11.1							
Di-n-butylphthalate	2019-08	ug/L					< 10.8	< 10.8		< 10.9							
Di-n-butylphthalate	2020-03	ug/L					< 13.7	< 11.1		< 12.5							
Di-n-butylphthalate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Di-n-butylphthalate	2021-08	ug/L					< 12.5	< 11.8		< 10.8							
Di-n-butylphthalate	2022-08	ug/L					< 10.4	< 10.4		< 10							
Di-n-butylphthalate	2023-01	ug/L															
Di-n-butylphthalate	2023-03	ug/L					< 10			< 10							
Di-n-butylphthalate	2023-08	ug/L					< 9.62	< 10.6		< 11.4							
Di-n-octylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Di-n-octylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Di-n-octylphthalate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Di-n-octylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**0.298 J**	< 10.0								
Di-n-octylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Di-n-octylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Di-n-octylphthalate	2011-03	ug/L	**0.478 J**	< 10.0	< 10.0	< 10.0	< 10.0	**0.413 J**									
Di-n-octylphthalate	2011-09	ug/L	< 10.0				< 10.0	< 10.0									
Di-n-octylphthalate	2012-03	ug/L	< 10.0				< 10.0	< 10.0									
Di-n-octylphthalate	2012-09	ug/L	< 10.0				< 10.0	< 10.0									
Di-n-octylphthalate	2013-03	ug/L	< 20.4				**1.42 J**	< 22.2									
Di-n-octylphthalate	2013-09	ug/L	< 20.8				< 21.3	< 20.2									
Di-n-octylphthalate	2015-09	ug/L		< 22		< 22.5	< 23.3	< 22.5	< 22.5								
Di-n-octylphthalate	2015-10	ug/L	< 23.5		< 20.6					< 22							
Di-n-octylphthalate	2016-03	ug/L					< 21.7 J			< 22.5							
Di-n-octylphthalate	2016-06	ug/L															
Di-n-octylphthalate	2020-08	ug/L	< 23.8	< 23.5	< 21.1	< 22	< 27	< 23.5	< 22.2	< 22.2							
Di-n-octylphthalate	2023-01	ug/L															
Di-n-octylphthalate	2023-03	ug/L					< 20			< 20							
Dinoseb	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Dinoseb	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Dinoseb	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Dinoseb	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dinoseb	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Dinoseb	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Dinoseb	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Dinoseb	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Dinoseb	2015-10	ug/L	< 11.8		< 10.3					< 11							
Dinoseb	2016-03	ug/L					< 10.9			< 11.2							
Dinoseb	2016-06	ug/L															
Dinoseb	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Dinoseb	2023-01	ug/L															
Dinoseb	2023-03	ug/L					< 10			< 10							
Diphenylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Diphenylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Diphenylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Diphenylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Diphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Diphenylamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R										
Diphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Diphenylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Diphenylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
Diphenylamine	2016-03	ug/L					< 10.9			< 11.2							
Diphenylamine	2016-06	ug/L															
Diphenylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Diphenylamine	2023-01	ug/L															< 10.9	
Diphenylamine	2023-03	ug/L															< 10.4	
Disulfoton	2008-08	ug/L	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 77.8	< 70	< 70	< 70	< 70	< 70	< 77.8	< 70
Disulfoton	2009-03	ug/L	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70
Disulfoton	2009-07	ug/L	< 70	< 70.0	< 70.0	< 70		< 70		< 70			< 70.0		< 70	< 70	< 70	< 70
Disulfoton	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Disulfoton	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Disulfoton	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Disulfoton	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Disulfoton	2012-03	ug/L																
Disulfoton	2012-09	ug/L																
Disulfoton	2013-03	ug/L																
Disulfoton	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Disulfoton	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Disulfoton	2016-03	ug/L			< 11.1	< 11.2												
Disulfoton	2016-06	ug/L			< 11.4	< 11.4												
Disulfoton	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Disulfoton	2023-01	ug/L															< 10.9	
Disulfoton	2023-03	ug/L															< 10.4	
Endosulfan I	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Endosulfan I	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Endosulfan I	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endosulfan I	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Endosulfan I	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Endosulfan I	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Endosulfan I	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Endosulfan I	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Endosulfan I	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	**0.00303 J**			**0.00359 J**	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Endosulfan I	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Endosulfan I	2016-03	ug/L			< 0.032	< 0.0356												
Endosulfan I	2016-06	ug/L			< 0.0364	< 0.0364												
Endosulfan I	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	**0.00315 J**	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Endosulfan I	2023-01	ug/L															< 0.0727	
Endosulfan I	2023-03	ug/L															< 0.0667	
Endosulfan II	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Endosulfan II	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Endosulfan II	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endosulfan II	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Endosulfan II	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Endosulfan II	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Endosulfan II	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Endosulfan II	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Endosulfan II	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Endosulfan II	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Endosulfan II	2016-03	ug/L			< 0.032	< 0.0356												
Endosulfan II	2016-06	ug/L			< 0.0364	< 0.0364												
Endosulfan II	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Endosulfan II	2023-01	ug/L															< 0.0727	
Endosulfan II	2023-03	ug/L															< 0.0667	
Endosulfan Sulfate	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Endosulfan Sulfate	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Endosulfan Sulfate	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endosulfan Sulfate	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Endosulfan Sulfate	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Endosulfan Sulfate	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Endosulfan Sulfate	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Endosulfan Sulfate	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Diphenylamine	2023-01	ug/L															
Diphenylamine	2023-03	ug/L					< 10			< 10							
Disulfoton	2008-08	ug/L	< 70	< 70	< 70	< 70	< 70	< 77.8	< 70								
Disulfoton	2009-03	ug/L	< 70	< 70	< 70	< 70	< 70	< 70	< 70								
Disulfoton	2009-07	ug/L	< 70.0	< 70	< 70	< 70	< 70.0	< 79.5	< 70.0								
Disulfoton	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Disulfoton	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Disulfoton	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Disulfoton	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Disulfoton	2012-03	ug/L					< 10.0										
Disulfoton	2012-09	ug/L					< 10.0										
Disulfoton	2013-03	ug/L					< 11.8										
Disulfoton	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Disulfoton	2015-10	ug/L	< 11.8		< 10.3					< 11							
Disulfoton	2016-03	ug/L					< 10.9			< 11.2							
Disulfoton	2016-06	ug/L															
Disulfoton	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Disulfoton	2023-01	ug/L															
Disulfoton	2023-03	ug/L					< 10			< 10							
Endosulfan I	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Endosulfan I	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Endosulfan I	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Endosulfan I	2009-07	ug/L					< 0.0320		< 0.0320								
Endosulfan I	2009-09	ug/L					< 0.0320		< 0.0320								
Endosulfan I	2010-03	ug/L					< 0.0320		< 0.0320								
Endosulfan I	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Endosulfan I	2011-03	ug/L					< 0.0320										
Endosulfan I	2015-09	ug/L		**0.0029 J**		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Endosulfan I	2015-10	ug/L	< 0.0372		**0.0127 J**					< 0.0372							
Endosulfan I	2016-03	ug/L					< 0.0333			< 0.0356							
Endosulfan I	2016-06	ug/L															
Endosulfan I	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	**0.00517 J**							
Endosulfan I	2023-01	ug/L															
Endosulfan I	2023-03	ug/L					< 0.0696			< 0.064							
Endosulfan II	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Endosulfan II	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Endosulfan II	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Endosulfan II	2009-07	ug/L					< 0.0320		< 0.0320								
Endosulfan II	2009-09	ug/L					< 0.0320		< 0.0320								
Endosulfan II	2010-03	ug/L					< 0.0320		< 0.0320								
Endosulfan II	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Endosulfan II	2011-03	ug/L					< 0.0320										
Endosulfan II	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Endosulfan II	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Endosulfan II	2016-03	ug/L					< 0.0333			< 0.0356							
Endosulfan II	2016-06	ug/L															
Endosulfan II	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Endosulfan II	2023-01	ug/L															
Endosulfan II	2023-03	ug/L					< 0.0696			< 0.064							
Endosulfan Sulfate	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Endosulfan Sulfate	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Endosulfan Sulfate	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Endosulfan Sulfate	2009-07	ug/L					< 0.0320		< 0.0320								
Endosulfan Sulfate	2009-09	ug/L					< 0.0320		< 0.0320								
Endosulfan Sulfate	2010-03	ug/L					< 0.0320		< 0.0320								
Endosulfan Sulfate	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Endosulfan Sulfate	2011-03	ug/L					< 0.0320										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Endosulfan Sulfate	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	**0.00306 J**		< 0.0356	< 0.0376	
Endosulfan Sulfate	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Endosulfan Sulfate	2016-03	ug/L			< 0.032	< 0.0356												
Endosulfan Sulfate	2016-06	ug/L			< 0.0364	< 0.0364												
Endosulfan Sulfate	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Endosulfan Sulfate	2023-01	ug/L															< 0.0727	
Endosulfan Sulfate	2023-03	ug/L															< 0.0667	
Endrin	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Endrin	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Endrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endrin	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Endrin	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Endrin	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Endrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Endrin	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Endrin	2015-09	ug/L	< 0.036	< 0.0356			**0.00343 J**	< 0.0386			**0.00844 J**	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Endrin	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Endrin	2016-03	ug/L			< 0.032	< 0.0356 J												
Endrin	2016-06	ug/L			< 0.0364	**0.00243 J**												
Endrin	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	**0.00239 J**	< 0.0376	**0.00736 J**	**0.00556 J**	**0.00455 J**	**0.00448 J**	< 0.0386	**0.00665 J**	< 0.0395	< 0.039	< 0.0381	< 0.04
Endrin	2023-01	ug/L															< 0.0727	
Endrin	2023-03	ug/L															< 0.0667	
Endrin Aldehyde	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Endrin Aldehyde	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Endrin Aldehyde	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endrin Aldehyde	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Endrin Aldehyde	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Endrin Aldehyde	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Endrin Aldehyde	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Endrin Aldehyde	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Endrin Aldehyde	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Endrin Aldehyde	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Endrin Aldehyde	2016-03	ug/L			**0.00921 J**	< 0.0356												
Endrin Aldehyde	2016-06	ug/L			< 0.0364	< 0.0364												
Endrin Aldehyde	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Endrin Aldehyde	2023-01	ug/L															< 0.0727	
Endrin Aldehyde	2023-03	ug/L															< 0.0667	
Ethyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethyl Methacrylate	2009-07	ug/L	< 2	< 2.00		< 2		< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	
Ethyl Methacrylate	2009-09	ug/L	< 2	< 2.00		< 2.00		< 2.00	< 2.00	< 10.0	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	
Ethyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Ethyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0			< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	
Ethyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	
Ethyl Methacrylate	2012-09	ug/L														< 2.00		
Ethyl Methacrylate	2015-09	ug/L	< 2	< 2			< 2	< 2			< 2	< 2	< 2	< 2		< 2	< 2	
Ethyl Methacrylate	2015-10	ug/L							< 2	< 2					< 2			< 2
Ethyl Methacrylate	2016-03	ug/L			< 2	< 2												
Ethyl Methacrylate	2016-06	ug/L			< 2	< 2												
Ethyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethyl Methacrylate	2023-01	ug/L															< 2	
Ethyl Methacrylate	2023-03	ug/L															< 2	
Ethyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Ethyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Ethyl Methanesulfonate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Ethyl Methanesulfonate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Ethyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Endosulfan Sulfate	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Endosulfan Sulfate	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Endosulfan Sulfate	2016-03	ug/L					< 0.0333			< 0.0356							
Endosulfan Sulfate	2016-06	ug/L															
Endosulfan Sulfate	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Endosulfan Sulfate	2023-01	ug/L															
Endosulfan Sulfate	2023-03	ug/L					< 0.0696			< 0.064							
Endrin	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Endrin	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Endrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Endrin	2009-07	ug/L					< 0.0320		< 0.0320								
Endrin	2009-09	ug/L					< 0.0320		< 0.0320								
Endrin	2010-03	ug/L					< 0.0320		< 0.0320								
Endrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Endrin	2011-03	ug/L					< 0.0320										
Endrin	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Endrin	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Endrin	2016-03	ug/L					< 0.0333			< 0.0356							
Endrin	2016-06	ug/L															
Endrin	2020-08	ug/L	< 0.039	**0.00388 J**	**0.0132 J**	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Endrin	2023-01	ug/L															
Endrin	2023-03	ug/L					< 0.0696			< 0.064							
Endrin Aldehyde	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Endrin Aldehyde	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Endrin Aldehyde	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Endrin Aldehyde	2009-07	ug/L					< 0.0320		< 0.0320								
Endrin Aldehyde	2009-09	ug/L					< 0.0320		< 0.0320								
Endrin Aldehyde	2010-03	ug/L					< 0.0320		< 0.0320								
Endrin Aldehyde	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Endrin Aldehyde	2011-03	ug/L					< 0.0320										
Endrin Aldehyde	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Endrin Aldehyde	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Endrin Aldehyde	2016-03	ug/L					< 0.0333			< 0.0356 J							
Endrin Aldehyde	2016-06	ug/L															
Endrin Aldehyde	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Endrin Aldehyde	2023-01	ug/L															
Endrin Aldehyde	2023-03	ug/L					< 0.0696			< 0.064							
Ethyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Ethyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Ethyl Methacrylate	2009-07	ug/L	< 2.00	< 2	< 2	< 2	< 2.00										
Ethyl Methacrylate	2009-09	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00										
Ethyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Ethyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0										
Ethyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00									
Ethyl Methacrylate	2012-09	ug/L				< 2.00											
Ethyl Methacrylate	2015-09	ug/L		< 2		< 2	< 2	< 2	< 2								
Ethyl Methacrylate	2015-10	ug/L	< 2		< 2					< 2							
Ethyl Methacrylate	2016-03	ug/L					< 2			< 2							
Ethyl Methacrylate	2016-06	ug/L															
Ethyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2							
Ethyl Methacrylate	2023-01	ug/L															
Ethyl Methacrylate	2023-03	ug/L					< 2			< 2							
Ethyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Ethyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Ethyl Methanesulfonate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Ethyl Methanesulfonate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Ethyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Ethyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Ethyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Ethyl Methanesulfonate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Ethyl Methanesulfonate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Ethyl Methanesulfonate	2016-03	ug/L			< 11.1	< 11.2												
Ethyl Methanesulfonate	2016-06	ug/L			< 11.4	< 11.4												
Ethyl Methanesulfonate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Ethyl Methanesulfonate	2023-01	ug/L															< 10.9	
Ethyl Methanesulfonate	2023-03	ug/L															< 10.4	
Ethylbenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.6**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**4.33**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	**2.85**	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Ethylbenzene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Ethylbenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.89**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	**1.53**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.15**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.61**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	**0.792 J**	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
Ethylbenzene	2013-05	ug/L			< 1.00			< 1.00										
Ethylbenzene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.07**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2013-11	ug/L																
Ethylbenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.480 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2014-06	ug/L																
Ethylbenzene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.399 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.336 J**	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Ethylbenzene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Ethylbenzene	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Ethylbenzene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2016-06	ug/L			< 1	< 1												
Ethylbenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.42 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2017-03	ug/L	< 1	< 1	**0.24 J**	< 1	< 1	< 1	< 1	< 1	**0.526 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2017-08	ug/L	< 1	**0.214 J**	**0.266 J**	< 1	< 1	< 1	< 1	< 1	**0.306 J**	< 1	< 1	< 1	< 1	< 1	**0.408 J**	< 1
Ethylbenzene	2017-11	ug/L																
Ethylbenzene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2018-06	ug/L																
Ethylbenzene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Ethylbenzene	2018-09	ug/L					< 1						< 1	< 1				
Ethylbenzene	2018-11	ug/L																
Ethylbenzene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.68**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2020-04	ug/L				< 1	< 1		< 1									
Ethylbenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2021-03	ug/L							< 1	< 1	< 1	< 1						
Ethylbenzene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2022-03	ug/L							< 1	< 1	< 1	< 1						
Ethylbenzene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2023-01	ug/L															< 1	
Ethylbenzene	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Ethylbenzene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Famphur	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20
Famphur	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Famphur	2009-07	ug/L	< 20	< 20.0	< 20.0	< 20		< 20		< 20			< 20.0		< 20	< 20	< 20	< 20
Famphur	2009-09	ug/L	< 20	< 20.0	< 20.0	< 20.0		< 20.0		< 20.0			< 20		< 20	< 22.5	< 20	< 20
Famphur	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0			< 20.0		< 20.0	< 20.0	< 20.0	< 22.5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Ethyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Ethyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Ethyl Methanesulfonate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Ethyl Methanesulfonate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Ethyl Methanesulfonate	2016-03	ug/L					< 10.9			< 11.2							
Ethyl Methanesulfonate	2016-06	ug/L															
Ethyl Methanesulfonate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Ethyl Methanesulfonate	2023-01	ug/L															
Ethyl Methanesulfonate	2023-03	ug/L					< 10			< 10							
Ethylbenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Ethylbenzene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Ethylbenzene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Ethylbenzene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Ethylbenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
Ethylbenzene	2013-05	ug/L															
Ethylbenzene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	**0.221 J**	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Ethylbenzene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2016-06	ug/L															
Ethylbenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2017-03	ug/L	< 1	< 1	< 1	< 1	**0.348 J**	< 1	**0.261 J**	< 1	< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2017-08	ug/L	< 1	< 1	< 1	< 1	**0.466 J**	**0.216 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2017-11	ug/L														< 1	< 1
Ethylbenzene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2018-06	ug/L														< 1	< 1
Ethylbenzene	2018-08	ug/L	< 1	< 1	< 1	< 1	**1.41**	< 1	< 1	< 1		< 1	< 1	< 1			
Ethylbenzene	2018-09	ug/L													< 1	< 1	< 1
Ethylbenzene	2018-11	ug/L					< 1									< 1	< 1
Ethylbenzene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Ethylbenzene	2020-04	ug/L			< 1									< 1			
Ethylbenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Ethylbenzene	2021-03	ug/L		< 1			< 1			< 1							
Ethylbenzene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Ethylbenzene	2022-03	ug/L		< 1			< 1			< 1							
Ethylbenzene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Ethylbenzene	2023-01	ug/L															
Ethylbenzene	2023-03	ug/L		< 1			< 1			< 1							
Ethylbenzene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Famphur	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20								
Famphur	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20								
Famphur	2009-07	ug/L	< 20.0	< 20	< 20	< 20	< 20.0	< 22.7	< 20.0								
Famphur	2009-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0								
Famphur	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Famphur	2010-09	ug/L	< 20.0	< 20.0	< 20.0			< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	
Famphur	2011-03	ug/L	< 20.0	< 20.0	< 20.0			< 20.0		< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	
Famphur	2015-09	ug/L	< 22.7	< 22.2			< 22.2	< 23.3			< 21.7	< 22.2	< 21.7	< 22.5		< 22.7	< 21.1	
Famphur	2015-10	ug/L							< 20.8	< 21.1					< 23.5			< 23.5
Famphur	2016-03	ug/L			< 22.2	< 22.5												
Famphur	2016-06	ug/L			< 22.7	< 22.7												
Famphur	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Famphur	2023-01	ug/L															< 10.9	
Famphur	2023-03	ug/L															< 10.4	
Fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Fluoranthene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Fluoranthene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Fluoranthene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Fluoranthene	2016-03	ug/L			< 11.1	< 11.2												
Fluoranthene	2016-06	ug/L			< 11.4	< 11.4												
Fluoranthene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Fluoranthene	2023-01	ug/L															< 10.9	
Fluoranthene	2023-03	ug/L															< 10.4	
Fluorene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Fluorene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Fluorene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	**0.751 J**	**0.259 J**
Fluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Fluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Fluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Fluorene	2011-09	ug/L															< 10.0	
Fluorene	2012-03	ug/L															< 10.0	< 10.0
Fluorene	2012-09	ug/L															< 11.1	< 10.0
Fluorene	2013-03	ug/L															< 10.6	< 10.2
Fluorene	2013-09	ug/L															< 12.8	< 10.2
Fluorene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Fluorene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Fluorene	2016-03	ug/L			< 11.1	< 11.2												
Fluorene	2016-06	ug/L			< 11.4	< 11.4												
Fluorene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Fluorene	2023-01	ug/L															< 10.9	
Fluorene	2023-03	ug/L															< 10.4	
Fluorotrichloromethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2009-07	ug/L	< 4	< 4.00		< 4		< 4	< 4	< 4	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4	
Fluorotrichloromethane	2009-09	ug/L	< 4	< 4.00		< 4.00		< 4.00	< 4.00	< 20.0	< 4.00	< 4	< 4	< 4	< 4	< 4	< 4	
Fluorotrichloromethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 40.0	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2012-09	ug/L	< 4.00	< 5.00	< 5.00	< 4.00	< 4.00	< 5.00	< 5.00	< 5.00	< 5.00	< 4.00	< 5.00	< 5.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2013-03	ug/L	< 4.00	< 4		< 4.00	< 4.00		< 4	< 4	**0.27 J**	< 4	< 4	< 4	< 4.00	< 4.00	< 4	< 4
Fluorotrichloromethane	2013-05	ug/L			< 4.00			< 4.00										
Fluorotrichloromethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**0.185 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2013-11	ug/L																
Fluorotrichloromethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Famphur	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0										
Famphur	2011-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0									
Famphur	2015-09	ug/L		< 22		< 22.5	< 23.3	< 22.5	< 22.5								
Famphur	2015-10	ug/L	< 23.5		< 20.6					< 22							
Famphur	2016-03	ug/L					< 21.7			< 22.5							
Famphur	2016-06	ug/L															
Famphur	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Famphur	2023-01	ug/L															
Famphur	2023-03	ug/L					< 10			< 10							
Fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Fluoranthene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Fluoranthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Fluoranthene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Fluoranthene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Fluoranthene	2016-03	ug/L					< 10.9			< 11.2							
Fluoranthene	2016-06	ug/L															
Fluoranthene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Fluoranthene	2023-01	ug/L															
Fluoranthene	2023-03	ug/L					< 10			< 10							
Fluorene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Fluorene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Fluorene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Fluorene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Fluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Fluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Fluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Fluorene	2011-09	ug/L					< 10.0										
Fluorene	2012-03	ug/L					< 10.0										
Fluorene	2012-09	ug/L					< 10.0										
Fluorene	2013-03	ug/L					< 11.8										
Fluorene	2013-09	ug/L															
Fluorene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Fluorene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Fluorene	2016-03	ug/L					< 10.9			< 11.2							
Fluorene	2016-06	ug/L															
Fluorene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Fluorene	2023-01	ug/L															
Fluorene	2023-03	ug/L					< 10			< 10							
Fluorotrichloromethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4								
Fluorotrichloromethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4								
Fluorotrichloromethane	2009-07	ug/L	< 4.00	< 4	< 4	< 4	< 4.00										
Fluorotrichloromethane	2009-09	ug/L	< 4.00	< 20.0	< 4.00	< 4.00	< 4.00										
Fluorotrichloromethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2012-09	ug/L	< 4.00	< 4.00	< 5.00	< 4.00	< 4.00	< 5.00	< 5.00								
Fluorotrichloromethane	2013-03	ug/L	< 4	< 4	< 100		< 4.00	< 4	< 4								
Fluorotrichloromethane	2013-05	ug/L															
Fluorotrichloromethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2013-11	ug/L									< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Fluorotrichloromethane	2014-06	ug/L																
Fluorotrichloromethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2015-03	ug/L	< 4	< 4	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4	< 4.00
Fluorotrichloromethane	2015-09	ug/L	< 4	< 4		< 4	< 4	< 4			< 4	< 4	< 4	< 4		< 4	< 4	
Fluorotrichloromethane	2015-10	ug/L			< 4				< 4	< 4					< 4			< 4
Fluorotrichloromethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2016-06	ug/L			< 4	< 4												
Fluorotrichloromethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2017-11	ug/L																
Fluorotrichloromethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2018-06	ug/L																
Fluorotrichloromethane	2018-08	ug/L	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Fluorotrichloromethane	2018-09	ug/L					< 4						< 4	< 4				
Fluorotrichloromethane	2018-11	ug/L																
Fluorotrichloromethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-03	ug/L	< 4	< 4	< 4			< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-04	ug/L				< 4	< 4		< 4									
Fluorotrichloromethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2021-03	ug/L							< 4	< 4	< 4	< 4						
Fluorotrichloromethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 40	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2022-03	ug/L							< 4	< 4	< 4	< 4						
Fluorotrichloromethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2023-01	ug/L															< 4	
Fluorotrichloromethane	2023-03	ug/L							< 4	< 4	< 4	< 4					< 4	
Fluorotrichloromethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Heptachlor	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Heptachlor	2008-09	ug/L		< 0.016	< 0.016												**0.537**	
Heptachlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Heptachlor	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Heptachlor	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Heptachlor	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Heptachlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Heptachlor	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Heptachlor	2011-09	ug/L															< 0.0320	
Heptachlor	2012-03	ug/L															< 0.0320	
Heptachlor	2012-09	ug/L															< 0.0320	
Heptachlor	2013-03	ug/L															< 0.0386	
Heptachlor	2013-09	ug/L															< 0.0323	
Heptachlor	2014-03	ug/L															< 0.0330	
Heptachlor	2014-09	ug/L															< 0.0381	
Heptachlor	2015-03	ug/L															**0.0132 J**	
Heptachlor	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Heptachlor	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Heptachlor	2016-03	ug/L			< 0.032	< 0.0356											< 0.0333	
Heptachlor	2016-06	ug/L			< 0.0364	**0.00385 J**												
Heptachlor	2016-08	ug/L															**0.00392 J**	
Heptachlor	2017-03	ug/L															< 0.0381	
Heptachlor	2017-08	ug/L															< 0.178	
Heptachlor	2018-03	ug/L															< 0.0372	
Heptachlor	2018-08	ug/L															< 0.0352	
Heptachlor	2019-03	ug/L															**0.0438**	
Heptachlor	2019-08	ug/L															< 0.0327	
Heptachlor	2020-03	ug/L															< 0.0356	
Heptachlor	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	**0.00483 J**	**0.00347 J**	< 0.0376	< 0.0376	**0.00931 J**	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Fluorotrichloromethane	2014-06	ug/L									< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2015-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4	< 4	< 4		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2015-09	ug/L		< 4		< 4	< 4	< 4	< 4								
Fluorotrichloromethane	2015-10	ug/L	< 4		< 4					< 4	< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2016-06	ug/L															
Fluorotrichloromethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2017-11	ug/L														< 4	< 4
Fluorotrichloromethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 40	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2018-06	ug/L														< 4	< 4
Fluorotrichloromethane	2018-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4			
Fluorotrichloromethane	2018-09	ug/L													< 4	< 4	< 4
Fluorotrichloromethane	2018-11	ug/L														< 4	< 4
Fluorotrichloromethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-03	ug/L	< 4	< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4
Fluorotrichloromethane	2020-04	ug/L			< 4									< 4			
Fluorotrichloromethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Fluorotrichloromethane	2021-03	ug/L		< 4			< 4			< 4							
Fluorotrichloromethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Fluorotrichloromethane	2022-03	ug/L		< 4			< 4			< 4							
Fluorotrichloromethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Fluorotrichloromethane	2023-01	ug/L															
Fluorotrichloromethane	2023-03	ug/L		< 4			< 4			< 4							
Fluorotrichloromethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4		< 4
Heptachlor	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Heptachlor	2008-09	ug/L	< 0.016				< 0.016	< 0.016	**0.063**								
Heptachlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Heptachlor	2009-07	ug/L					< 0.0320		< 0.0320								
Heptachlor	2009-09	ug/L					< 0.0320		< 0.0320								
Heptachlor	2010-03	ug/L					< 0.0320		< 0.0320								
Heptachlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Heptachlor	2011-03	ug/L					< 0.0320										
Heptachlor	2011-09	ug/L					< 0.0320										
Heptachlor	2012-03	ug/L					< 0.0320		< 0.0320								
Heptachlor	2012-09	ug/L							< 0.0360								
Heptachlor	2013-03	ug/L					< 0.0333		< 0.0323 J								
Heptachlor	2013-09	ug/L							< 0.0360								
Heptachlor	2014-03	ug/L					< 0.0348		< 0.0330								
Heptachlor	2014-09	ug/L					< 0.032		< 0.0337								
Heptachlor	2015-03	ug/L					< 0.036		< 0.0372								
Heptachlor	2015-09	ug/L		< 0.0352		< 0.0356	**0.0173 J**	< 0.0356	< 0.0352								
Heptachlor	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Heptachlor	2016-03	ug/L					**0.00799 J**		< 0.0372	< 0.0356							
Heptachlor	2016-06	ug/L															
Heptachlor	2016-08	ug/L					< 0.0356		< 0.0356	< 0.0356							
Heptachlor	2017-03	ug/L					< 0.0337		< 0.032	< 0.0372							
Heptachlor	2017-08	ug/L					< 0.0356		< 0.0356	< 0.0356							
Heptachlor	2018-03	ug/L					< 0.0444		< 0.036	< 0.0372							
Heptachlor	2018-08	ug/L					< 0.0451		< 0.0376	< 0.0381							
Heptachlor	2019-03	ug/L					< 0.039		< 0.0356	< 0.0395							
Heptachlor	2019-08	ug/L					< 0.0346		< 0.0342	< 0.034							
Heptachlor	2020-03	ug/L					< 0.0427		< 0.0356	< 0.0376							
Heptachlor	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Heptachlor	2021-08	ug/L															< 0.0356	
Heptachlor	2022-08	ug/L																
Heptachlor	2023-01	ug/L															< 0.0727	
Heptachlor	2023-03	ug/L															< 0.0667	
Heptachlor	2023-08	ug/L															< 0.0604	
Heptachlor Epoxide	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Heptachlor Epoxide	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Heptachlor Epoxide	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Heptachlor Epoxide	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Heptachlor Epoxide	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Heptachlor Epoxide	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Heptachlor Epoxide	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Heptachlor Epoxide	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Heptachlor Epoxide	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Heptachlor Epoxide	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Heptachlor Epoxide	2016-03	ug/L			< 0.032	< 0.0356												
Heptachlor Epoxide	2016-06	ug/L			< 0.0364	< 0.0364												
Heptachlor Epoxide	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Heptachlor Epoxide	2023-01	ug/L															< 0.0727	
Heptachlor Epoxide	2023-03	ug/L															< 0.0667	
Hexachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Hexachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Hexachlorobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Hexachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Hexachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Hexachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Hexachlorobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Hexachlorobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Hexachlorobenzene	2016-03	ug/L			< 11.1	< 11.2												
Hexachlorobenzene	2016-06	ug/L			< 11.4	< 11.4												
Hexachlorobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Hexachlorobenzene	2023-01	ug/L															< 10.9	
Hexachlorobenzene	2023-03	ug/L															< 10.4	
Hexachlorobutadiene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Hexachlorobutadiene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Hexachlorobutadiene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Hexachlorobutadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Hexachlorobutadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Hexachlorobutadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Hexachlorobutadiene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Hexachlorobutadiene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Hexachlorobutadiene	2016-03	ug/L			< 11.1	< 11.2												
Hexachlorobutadiene	2016-06	ug/L			< 11.4	< 11.4												
Hexachlorobutadiene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Hexachlorobutadiene	2023-01	ug/L															< 10.9	
Hexachlorobutadiene	2023-03	ug/L															< 10.4	
Hexachlorocyclopentadiene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Hexachlorocyclopentadiene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorocyclopentadiene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Hexachlorocyclopentadiene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Hexachlorocyclopentadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Hexachlorocyclopentadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Hexachlorocyclopentadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Hexachlorocyclopentadiene	2015-09	ug/L	< 22.7	< 22.2			< 22.2	< 23.3			< 21.7	< 22.2	< 21.7	< 22.5		< 22.7	< 21.1	
Hexachlorocyclopentadiene	2015-10	ug/L							< 20.8	< 21.1					< 23.5			< 23.5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Heptachlor	2021-08	ug/L					< 0.04		< 0.0356	< 0.0368							
Heptachlor	2022-08	ug/L					< 0.0667		< 0.064	< 0.0604							
Heptachlor	2023-01	ug/L															
Heptachlor	2023-03	ug/L					< 0.0696			< 0.064							
Heptachlor	2023-08	ug/L					< 0.0604		< 0.0711	< 0.0711							
Heptachlor Epoxide	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Heptachlor Epoxide	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Heptachlor Epoxide	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Heptachlor Epoxide	2009-07	ug/L					< 0.0320		< 0.0320								
Heptachlor Epoxide	2009-09	ug/L					< 0.0320		< 0.0320								
Heptachlor Epoxide	2010-03	ug/L					< 0.0320		< 0.0320								
Heptachlor Epoxide	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Heptachlor Epoxide	2011-03	ug/L					< 0.0320										
Heptachlor Epoxide	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								
Heptachlor Epoxide	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Heptachlor Epoxide	2016-03	ug/L					< 0.0333			< 0.0356							
Heptachlor Epoxide	2016-06	ug/L															
Heptachlor Epoxide	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Heptachlor Epoxide	2023-01	ug/L															
Heptachlor Epoxide	2023-03	ug/L					< 0.0696			< 0.064							
Hexachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Hexachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Hexachlorobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Hexachlorobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Hexachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Hexachlorobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Hexachlorobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Hexachlorobenzene	2016-03	ug/L					< 10.9			< 11.2							
Hexachlorobenzene	2016-06	ug/L															
Hexachlorobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Hexachlorobenzene	2023-01	ug/L															
Hexachlorobenzene	2023-03	ug/L					< 10			< 10							
Hexachlorobutadiene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Hexachlorobutadiene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Hexachlorobutadiene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Hexachlorobutadiene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachlorobutadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachlorobutadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Hexachlorobutadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Hexachlorobutadiene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Hexachlorobutadiene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Hexachlorobutadiene	2016-03	ug/L					< 10.9			< 11.2							
Hexachlorobutadiene	2016-06	ug/L															
Hexachlorobutadiene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Hexachlorobutadiene	2023-01	ug/L															
Hexachlorobutadiene	2023-03	ug/L					< 10			< 10							
Hexachlorocyclopentadiene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Hexachlorocyclopentadiene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Hexachlorocyclopentadiene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Hexachlorocyclopentadiene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachlorocyclopentadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachlorocyclopentadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Hexachlorocyclopentadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Hexachlorocyclopentadiene	2015-09	ug/L		< 22		< 22.5	< 23.3	< 22.5	< 22.5								
Hexachlorocyclopentadiene	2015-10	ug/L	< 23.5		< 20.6					< 22							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Hexachlorocyclopentadiene	2016-03	ug/L			< 22.2	< 22.5												
Hexachlorocyclopentadiene	2016-06	ug/L			< 22.7	< 22.7												
Hexachlorocyclopentadiene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Hexachlorocyclopentadiene	2023-01	ug/L															< 10.9	
Hexachlorocyclopentadiene	2023-03	ug/L															< 10.4	
Hexachloroethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Hexachloroethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Hexachloroethane	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Hexachloroethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Hexachloroethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Hexachloroethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	**0.236 J**	< 10.0	
Hexachloroethane	2011-09	ug/L														< 10.0		
Hexachloroethane	2012-03	ug/L														< 10.0		
Hexachloroethane	2012-09	ug/L														< 10.0		
Hexachloroethane	2013-03	ug/L														< 11.0		
Hexachloroethane	2013-09	ug/L														< 11.2		
Hexachloroethane	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Hexachloroethane	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Hexachloroethane	2016-03	ug/L			< 11.1	< 11.2												
Hexachloroethane	2016-06	ug/L			< 11.4	< 11.4												
Hexachloroethane	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Hexachloroethane	2023-01	ug/L															< 10.9	
Hexachloroethane	2023-03	ug/L															< 10.4	
Hexachloropropene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Hexachloropropene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloropropene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Hexachloropropene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Hexachloropropene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Hexachloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Hexachloropropene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Hexachloropropene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Hexachloropropene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Hexachloropropene	2016-03	ug/L			< 11.1	< 11.2												
Hexachloropropene	2016-06	ug/L			< 11.4	< 11.4												
Hexachloropropene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Hexachloropropene	2023-01	ug/L															< 10.9	
Hexachloropropene	2023-03	ug/L															< 10.4	
Indeno(1,2,3-cd)pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Indeno(1,2,3-cd)pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Indeno(1,2,3-cd)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Indeno(1,2,3-cd)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Indeno(1,2,3-cd)pyrene	2011-09	ug/L																
Indeno(1,2,3-cd)pyrene	2012-03	ug/L																
Indeno(1,2,3-cd)pyrene	2012-09	ug/L																
Indeno(1,2,3-cd)pyrene	2013-03	ug/L																
Indeno(1,2,3-cd)pyrene	2013-09	ug/L																
Indeno(1,2,3-cd)pyrene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Indeno(1,2,3-cd)pyrene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Indeno(1,2,3-cd)pyrene	2016-03	ug/L			< 11.1	< 11.2												
Indeno(1,2,3-cd)pyrene	2016-06	ug/L			< 11.4	< 11.4												
Indeno(1,2,3-cd)pyrene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Indeno(1,2,3-cd)pyrene	2023-01	ug/L															< 10.9	
Indeno(1,2,3-cd)pyrene	2023-03	ug/L															< 10.4	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Hexachlorocyclopentadiene	2016-03	ug/L					< 21.7			< 22.5							
Hexachlorocyclopentadiene	2016-06	ug/L															
Hexachlorocyclopentadiene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Hexachlorocyclopentadiene	2023-01	ug/L															
Hexachlorocyclopentadiene	2023-03	ug/L					< 10			< 10							
Hexachloroethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Hexachloroethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Hexachloroethane	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Hexachloroethane	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachloroethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachloroethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	**0.135 J**	< 10.0										
Hexachloroethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Hexachloroethane	2011-09	ug/L				< 10.0	< 10.0										
Hexachloroethane	2012-03	ug/L				< 10.0	< 10.0										
Hexachloroethane	2012-09	ug/L				< 10.0	< 10.0										
Hexachloroethane	2013-03	ug/L					< 11.8										
Hexachloroethane	2013-09	ug/L				< 11.0											
Hexachloroethane	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Hexachloroethane	2015-10	ug/L	< 11.8		< 10.3					< 11							
Hexachloroethane	2016-03	ug/L					< 10.9			< 11.2							
Hexachloroethane	2016-06	ug/L															
Hexachloroethane	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Hexachloroethane	2023-01	ug/L															
Hexachloroethane	2023-03	ug/L					< 10			< 10							
Hexachloropropene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Hexachloropropene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Hexachloropropene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Hexachloropropene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachloropropene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Hexachloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Hexachloropropene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Hexachloropropene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Hexachloropropene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Hexachloropropene	2016-03	ug/L					< 10.9			< 11.2							
Hexachloropropene	2016-06	ug/L															
Hexachloropropene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Hexachloropropene	2023-01	ug/L															
Hexachloropropene	2023-03	ug/L					< 10			< 10							
Indeno(1,2,3-cd)pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Indeno(1,2,3-cd)pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Indeno(1,2,3-cd)pyrene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Indeno(1,2,3-cd)pyrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	**0.299 J**	< 10.0	< 10.0								
Indeno(1,2,3-cd)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Indeno(1,2,3-cd)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Indeno(1,2,3-cd)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Indeno(1,2,3-cd)pyrene	2011-09	ug/L					< 10.0										
Indeno(1,2,3-cd)pyrene	2012-03	ug/L					< 10.0										
Indeno(1,2,3-cd)pyrene	2012-09	ug/L					< 10.0										
Indeno(1,2,3-cd)pyrene	2013-03	ug/L					< 11.8										
Indeno(1,2,3-cd)pyrene	2013-09	ug/L					< 10.6										
Indeno(1,2,3-cd)pyrene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Indeno(1,2,3-cd)pyrene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Indeno(1,2,3-cd)pyrene	2016-03	ug/L					< 10.9			< 11.2							
Indeno(1,2,3-cd)pyrene	2016-06	ug/L															
Indeno(1,2,3-cd)pyrene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Indeno(1,2,3-cd)pyrene	2023-01	ug/L															
Indeno(1,2,3-cd)pyrene	2023-03	ug/L					< 10			< 10							

Table 14
Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Upper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Iodomethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2009-07	ug/L	< 20	< 20.0		< 10		< 20	< 10	< 10	< 10	< 20	< 20.0	< 20.0	< 20	< 10	< 20	
Iodomethane	2009-09	ug/L	< 10	< 10.0		< 20.0		< 20.0	< 10.0	< 50.0	< 20.0	< 10	< 10	< 10	< 10	< 10	< 10	
Iodomethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2011-09	ug/L	< 20.0	< 50.0	< 50.0	< 50.0	< 10.0	< 50.0	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 20.0	< 20.0	< 10.0	< 10.0
Iodomethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10
Iodomethane	2013-05	ug/L			< 10.0			< 10.0										
Iodomethane	2013-09	ug/L	**5.23 J**	< 10.0	< 10.0	< 10.0	< 10.0	**5.11 J**	**5.11 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2013-11	ug/L																
Iodomethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2014-06	ug/L																
Iodomethane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Iodomethane	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Iodomethane	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
Iodomethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2016-06	ug/L			< 10	< 10												
Iodomethane	2016-08	ug/L	< 10	< 10	< 10	**3.45 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2017-11	ug/L																
Iodomethane	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2018-06	ug/L																
Iodomethane	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Iodomethane	2018-09	ug/L					< 10						< 10	< 10				
Iodomethane	2018-11	ug/L																
Iodomethane	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2020-04	ug/L				< 10	< 10		< 10									
Iodomethane	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2021-03	ug/L							< 10	< 10	< 10	< 10						
Iodomethane	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2022-03	ug/L							< 10	< 10	< 10	< 10						
Iodomethane	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2023-01	ug/L															< 10	
Iodomethane	2023-03	ug/L							< 10	< 10	< 10	< 10					< 10	
Iodomethane	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isobutanol	2008-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isobutanol	2009-03	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isobutanol	2010-09	mg/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Isobutanol	2015-09	mg/L	< 10	< 10			< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Isobutanol	2015-10	mg/L							< 10	< 10					< 10			< 10
Isobutanol	2016-03	mg/L			< 10	< 10												
Isobutanol	2016-06	mg/L			< 10	< 10												
Isobutanol	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isobutanol	2023-01	mg/L															< 10	
Isobutanol	2023-03	mg/L															< 10	
Isodrin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Isodrin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isodrin	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Isodrin	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Iodomethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Iodomethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Iodomethane	2009-07	ug/L	< 20.0	< 20	< 10	< 10	< 20.0										
Iodomethane	2009-09	ug/L	< 10.0	< 100	< 10.0	< 20.0	< 10.0										
Iodomethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Iodomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Iodomethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Iodomethane	2011-09	ug/L	< 50.0	< 50.0	< 50.0	< 20.0	< 20.0	< 50.0	< 50.0								
Iodomethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Iodomethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Iodomethane	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								
Iodomethane	2013-05	ug/L															
Iodomethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 50	< 10	< 10	< 10	< 10		
Iodomethane	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Iodomethane	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
Iodomethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Iodomethane	2016-06	ug/L															
Iodomethane	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Iodomethane	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Iodomethane	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Iodomethane	2017-11	ug/L														< 10	**7.36 J**
Iodomethane	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2018-06	ug/L														< 10	< 10
Iodomethane	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
Iodomethane	2018-09	ug/L													< 10	< 10	< 10
Iodomethane	2018-11	ug/L														< 10	< 10
Iodomethane	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
Iodomethane	2020-04	ug/L			< 10									< 10			
Iodomethane	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Iodomethane	2021-03	ug/L		< 10			< 10			< 10							
Iodomethane	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Iodomethane	2022-03	ug/L		< 10			< 10			< 10							
Iodomethane	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Iodomethane	2023-01	ug/L															
Iodomethane	2023-03	ug/L		< 10			< 10			< 10							
Iodomethane	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Isobutanol	2008-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Isobutanol	2009-03	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Isobutanol	2010-09	mg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Isobutanol	2015-09	mg/L		< 10		< 10	< 10	< 10	< 10								
Isobutanol	2015-10	mg/L	< 10		< 10					< 10							
Isobutanol	2016-03	mg/L					< 10			< 10							
Isobutanol	2016-06	mg/L															
Isobutanol	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10							
Isobutanol	2023-01	mg/L															
Isobutanol	2023-03	mg/L					< 10			< 10							
Isodrin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Isodrin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Isodrin	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Isodrin	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Isodrin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Isodrin	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Isodrin	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Isodrin	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Isodrin	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Isodrin	2016-03	ug/L			< 11.1	< 11.2												
Isodrin	2016-06	ug/L			< 11.4	< 11.4												
Isodrin	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Isodrin	2023-01	ug/L															< 10.9	
Isodrin	2023-03	ug/L															< 10.4	
Isophorone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Isophorone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isophorone	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Isophorone	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Isophorone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Isophorone	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Isophorone	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Isophorone	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Isophorone	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Isophorone	2016-03	ug/L			< 11.1	< 11.2												
Isophorone	2016-06	ug/L			< 11.4	< 11.4												
Isophorone	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Isophorone	2023-01	ug/L															< 10.9	
Isophorone	2023-03	ug/L															< 10.4	
Isosafrole	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Isosafrole	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isosafrole	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Isosafrole	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Isosafrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Isosafrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Isosafrole	2011-03	ug/L	**0.182 J**	**0.183 J**	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Isosafrole	2011-09	ug/L	< 10.0	< 10.0														
Isosafrole	2012-03	ug/L	< 10.0	< 10.0														
Isosafrole	2012-09	ug/L	< 10.0	< 10.0														
Isosafrole	2013-03	ug/L	< 10.9	< 10.2														
Isosafrole	2013-09	ug/L	< 11.0	< 10.2														
Isosafrole	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Isosafrole	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Isosafrole	2016-03	ug/L			< 11.1	< 11.2												
Isosafrole	2016-06	ug/L			< 11.4	< 11.4												
Isosafrole	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Isosafrole	2023-01	ug/L															< 10.9	
Isosafrole	2023-03	ug/L															< 10.4	
Kepone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Kepone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Kepone	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Kepone	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Kepone	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0			< 20.0		< 20.0	< 20.0	< 20.0	< 22.5
Kepone	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Kepone	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 0.330	< 10.0	< 10.0	
Kepone	2011-09	ug/L																
Kepone	2012-03	ug/L																
Kepone	2012-09	ug/L																
Kepone	2013-03	ug/L																
Kepone	2013-09	ug/L																
Kepone	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Kepone	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Isodrin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Isodrin	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Isodrin	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Isodrin	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Isodrin	2015-10	ug/L	< 11.8		< 10.3					< 11							
Isodrin	2016-03	ug/L					< 10.9			< 11.2							
Isodrin	2016-06	ug/L															
Isodrin	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Isodrin	2023-01	ug/L															
Isodrin	2023-03	ug/L					< 10			< 10							
Isophorone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Isophorone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Isophorone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Isophorone	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Isophorone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Isophorone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Isophorone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Isophorone	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Isophorone	2015-10	ug/L	< 11.8		< 10.3					< 11							
Isophorone	2016-03	ug/L					< 10.9			< 11.2							
Isophorone	2016-06	ug/L															
Isophorone	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Isophorone	2023-01	ug/L															
Isophorone	2023-03	ug/L					< 10			< 10							
Isosafrole	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Isosafrole	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Isosafrole	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Isosafrole	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Isosafrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Isosafrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Isosafrole	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Isosafrole	2011-09	ug/L					< 10.0										
Isosafrole	2012-03	ug/L					< 10.0										
Isosafrole	2012-09	ug/L					< 10.0										
Isosafrole	2013-03	ug/L					< 11.8										
Isosafrole	2013-09	ug/L															
Isosafrole	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Isosafrole	2015-10	ug/L	< 11.8		< 10.3					< 11							
Isosafrole	2016-03	ug/L					< 10.9			< 11.2							
Isosafrole	2016-06	ug/L															
Isosafrole	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Isosafrole	2023-01	ug/L															
Isosafrole	2023-03	ug/L					< 10			< 10							
Kepone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Kepone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Kepone	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Kepone	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Kepone	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0								
Kepone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Kepone	2011-03	ug/L	< 10.0	**1.63 J**	**0.614 J**	< 10.0	< 10.0	< 10.0									
Kepone	2011-09	ug/L		< 10.0	< 10.0		< 10.0										
Kepone	2012-03	ug/L		< 10.0	< 10.0		< 10.0										
Kepone	2012-09	ug/L		< 10.0	< 10.0		< 10.0										
Kepone	2013-03	ug/L		< 10.5	< 10.6		< 11.8										
Kepone	2013-09	ug/L		< 10.1	< 11.0												
Kepone	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Kepone	2015-10	ug/L	< 11.8		< 10.3					< 11							

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Kepone	2016-03	ug/L			< 11.1	< 11.2												
Kepone	2016-06	ug/L			< 11.4	< 11.4												
Kepone	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Kepone	2023-01	ug/L															< 10.9	
Kepone	2023-03	ug/L															< 10.4	
Lead	2008-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.03**	**0.01**	**0.01**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	2009-03	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.01**	**0.01**	< 0.01	**0.01**	**0.01**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.01**
Lead	2009-07	mg/L	< 0.01	**0.07**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	2009-09	mg/L	< 0.004	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Lead	2010-03	mg/L	< 0.00400	**0.00431**	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00480**	< 0.00400	< 0.00400
Lead	2010-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00691**
Lead	2011-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2011-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2012-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00410**	< 0.00400
Lead	2012-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00676**	< 0.00400
Lead	2013-03	mg/L	**0.00118 J**	**0.0134**		**0.00172 J**	< 0.00400		< 0.004 J	< 0.004 J	< 0.004	< 0.004 J	< 0.004	< 0.004	< 0.00400	< 0.00400	**0.00661**	**0.00914**
Lead	2013-05	mg/L			**0.000980 J**			< 0.00400										
Lead	2013-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00184 J**	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.000949 J**	**0.00295 J**	**0.00477**
Lead	2013-11	mg/L																
Lead	2014-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00144 J**	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.00719**	< 0.00400	**0.00440**
Lead	2014-06	mg/L																
Lead	2014-09	mg/L	**0.000557**	**0.000787**	**0.000259 J**	**0.000142 J**	**0.000301 J**	**0.000826**	**0.000286 J**	**0.000923**	**0.000158 J**	**0.000498 J**	**0.000199 J**	**0.000183 J**	**0.000155 J**	**0.000968**	**0.0052**	**0.000394 J**
Lead	2015-03	mg/L	**0.000866**	**0.0158**	**0.000407 J**	**0.000259 J**	**0.000182 J**	**0.000218 J**	**0.000685**	< 0.000500	**0.000151 J**	**0.000159 J**	**0.000100 J**	< 0.000500	**0.000159 J**	**0.000978**	**0.00024 J**	< 0.000500
Lead	2015-09	mg/L	**0.000229 J**	**0.00421**		**0.000107 J**	**0.000279 J**	< 0.0005			**0.000361 J**	< 0.0005	**0.000642**	< 0.0005		**0.000369 J**	< 0.0005	
Lead	2015-10	mg/L			**0.000305 J**				**0.000252 J**	< 0.0005					**0.00025 J**			< 0.0005
Lead	2016-03	mg/L	< 0.0005	**0.000373 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000308 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00058**	**0.000221 J**	< 0.0005
Lead	2016-06	mg/L			< 0.0005 J	< 0.0005												
Lead	2016-08	mg/L	**0.000565**	**0.000589**	< 0.0005	< 0.0005	**0.000279 J**	**0.000256 J**	**0.00165**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00115**	< 0.0005	< 0.0005
Lead	2017-03	mg/L	**0.000841**	**0.00042 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000621**	< 0.0005	**0.000702**	< 0.0005	< 0.0005
Lead	2017-08	mg/L	< 0.0005	**0.000491 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000447 J**	< 0.0005	< 0.0005
Lead	2017-11	mg/L																
Lead	2018-03	mg/L	**0.000499 J**	**0.00449**	< 0.0005	< 0.0005	**0.000382 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000838**	< 0.0005	< 0.0005
Lead	2018-06	mg/L																
Lead	2018-08	mg/L	< 0.0005	**0.000823**	< 0.0005	< 0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	**0.000367 J**	< 0.0005	< 0.0005
Lead	2018-09	mg/L					**0.000373 J**						< 0.0005	< 0.0005				
Lead	2018-11	mg/L																
Lead	2019-03	mg/L	< 0.0005	**0.000434 J**	**0.000285 J**	< 0.0005	< 0.0005	< 0.0005	**0.000281 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2019-08	mg/L	**0.000348 J**	**0.00128**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2020-03	mg/L	**0.000822**	**0.000795**	< 0.0005			< 0.0005		< 0.0005	< 0.002	< 0.0005	< 0.0005	< 0.002	< 0.0005	**0.000516**	< 0.0005	< 0.0005
Lead	2020-04	mg/L				< 0.0005	< 0.0005		< 0.0005									
Lead	2020-08	mg/L	**0.00093**	< 0.0005	**0.000147 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000152 J**	< 0.0005	**0.00038 J**	< 0.0005	< 0.0005
Lead	2021-03	mg/L							< 0.0005	< 0.0005	< 0.0005	< 0.0005						
Lead	2021-08	mg/L	**0.000275 J**	**0.00195**	**0.000346 J**	< 0.0005	**0.000222 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000256 J**	< 0.0005	< 0.0005
Lead	2022-03	mg/L							< 0.0005	< 0.002	< 0.0005	< 0.0005						
Lead	2022-08	mg/L	**0.000741 J**	**0.00058**	< 0.0005	**0.0004 J**	**0.000387 J**		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000544**	< 0.0005	< 0.0005
Lead	2023-01	mg/L															< 0.0005	
Lead	2023-03	mg/L							< 0.0005	< 0.0005	**0.000381 J**	< 0.0005					**0.000286 J**	
Lead	2023-08	mg/L	**0.000974**	**0.00201**	< 0.0005	< 0.0005	**0.00076**		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00058**	< 0.0005	< 0.0005
Lindane (BHC, Gamma-)	2008-08	ug/L	< 0.053			< 0.054	< 0.062	< 0.052	< 0.061	< 0.047	< 0.053	< 0.053	< 0.056	< 0.056	< 0.058	< 0.053		< 0.053
Lindane (BHC, Gamma-)	2008-09	ug/L		< 0.016	< 0.016												< 0.016	
Lindane (BHC, Gamma-)	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Lindane (BHC, Gamma-)	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Lindane (BHC, Gamma-)	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Lindane (BHC, Gamma-)	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Lindane (BHC, Gamma-)	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Lindane (BHC, Gamma-)	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Lindane (BHC, Gamma-)	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Kepone	2016-03	ug/L					< 10.9			< 11.2							
Kepone	2016-06	ug/L															
Kepone	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Kepone	2023-01	ug/L															
Kepone	2023-03	ug/L					< 10			< 10							
Lead	2008-08	mg/L	**0.03**	< 0.01	< 0.01	< 0.01	~~< 0.01~~	**0.01**	< 0.01								
Lead	2009-03	mg/L	**0.02**	**0.06**	< 0.01	**0.01**	~~< 0.01~~	< 0.01	**0.01**								
Lead	2009-07	mg/L	**0.03**	< 0.01	< 0.01	< 0.01	~~< 0.01~~	< 0.01	**0.01**								
Lead	2009-09	mg/L	< 0.00400	< 0.00400	**0.00881**	< 0.00400	< 0.00400	< 0.00400									
Lead	2010-03	mg/L	< 0.00400	< 0.00400	< 0.00400	**0.00656**	< 0.00400	**0.0129**	**0.00503**								
Lead	2010-09	mg/L	< 0.00400	< 0.00400	< 0.00400	**0.00637**	< 0.00400	< 0.00400	< 0.00400								
Lead	2011-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	**0.0101**	**0.0208**								
Lead	2011-09	mg/L	< 0.00400	< 0.00400	< 0.00400	**0.00627**	< 0.00400	< 0.00400	**0.0411**								
Lead	2012-03	mg/L	< 0.00400	< 0.00400	< 0.00400	**0.00424**	< 0.00400	< 0.00400	**0.0160**								
Lead	2012-09	mg/L	< 0.00400	< 0.00400	< 0.00400	**0.0128**	< 0.00400	**0.00436**	**0.00802**								
Lead	2013-03	mg/L	**0.00657**	< 0.004 J	**0.00208 J**		**0.000925 J**	**0.00261 J**	**0.00609**								
Lead	2013-05	mg/L															
Lead	2013-09	mg/L	**0.00145 J**	< 0.00400	< 0.00400	**0.00245 J**	< 0.00400	**0.00117 J**	**0.00342 J**	~~**0.00297 J**~~	< 0.00400	**0.00432**	**0.00142 J**	**0.0138**	**0.00461**		
Lead	2013-11	mg/L								~~**0.00288 J**~~	**0.00111 J**	**0.00194 J**	< 0.00400	**0.0244**	< 0.00400		
Lead	2014-03	mg/L	< 0.00400	< 0.00400	< 0.00400	**0.0648**	< 0.00400	**0.00489**	**0.00584**	~~< 0.00400~~	< 0.00400	< 0.00400	< 0.00400	**0.00545**	< 0.00400		
Lead	2014-06	mg/L								~~**0.00121 J**~~	**0.00114 J**	**0.00122 J**	< 0.00400	**0.00730**	< 0.00400		
Lead	2014-09	mg/L	**0.00101**	**0.000579**	**0.000191 J**	**0.00252**	**0.000354 J**	**0.00325**	**0.00248**	~~**0.000456 J**~~	**0.000498 J**	**0.000913**	**0.000211 J**	**0.00324**	**0.00066**		
Lead	2015-03	mg/L	**0.00114**	**0.000354 J**	< 0.000500	**0.000512**	< 0.0005	**0.00408**	**0.000302 J**	**0.000731**	< 0.000500	< 0.000500	**0.000102 J**	< 0.000500	< 0.000500		
Lead	2015-09	mg/L		**0.000197 J**		**0.000548**	**0.00019 J**	**0.000447 J**	< 0.0005								
Lead	2015-10	mg/L	**0.000327 J**		**0.000199 J**					**0.00695**	< 0.0005	< 0.0005	< 0.0005	**0.00115**	< 0.0005		
Lead	2016-03	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.00041 J**	**0.000324 J**	**0.000223 J**	< 0.0005	< 0.0005	**0.000291 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005		
Lead	2016-06	mg/L															
Lead	2016-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000482 J**	< 0.0005	**0.000804**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000486 J**		
Lead	2017-03	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.0005**	< 0.0005	< 0.0005	**0.000391 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		
Lead	2017-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000366 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		
Lead	2017-11	mg/L														< 0.0005	< 0.0005
Lead	2018-03	mg/L	< 0.0005	< 0.0005	**0.00076**	**0.000337 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000484 J**
Lead	2018-06	mg/L														< 0.0005	< 0.0005
Lead	2018-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000365 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005	< 0.0005			
Lead	2018-09	mg/L													< 0.0005	< 0.0005	< 0.0005
Lead	2018-11	mg/L														< 0.0005	< 0.0005
Lead	2019-03	mg/L	< 0.0005	**0.000822**	< 0.0005	**0.000497 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2019-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2020-03	mg/L	< 0.0005	**0.000459 J**		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0003 J**	< 0.0005	< 0.0005		< 0.0005	**0.000737**	< 0.0005
Lead	2020-04	mg/L			< 0.0005									< 0.0005			
Lead	2020-08	mg/L	< 0.0005	< 0.0005	**0.000412 J**	**0.000217 J**	**0.000118 J**	< 0.0005	< 0.0005	**0.000347 J**			< 0.0005	< 0.0005	< 0.0005		< 0.0005
Lead	2021-03	mg/L		**0.000232 J**			< 0.0005			**0.000931**							
Lead	2021-08	mg/L	**0.000272 J**	< 0.0005	**0.000251 J**	**0.000384 J**	**0.000232 J**	< 0.0005	< 0.0005	< 0.0005			< 0.0005	< 0.0005	< 0.0005		< 0.0005
Lead	2022-03	mg/L		< 0.002			< 0.0005			< 0.0005							
Lead	2022-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.00025 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	< 0.0005	< 0.0005		< 0.0005
Lead	2023-01	mg/L															
Lead	2023-03	mg/L		**0.000534**			< 0.0005			< 0.0005							
Lead	2023-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000288 J**	< 0.0005			< 0.0005	< 0.0005	< 0.0005		< 0.0005
Lindane (BHC, Gamma-)	2008-08	ug/L		< 0.047	< 0.051	< 0.055											
Lindane (BHC, Gamma-)	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Lindane (BHC, Gamma-)	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Lindane (BHC, Gamma-)	2009-07	ug/L					< 0.0320		< 0.0320								
Lindane (BHC, Gamma-)	2009-09	ug/L					< 0.0320		< 0.0320								
Lindane (BHC, Gamma-)	2010-03	ug/L					< 0.0320		< 0.0320								
Lindane (BHC, Gamma-)	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Lindane (BHC, Gamma-)	2011-03	ug/L					< 0.0320										
Lindane (BHC, Gamma-)	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	< 0.0356	< 0.0352								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Lindane (BHC, Gamma-)	2015-10	ug/L							**0.00433 J**	**0.00315 J**					< 0.0386			< 0.0368
Lindane (BHC, Gamma-)	2016-03	ug/L			< 0.032	< 0.0356												
Lindane (BHC, Gamma-)	2016-06	ug/L			< 0.0364	**0.00405 J**												
Lindane (BHC, Gamma-)	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	**0.00525 J**	**0.008 J**	< 0.0376	**0.00462 J**	**0.00334 J**	**0.00234 J**	< 0.0395	< 0.039	< 0.0381	< 0.04
Lindane (BHC, Gamma-)	2023-01	ug/L															< 0.0727	
Lindane (BHC, Gamma-)	2023-03	ug/L															< 0.0667	
m/p-Cresol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	**10.3**
m/p-Cresol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
m/p-Cresol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
m/p-Cresol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
m/p-Cresol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
m/p-Cresol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
m/p-Cresol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
m/p-Cresol	2014-03	ug/L																< 11.9
m/p-Cresol	2014-09	ug/L																< 12.3
m/p-Cresol	2015-03	ug/L																< 10.6
m/p-Cresol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	**1.45 J**	< 10.9	< 11.2		< 11.4	< 10.5	
m/p-Cresol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
m/p-Cresol	2016-03	ug/L			< 11.1	< 11.2												< 10.9
m/p-Cresol	2016-06	ug/L			< 11.4	< 11.4												
m/p-Cresol	2016-08	ug/L																< 11.6
m/p-Cresol	2017-03	ug/L																< 11.8
m/p-Cresol	2017-08	ug/L																< 11.1
m/p-Cresol	2018-03	ug/L																< 11.1
m/p-Cresol	2018-08	ug/L																< 11.1
m/p-Cresol	2019-03	ug/L																< 12
m/p-Cresol	2019-08	ug/L																< 10.8
m/p-Cresol	2020-03	ug/L																< 12.5
m/p-Cresol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
m/p-Cresol	2021-03	ug/L																
m/p-Cresol	2021-08	ug/L																< 11.5
m/p-Cresol	2022-08	ug/L																
m/p-Cresol	2023-01	ug/L															< 10.9	
m/p-Cresol	2023-03	ug/L															< 10.4	
m/p-Cresol	2023-08	ug/L																< 11.4
Mercury	2008-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Mercury	2009-03	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Mercury	2010-09	mg/L	< 0.000200	< 0.000200	< 0.000200			< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200		< 0.000200	< 0.000200	< 0.000200	< 0.000200	
Mercury	2011-03	mg/L	< 0.000200	< 0.000200	< 0.000200			< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	
Mercury	2013-09	mg/L																
Mercury	2013-11	mg/L																
Mercury	2014-03	mg/L																
Mercury	2014-06	mg/L																
Mercury	2014-09	mg/L																
Mercury	2015-03	mg/L																
Mercury	2015-09	mg/L	< 0.0002	< 0.0002			< 0.0002	< 0.0002			< 0.0002	< 0.0002	< 0.0002	< 0.0002		< 0.0002	< 0.0002	
Mercury	2015-10	mg/L							< 0.0002	< 0.0002					< 0.0002			< 0.0002
Mercury	2016-03	mg/L			< 0.0002	< 0.0002												
Mercury	2016-06	mg/L			< 0.0002	< 0.0002												
Mercury	2017-03	mg/L																
Mercury	2017-08	mg/L																
Mercury	2020-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Mercury	2023-01	mg/L															< 0.0002	
Mercury	2023-03	mg/L															< 0.0002	
Methacrylonitrile	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methacrylonitrile	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methacrylonitrile	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Lindane (BHC, Gamma-)	2015-10	ug/L	< 0.0372		< 0.0356					< 0.0372							
Lindane (BHC, Gamma-)	2016-03	ug/L					**0.00674 J**			< 0.0356							
Lindane (BHC, Gamma-)	2016-06	ug/L															
Lindane (BHC, Gamma-)	2020-08	ug/L	< 0.039	**0.00926 J**	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Lindane (BHC, Gamma-)	2023-01	ug/L															
Lindane (BHC, Gamma-)	2023-03	ug/L					< 0.0696			< 0.064							
m/p-Cresol	2008-08	ug/L	< 10	< 10	< 10	**9.02 J**	< 10	< 11.1	< 10								
m/p-Cresol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
m/p-Cresol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
m/p-Cresol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
m/p-Cresol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
m/p-Cresol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
m/p-Cresol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
m/p-Cresol	2014-03	ug/L					< 11.2										
m/p-Cresol	2014-09	ug/L					< 11										
m/p-Cresol	2015-03	ug/L					< 11										
m/p-Cresol	2015-09	ug/L		< 11		< 11.2	**404**	< 11.2	< 11.2								
m/p-Cresol	2015-10	ug/L	< 11.8		< 10.3					< 11							
m/p-Cresol	2016-03	ug/L					< 10.9			< 11.2							
m/p-Cresol	2016-06	ug/L															
m/p-Cresol	2016-08	ug/L					< 11.8			< 10.6							
m/p-Cresol	2017-03	ug/L					< 10.5			< 10.9							
m/p-Cresol	2017-08	ug/L					< 10.6			< 10.4							
m/p-Cresol	2018-03	ug/L					< 12.5			< 12.3							
m/p-Cresol	2018-08	ug/L					< 13.2			< 10.6							
m/p-Cresol	2019-03	ug/L					< 13			< 11.1							
m/p-Cresol	2019-08	ug/L					< 10.8			< 10.9							
m/p-Cresol	2020-03	ug/L					< 13.7			< 12.5							
m/p-Cresol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
m/p-Cresol	2021-03	ug/L					< 11.1			< 12.2							
m/p-Cresol	2021-08	ug/L					< 12.5			< 10.8							
m/p-Cresol	2022-08	ug/L					~~< 10.4 R~~			~~< 10 R~~							
m/p-Cresol	2023-01	ug/L															
m/p-Cresol	2023-03	ug/L					< 10			< 10							
m/p-Cresol	2023-08	ug/L					< 9.62			< 11.4							
Mercury	2008-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002								
Mercury	2009-03	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002								
Mercury	2010-09	mg/L	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200										
Mercury	2011-03	mg/L	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200	< 0.000200									
Mercury	2013-09	mg/L								~~< 0.000200~~							
Mercury	2013-11	mg/L								~~< 0.000200 J~~							
Mercury	2014-03	mg/L					< 0.000200			~~< 0.000200~~							
Mercury	2014-06	mg/L								~~< 0.000200~~							
Mercury	2014-09	mg/L					< 0.0002			~~< 0.0002~~							
Mercury	2015-03	mg/L					< 0.0002			< 0.000200							
Mercury	2015-09	mg/L		< 0.0002		< 0.0002	< 0.0002	< 0.0002	< 0.0002								
Mercury	2015-10	mg/L	< 0.0002		< 0.0002					< 0.0002							
Mercury	2016-03	mg/L					< 0.0002			< 0.0002							
Mercury	2016-06	mg/L															
Mercury	2017-03	mg/L					< 0.0002			< 0.0002							
Mercury	2017-08	mg/L					< 0.0002			< 0.0002							
Mercury	2020-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002							
Mercury	2023-01	mg/L															
Mercury	2023-03	mg/L					< 0.0002			< 0.0002							
Methacrylonitrile	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Methacrylonitrile	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Methacrylonitrile	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Methacrylonitrile	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Methacrylonitrile	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Methacrylonitrile	2010-09	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	
Methacrylonitrile	2011-03	ug/L	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Methacrylonitrile	2012-09	ug/L														< 1.00		
Methacrylonitrile	2015-09	ug/L	< 10	< 10			< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Methacrylonitrile	2015-10	ug/L							< 10	< 10					< 10			< 10
Methacrylonitrile	2016-03	ug/L			< 10	< 10												
Methacrylonitrile	2016-06	ug/L			< 10	< 10												
Methacrylonitrile	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methacrylonitrile	2023-01	ug/L															< 10	
Methacrylonitrile	2023-03	ug/L															< 10	
Methapyrilene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Methapyrilene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methapyrilene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Methapyrilene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Methapyrilene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Methapyrilene	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Methapyrilene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Methapyrilene	2012-03	ug/L																
Methapyrilene	2012-09	ug/L																
Methapyrilene	2013-03	ug/L																
Methapyrilene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Methapyrilene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Methapyrilene	2016-03	ug/L			< 11.1	< 11.2												
Methapyrilene	2016-06	ug/L			< 11.4	< 11.4												
Methapyrilene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Methapyrilene	2023-01	ug/L															< 10.9	
Methapyrilene	2023-03	ug/L															< 10.4	
Methoxychlor	2008-08	ug/L	< 0.11			< 0.11	< 0.12	< 0.1	< 0.12	< 0.093	< 0.11	< 0.11	< 0.11	< 0.11	< 0.12	< 0.11		< 0.11
Methoxychlor	2008-09	ug/L		< 0.016	< 0.016												< 0.16	
Methoxychlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Methoxychlor	2009-07	ug/L			< 0.0320									< 0.0320			< 0.032	
Methoxychlor	2009-09	ug/L			< 0.0320									< 0.036			< 0.032	
Methoxychlor	2010-03	ug/L			< 0.0320									< 0.0320			< 0.0320	
Methoxychlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320			< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320		< 0.0320	< 0.0320	< 0.0320	< 0.0320	
Methoxychlor	2011-03	ug/L			< 0.0320				< 0.0320								< 0.0320	
Methoxychlor	2015-09	ug/L	< 0.036	< 0.0356			< 0.0352	< 0.0386			< 0.0337	< 0.0352	< 0.0333	< 0.036		< 0.0356	< 0.0376	
Methoxychlor	2015-10	ug/L							< 0.04	< 0.0372					< 0.0386			< 0.0368
Methoxychlor	2016-03	ug/L			**0.00274 J**	< 0.0356												
Methoxychlor	2016-06	ug/L			< 0.0364	< 0.0364												
Methoxychlor	2020-08	ug/L	< 0.04	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.0416	< 0.0376	< 0.0368	< 0.0386	< 0.0376	< 0.0395	< 0.039	< 0.0381	< 0.04
Methoxychlor	2023-01	ug/L															< 0.0727	
Methoxychlor	2023-03	ug/L															< 0.0667	
Methyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl Methacrylate	2009-07	ug/L	< 2	< 2.00		< 2		< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	
Methyl Methacrylate	2009-09	ug/L	< 2	< 2.00		< 2.00		< 2.00	< 2.00	< 10.0	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	
Methyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Methyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0			< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	
Methyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	
Methyl Methacrylate	2012-09	ug/L														< 2.00		
Methyl Methacrylate	2015-09	ug/L	< 2	< 2			< 2	< 2			< 2	< 2	< 2	< 2		< 2	< 2	
Methyl Methacrylate	2015-10	ug/L							< 2	< 2					< 2			< 2
Methyl Methacrylate	2016-03	ug/L			< 2	< 2												
Methyl Methacrylate	2016-06	ug/L			< 2	< 2												
Methyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Methacrylonitrile	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Methacrylonitrile	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Methacrylonitrile	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00										
Methacrylonitrile	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00									
Methacrylonitrile	2012-09	ug/L				< 1.00											
Methacrylonitrile	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Methacrylonitrile	2015-10	ug/L	< 10		< 10					< 10							
Methacrylonitrile	2016-03	ug/L					< 10			< 10							
Methacrylonitrile	2016-06	ug/L															
Methacrylonitrile	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10							
Methacrylonitrile	2023-01	ug/L															
Methacrylonitrile	2023-03	ug/L					< 10			< 10							
Methapyrilene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Methapyrilene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Methapyrilene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Methapyrilene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Methapyrilene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Methapyrilene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Methapyrilene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Methapyrilene	2012-03	ug/L					< 10.0										
Methapyrilene	2012-09	ug/L					< 10.0										
Methapyrilene	2013-03	ug/L					< 11.8										
Methapyrilene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Methapyrilene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Methapyrilene	2016-03	ug/L					< 10.9			< 11.2							
Methapyrilene	2016-06	ug/L															
Methapyrilene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Methapyrilene	2023-01	ug/L															
Methapyrilene	2023-03	ug/L					< 10			< 10							
Methoxychlor	2008-08	ug/L		< 0.093	< 0.1	< 0.11											
Methoxychlor	2008-09	ug/L	< 0.016				< 0.016	< 0.016	< 0.016								
Methoxychlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032								
Methoxychlor	2009-07	ug/L					< 0.0320		< 0.0320								
Methoxychlor	2009-09	ug/L					< 0.0320		< 0.0320								
Methoxychlor	2010-03	ug/L					< 0.0320		< 0.0320								
Methoxychlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320	< 0.0320										
Methoxychlor	2011-03	ug/L					< 0.0320										
Methoxychlor	2015-09	ug/L		< 0.0352		< 0.0356	< 0.0368	**0.00333 J**	< 0.0352								
Methoxychlor	2015-10	ug/L	< 0.0372		< 0.0356					**0.00279 J**							
Methoxychlor	2016-03	ug/L					< 0.0333			< 0.0356							
Methoxychlor	2016-06	ug/L															
Methoxychlor	2020-08	ug/L	< 0.039	< 0.0376	< 0.0337	< 0.0386	< 0.0438	< 0.0368	< 0.0356	< 0.0352							
Methoxychlor	2023-01	ug/L															
Methoxychlor	2023-03	ug/L					< 0.0696			< 0.064							
Methyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Methyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Methyl Methacrylate	2009-07	ug/L	< 2.00	< 2	< 2	< 2	< 2.00										
Methyl Methacrylate	2009-09	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00										
Methyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Methyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0										
Methyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00									
Methyl Methacrylate	2012-09	ug/L				< 2.00											
Methyl Methacrylate	2015-09	ug/L		< 2		< 2	< 2	< 2	< 2								
Methyl Methacrylate	2015-10	ug/L	< 2		< 2					< 2							
Methyl Methacrylate	2016-03	ug/L					< 2			< 2							
Methyl Methacrylate	2016-06	ug/L															
Methyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2							

Table 14
Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Upper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Methyl Methacrylate	2023-01	ug/L															< 2	
Methyl Methacrylate	2023-03	ug/L															< 2	
Methyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Methyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl Methanesulfonate	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Methyl Methanesulfonate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Methyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Methyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Methyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Methyl Methanesulfonate	2011-09	ug/L																
Methyl Methanesulfonate	2012-03	ug/L																
Methyl Methanesulfonate	2012-09	ug/L																
Methyl Methanesulfonate	2013-03	ug/L																
Methyl Methanesulfonate	2013-09	ug/L																
Methyl Methanesulfonate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Methyl Methanesulfonate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Methyl Methanesulfonate	2016-03	ug/L			< 11.1	< 11.2												
Methyl Methanesulfonate	2016-06	ug/L			< 11.4	< 11.4												
Methyl Methanesulfonate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Methyl Methanesulfonate	2023-01	ug/L															< 10.9	
Methyl Methanesulfonate	2023-03	ug/L															< 10.4	
Methyl Parathion	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Methyl Parathion	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl Parathion	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Methyl Parathion	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Methyl Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Methyl Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Methyl Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Methyl Parathion	2011-09	ug/L										< 10.0						
Methyl Parathion	2012-03	ug/L																
Methyl Parathion	2012-09	ug/L																
Methyl Parathion	2013-03	ug/L																
Methyl Parathion	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Methyl Parathion	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Methyl Parathion	2016-03	ug/L			< 11.1	< 11.2												
Methyl Parathion	2016-06	ug/L			< 11.4	< 11.4												
Methyl Parathion	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Methyl Parathion	2023-01	ug/L															< 10.9	
Methyl Parathion	2023-03	ug/L															< 10.4	
Methylene Chloride	2008-08	ug/L	< 10	< 10	< 10	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	< 10	< 10	< 10	< 10	< 10
Methylene Chloride	2009-03	ug/L	**7.55**	< 5	< 5	**7.24**	< 5	< 5	< 5	< 5	< 5	**6.04**	< 5	< 5	**5.43**	< 5	< 5	< 5
Methylene Chloride	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
Methylene Chloride	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
Methylene Chloride	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2013-03	ug/L	< 5.00	< 5		< 5.00	< 5.00		< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5
Methylene Chloride	2013-05	ug/L			< 5.00 J			< 5.00 J										
Methylene Chloride	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**0.187 J**	**0.194 J**
Methylene Chloride	2013-11	ug/L																
Methylene Chloride	2014-03	ug/L	< 5.00 J	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00 J	< 5.00 J	< 5.00 J
Methylene Chloride	2014-06	ug/L																
Methylene Chloride	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2015-03	ug/L	< 5	< 5	< 5.00	< 5.00	< 5.00 J	< 5.00	< 5.00	< 5.00 J	< 5	< 5	< 5.00 J	< 5.00 J	< 5	< 5 J	< 5	< 5.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Methyl Methacrylate	2023-01	ug/L															
Methyl Methacrylate	2023-03	ug/L					< 2			< 2							
Methyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Methyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Methyl Methanesulfonate	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Methyl Methanesulfonate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Methyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	**0.346 J**	< 10.0	< 10.0	< 10.0	< 10.0								
Methyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Methyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Methyl Methanesulfonate	2011-09	ug/L			< 10.0		< 10.0										
Methyl Methanesulfonate	2012-03	ug/L			< 10.0		< 10.0										
Methyl Methanesulfonate	2012-09	ug/L			< 10.0	< 10.0	< 10.0										
Methyl Methanesulfonate	2013-03	ug/L			< 10.6		< 11.8										
Methyl Methanesulfonate	2013-09	ug/L			< 11.0												
Methyl Methanesulfonate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Methyl Methanesulfonate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Methyl Methanesulfonate	2016-03	ug/L					< 10.9			< 11.2							
Methyl Methanesulfonate	2016-06	ug/L															
Methyl Methanesulfonate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Methyl Methanesulfonate	2023-01	ug/L															
Methyl Methanesulfonate	2023-03	ug/L					< 10			< 10							
Methyl Parathion	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Methyl Parathion	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Methyl Parathion	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Methyl Parathion	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Methyl Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Methyl Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Methyl Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Methyl Parathion	2011-09	ug/L					< 10.0										
Methyl Parathion	2012-03	ug/L					< 10.0										
Methyl Parathion	2012-09	ug/L					< 10.0										
Methyl Parathion	2013-03	ug/L					< 11.8										
Methyl Parathion	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Methyl Parathion	2015-10	ug/L	< 11.8		< 10.3					< 11							
Methyl Parathion	2016-03	ug/L					**0.877 J**			< 11.2							
Methyl Parathion	2016-06	ug/L															
Methyl Parathion	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Methyl Parathion	2023-01	ug/L															
Methyl Parathion	2023-03	ug/L					< 10			< 10							
Methylene Chloride	2008-08	ug/L	< 10	< 5	< 5	< 5	< 10	< 10	< 10								
Methylene Chloride	2009-03	ug/L	**5.17**	< 5	**6.07**	**6.19**	< 5	< 5	< 5								
Methylene Chloride	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
Methylene Chloride	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
Methylene Chloride	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2013-03	ug/L	< 5	< 5	< 125		< 5.00	< 5	< 5								
Methylene Chloride	2013-05	ug/L															
Methylene Chloride	2013-09	ug/L	**0.319 J**	< 5.00	< 5.00	< 5.00	< 5.00	**0.225 J**	**0.208 J**		< 5.00	< 5.00	< 5.00	< 5.00	**0.185 J**		
Methylene Chloride	2013-11	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2014-03	ug/L	< 5.00 J	< 5.00 J	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00 J	< 5.00		
Methylene Chloride	2014-06	ug/L									**0.701 J**	< 5.00 J	< 5.00 J	< 5.00 J	< 5.00		
Methylene Chloride	2014-09	ug/L	< 5	< 5	< 5 J	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	**0.617 J**		
Methylene Chloride	2015-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00 J		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Methylene Chloride	2015-09	ug/L	< 5	< 5 J		< 5	< 5	< 5			< 5 J	< 5	< 5	< 5		< 5 J	< 5	
Methylene Chloride	2015-10	ug/L			< 5				< 5	< 5 J					< 5 J			< 5 J
Methylene Chloride	2016-03	ug/L	< 5	< 5 J	< 5	< 5	< 5	< 5 J	< 5	< 5 J	< 5 J	< 5 J	< 5	< 5	< 5	< 5	< 5 J	< 5
Methylene Chloride	2016-06	ug/L			< 5	< 5												
Methylene Chloride	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2017-11	ug/L																
Methylene Chloride	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2018-06	ug/L																
Methylene Chloride	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Methylene Chloride	2018-09	ug/L					< 5						< 5	< 5				
Methylene Chloride	2018-11	ug/L																
Methylene Chloride	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2020-04	ug/L				< 5	< 5		< 5									
Methylene Chloride	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2021-03	ug/L							< 5	< 5	< 5	< 5						
Methylene Chloride	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2022-03	ug/L							< 5	< 5	< 5	< 5						
Methylene Chloride	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2023-01	ug/L															< 5	
Methylene Chloride	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
Methylene Chloride	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Naphthalene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Naphthalene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Naphthalene	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
Naphthalene	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
Naphthalene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Naphthalene	2010-09	ug/L	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	
Naphthalene	2011-03	ug/L	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
Naphthalene	2012-09	ug/L														< 5.00		
Naphthalene	2015-09	ug/L	< 5	< 5			< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
Naphthalene	2015-10	ug/L							< 5	< 5					< 5			< 5
Naphthalene	2016-03	ug/L			< 5	< 5												
Naphthalene	2016-06	ug/L			< 5	< 5												
Naphthalene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Naphthalene	2023-01	ug/L															< 5	
Naphthalene	2023-03	ug/L															< 5	
Nickel	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.06**	~~**0.107**~~	~~**0.158**~~	**0.062**	**0.088**	**0.063**	**0.05**	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	**0.057**	< 0.05	~~**0.101**~~	~~**0.179**~~	**0.065**	**0.08**	**0.069**	< 0.05	< 0.05	**0.061**	< 0.05	< 0.05
Nickel	2009-07	mg/L	< 0.05	**0.062**	< 0.05	< 0.05	**0.051**	< 0.05	~~**0.11**~~	~~**0.16**~~	**0.06**	**0.057**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	2009-09	mg/L	**0.0533**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	~~**0.116**~~	~~**0.161**~~	< 0.0500	**0.105**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	2010-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	~~**0.109**~~	~~**0.163**~~	**0.0651**	**0.0651**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2010-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.0644**	< 0.0500	~~**0.116**~~	~~**0.143**~~	**0.0686**	**0.0647**	**0.0542**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2011-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	~~**0.0647**~~	~~**0.134**~~	**0.0920**	**0.0686**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2011-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.0597**	< 0.0500	~~**0.0916**~~	~~**0.108**~~	**0.0688**	**0.0568**	**0.0600**	**0.0512**	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2012-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	~~**0.0838**~~	~~**0.106**~~	**0.0864**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2012-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	~~**0.0814**~~	~~**0.132**~~	**0.0891**	< 0.0500	**0.0664**	**0.0502**	< 0.0500	**0.0787**	< 0.0500	< 0.0500
Nickel	2013-03	mg/L	**0.0313 J**	**0.0279 J**		**0.00740 J**	**0.00979 J**		~~**0.088**~~	~~**0.0831**~~	**0.139**	**0.0468 J**	< 0.05 J	**0.0263 J**	**0.0550**	**0.0277 J**	< 0.05	< 0.05 J
Nickel	2013-05	mg/L			< 0.0500			**0.0229 J**										
Nickel	2013-09	mg/L	**0.0290 J**	**0.0214 J**	< 0.0500	**0.0248 J**	**0.0499 J**	**0.0105 J**	~~**0.0903**~~	~~**0.102**~~	**0.117**	**0.0414 J**	**0.0492 J**	**0.0450 J**	**0.0398 J**	**0.00800 J**	< 0.0500	< 0.0500
Nickel	2013-11	mg/L																
Nickel	2014-03	mg/L	**0.0233 J**	**0.0249 J**	< 0.0500	**0.0210 J**	**0.0253 J**	**0.0241 J**	~~**0.0831**~~	~~**0.214**~~	**0.0716**	**0.0501**	**0.0630**	**0.0525**	**0.0499 J**	**0.0278 J**	< 0.0500	**0.00435 J**
Nickel	2014-06	mg/L																
Nickel	2014-09	mg/L	**0.0272**	**0.0246**	**0.000967 J**	**0.0287**	**0.0464**	**0.0119**	~~**0.0872**~~	~~**0.183**~~	**0.101**	**0.0405**	**0.0436**	**0.0373**	**0.0387**	**0.0175**	**0.00167 J**	**0.000654 J**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Methylene Chloride	2015-09	ug/L		< 5 J		< 5	< 5	< 5	**0.692 J**								
Methylene Chloride	2015-10	ug/L	< 5 J		< 5					< 5 J	< 5 J	< 5	< 5 J	< 5	< 5 J		
Methylene Chloride	2016-03	ug/L	< 5 J	< 5 J	< 5	< 5 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Methylene Chloride	2016-06	ug/L															
Methylene Chloride	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Methylene Chloride	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Methylene Chloride	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Methylene Chloride	2017-11	ug/L														< 5	**0.45 J**
Methylene Chloride	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2018-06	ug/L														< 5	< 5
Methylene Chloride	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
Methylene Chloride	2018-09	ug/L													< 5	< 5	< 5
Methylene Chloride	2018-11	ug/L														< 5	< 5
Methylene Chloride	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
Methylene Chloride	2020-04	ug/L			< 5									< 5			
Methylene Chloride	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Methylene Chloride	2021-03	ug/L		< 5			< 5			< 5							
Methylene Chloride	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Methylene Chloride	2022-03	ug/L		< 5			< 5			< 5							
Methylene Chloride	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Methylene Chloride	2023-01	ug/L															
Methylene Chloride	2023-03	ug/L		< 5			< 5			< 5							
Methylene Chloride	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
Naphthalene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Naphthalene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Naphthalene	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
Naphthalene	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
Naphthalene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Naphthalene	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00										
Naphthalene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00									
Naphthalene	2012-09	ug/L				< 5.00											
Naphthalene	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
Naphthalene	2015-10	ug/L	< 5		< 5					< 5							
Naphthalene	2016-03	ug/L					< 5			< 5							
Naphthalene	2016-06	ug/L															
Naphthalene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5							
Naphthalene	2023-01	ug/L															
Naphthalene	2023-03	ug/L					< 5			< 5							
Nickel	2008-08	mg/L	< 0.05	**0.083**	**0.096**	< 0.05	< 0.05	< 0.05	< 0.05								
Nickel	2009-03	mg/L	< 0.05	**0.105**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Nickel	2009-07	mg/L	**0.05**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Nickel	2009-09	mg/L	< 0.0500	**0.167**	< 0.0500	< 0.0500	< 0.0500	< 0.0500									
Nickel	2010-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Nickel	2010-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Nickel	2011-03	mg/L	< 0.0500	< 0.0500	**0.0799**	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Nickel	2011-09	mg/L	< 0.0500	< 0.0500	**0.0582**	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Nickel	2012-03	mg/L	< 0.0500	< 0.0500	**0.0952**	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Nickel	2012-09	mg/L	< 0.0500	< 0.0500	**0.0995**	**0.126**	< 0.0500	< 0.0500	< 0.0500								
Nickel	2013-03	mg/L	**0.0236 J**	**0.0533**	**0.0769**		**0.00215 J**	< 0.05 J	< 0.05								
Nickel	2013-05	mg/L															
Nickel	2013-09	mg/L	**0.0193 J**	< 0.0500 J	**0.0325 J**	**0.0443 J**	**0.00743 J**	< 0.0500	< 0.0500	~~< 0.0500~~	< 0.0500	**0.00790 J**	**0.0333 J**	**0.0420 J**	**0.00271 J**		
Nickel	2013-11	mg/L								~~**0.00309 J**~~	**0.00230 J**	< 0.0500	**0.0488 J**	**0.00801 J**	**0.00244 J**		
Nickel	2014-03	mg/L	**0.0123 J**	**0.0238 J**	**0.0813**	**0.0663**	< 0.0500 J	**0.0134 J**	< 0.0500	~~< 0.0500~~	< 0.0500 J	< 0.0500	**0.0343 J**	< 0.0500	< 0.0500 J		
Nickel	2014-06	mg/L								~~< 0.0500~~	< 0.0500	< 0.0500	**0.0331 J**	**0.00908 J**	< 0.0500		
Nickel	2014-09	mg/L	**0.017**	**0.0154**	**0.0384**	**0.0262**	**0.0522**	**0.00632**	**0.000644 J**	~~< 0.005~~	**0.00143 J**	**0.0022 J**	**0.0322**	**0.0242**	**0.000798 J**		

Table 14
Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Upper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Nickel	2015-03	mg/L	0.0251	0.033	0.00126 J	0.0195	0.0214	0.0228	0.0837	~~0.0507~~	0.0544	0.0254	0.0263	0.0377	0.0393	0.00777	< 0.005	< 0.00500
Nickel	2015-09	mg/L	0.032	0.0236		0.0215	0.00866	0.0207			0.084	0.0219	0.0312	0.0312		0.0108	< 0.005	
Nickel	2015-10	mg/L			0.00205 J				0.0802	~~0.0456~~					0.0318			< 0.005
Nickel	2016-03	mg/L	0.0267	0.023	< 0.005	0.0274	0.0211	0.0168	0.0724	~~0.0119~~	0.132	0.023	0.0102	0.0159	0.0245	0.0102	< 0.005	< 0.005
Nickel	2016-06	mg/L			< 0.005	0.0242												
Nickel	2016-08	mg/L	0.0266	0.0197	< 0.005	0.045	0.0161	0.0216	0.0716	0.0134	0.12	0.0177	0.0888	0.0257	0.0203	0.0123	< 0.005	< 0.005
Nickel	2017-03	mg/L	0.0547	0.0224	< 0.005	0.0239	0.0141	0.0236	0.0802	0.0113	0.066	0.0174	0.0149	0.0269	0.0275	0.00475 J	< 0.005	< 0.005
Nickel	2017-08	mg/L	0.035	0.0178	< 0.005	0.0341	0.0123	0.0229	0.0604	0.0227	0.0957	0.0114	0.0306	0.0452	0.0257	0.00656	< 0.005	< 0.005
Nickel	2017-11	mg/L																
Nickel	2018-03	mg/L	0.0286	0.0226	< 0.005	0.0199	0.00975	0.0189	0.0662	0.0358	0.104	0.0218	0.0236	0.0345	0.0255	0.00836	< 0.005	< 0.005
Nickel	2018-06	mg/L																
Nickel	2018-08	mg/L	0.0268	0.0177	0.00217 J	0.0305		0.0175	0.0644	0.02	0.0679	0.00855			0.0214	0.0105	< 0.005	< 0.005
Nickel	2018-09	mg/L					0.00894						0.0407	0.0412				
Nickel	2018-11	mg/L																
Nickel	2019-03	mg/L	0.0161	0.0167	< 0.005	0.0371	0.0124	0.0213	0.0781	0.0329	0.0554	0.015	0.00514	0.0134	0.00715	0.0132	< 0.005	< 0.005
Nickel	2019-08	mg/L	0.0231	0.0133	< 0.005	0.0592	0.0164	0.0153 J	0.0465	0.0423	0.0286	0.00801	0.0197	0.0451	0.0234	0.0034 J	< 0.005	< 0.005
Nickel	2020-03	mg/L	0.0338	0.014	< 0.005			0.0178		0.0133	0.0206	0.0148	0.00471 J	0.0417	0.0213	0.00271 J	< 0.005	< 0.005
Nickel	2020-04	mg/L				0.0342	0.0212		0.0599									
Nickel	2020-08	mg/L	0.0265	0.0144	< 0.005	0.0514	0.017	0.0197	0.0614	0.0133	0.0862	0.00917	0.0297	0.0682	0.0266	0.00617	< 0.005	< 0.005
Nickel	2021-03	mg/L							0.0753	0.0214	0.038	0.0177						
Nickel	2021-08	mg/L	0.0483	0.0142	< 0.005	0.0242	0.0112	0.00828	0.0691	0.0264	0.0348	0.0154	0.0252	0.0646	0.0316	0.0272	< 0.005	< 0.005
Nickel	2022-03	mg/L							0.0623	0.0508	0.0592	0.0203						
Nickel	2022-08	mg/L	0.0312 J	0.0127	< 0.005	0.0513	0.00671		0.063	0.0111	0.0804	0.00795	0.0233	0.0491	0.0276	0.00723	< 0.005	< 0.005
Nickel	2023-01	mg/L															< 0.005	
Nickel	2023-03	mg/L							0.0828	0.0117	0.0182	0.00967					< 0.005	
Nickel	2023-08	mg/L	0.0332	0.0145	< 0.005	0.0223	0.0083		0.0682	0.0132	0.0452	0.013	0.0218	0.0573	0.0291	0.00782	< 0.005	< 0.005
Nitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Nitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Nitrobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Nitrobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Nitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	0.221 J	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Nitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Nitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Nitrobenzene	2011-09	ug/L																
Nitrobenzene	2012-03	ug/L					< 10.0											
Nitrobenzene	2012-09	ug/L					< 10.0											
Nitrobenzene	2013-03	ug/L					< 11.0											
Nitrobenzene	2013-09	ug/L					< 10.4											
Nitrobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Nitrobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Nitrobenzene	2016-03	ug/L			< 11.1	< 11.2												
Nitrobenzene	2016-06	ug/L			< 11.4	< 11.4												
Nitrobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Nitrobenzene	2023-01	ug/L															< 10.9	
Nitrobenzene	2023-03	ug/L															< 10.4	
N-Nitrosodiethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosodiethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiethylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosodiethylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosodiethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosodiethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosodiethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosodiethylamine	2012-09	ug/L																
N-Nitrosodiethylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosodiethylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosodiethylamine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosodiethylamine	2016-06	ug/L			< 11.4	< 11.4												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Nickel	2015-03	mg/L	0.0125	0.0708	0.0594	0.0225	0.00403 J	0.00521	< 0.005	0.00519	0.00118 J	0.000918 J	0.0222	0.00420 J	0.000997 J		
Nickel	2015-09	mg/L		0.0185		0.0274	0.00776	< 0.005 J	< 0.005								
Nickel	2015-10	mg/L	0.034		0.0663					0.000643 J	0.00158 J	0.000897 J	0.0364	0.0279	0.00103 J		
Nickel	2016-03	mg/L	0.0346	0.0165	0.0469	0.027	0.00924	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0287	0.0164	< 0.005		
Nickel	2016-06	mg/L															
Nickel	2016-08	mg/L	0.0197	0.0162	0.0403	0.0249	0.00233 J	0.00288 J	< 0.005	< 0.005	< 0.005	< 0.005	0.029	0.0486	< 0.005		
Nickel	2017-03	mg/L	0.0263	0.0165	0.0415	0.0315	0.00337 J	0.000954 J	< 0.005	< 0.005	0.00104 J	0.00153 J	0.0323	0.0221	< 0.005		
Nickel	2017-08	mg/L	0.0132	0.015	0.0458	0.0241	0.00472 J	< 0.005	< 0.005	< 0.005	< 0.005	0.00106 J	0.034	0.0329	0.00538		
Nickel	2017-11	mg/L														0.00334 J	0.00542
Nickel	2018-03	mg/L	0.0219	0.0987	0.0938	0.0332	0.00366 J	0.0012 J	< 0.005	< 0.005	0.000933 J	< 0.005	0.0318	0.00567	0.00213 J	0.00474 J	0.00392 J
Nickel	2018-06	mg/L														0.002 J	0.00237 J
Nickel	2018-08	mg/L	0.0157	0.0171	0.0537	0.0327	~~0.00548~~	< 0.005	< 0.005	< 0.005		0.00121 J	0.0424	0.0175			
Nickel	2018-09	mg/L													0.00234 J	0.00451 J	0.00172 J
Nickel	2018-11	mg/L														0.00126 J	0.00164 J
Nickel	2019-03	mg/L	0.0385	0.0105	0.0345	0.0304	0.00218 J	< 0.005	< 0.005	< 0.005		< 0.005	0.034	0.00254 J	< 0.005	< 0.005	< 0.005
Nickel	2019-08	mg/L	0.00886	0.0127	0.039	0.0271	0.00186 J	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.039	0.0997	0.00318 J	0.00349 J	0.00187 J
Nickel	2020-03	mg/L	0.0254	0.0242		0.0357	0.00229 J	0.00197 J	< 0.005	< 0.005	< 0.005	< 0.005	0.0343		< 0.005	0.00266 J	0.00327 J
Nickel	2020-04	mg/L			0.0385									0.0104			
Nickel	2020-08	mg/L	0.00547	0.013	0.0469	0.0266	0.00216 J	< 0.005	< 0.005	< 0.005			0.0346	0.0554	0.00353 J		< 0.005
Nickel	2021-03	mg/L		0.0832			0.00218 J			< 0.005							
Nickel	2021-08	mg/L	0.053	0.0137	0.0716	0.024	0.00228 J	< 0.005	< 0.005	< 0.005			0.0262	0.0522	0.0189		< 0.005
Nickel	2022-03	mg/L		0.397			0.00198 J			< 0.005							
Nickel	2022-08	mg/L	0.00932	0.022	0.0554	0.0236	< 0.005	< 0.005	< 0.005	< 0.005			0.0202	0.0505	0.0187		< 0.005
Nickel	2023-01	mg/L															
Nickel	2023-03	mg/L		0.0285			< 0.005			~~0.00534~~							
Nickel	2023-08	mg/L	0.0118	0.02	0.064	0.0249	< 0.005	< 0.005	< 0.005	0.00207 J			0.0134	0.0168	0.0109		< 0.005
Nitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Nitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Nitrobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Nitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Nitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Nitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Nitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	0.226 J	< 10.0									
Nitrobenzene	2011-09	ug/L					< 10.0										
Nitrobenzene	2012-03	ug/L					< 10.0										
Nitrobenzene	2012-09	ug/L					< 10.0										
Nitrobenzene	2013-03	ug/L					< 11.8										
Nitrobenzene	2013-09	ug/L					< 10.6										
Nitrobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Nitrobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Nitrobenzene	2016-03	ug/L					< 10.9			< 11.2							
Nitrobenzene	2016-06	ug/L															
Nitrobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Nitrobenzene	2023-01	ug/L															
Nitrobenzene	2023-03	ug/L					< 10			< 10							
N-Nitrosodiethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosodiethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosodiethylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosodiethylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodiethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodiethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosodiethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosodiethylamine	2012-09	ug/L		< 10.0													
N-Nitrosodiethylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosodiethylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosodiethylamine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosodiethylamine	2016-06	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
N-Nitrosodiethylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosodiethylamine	2023-01	ug/L															< 10.9	
N-Nitrosodiethylamine	2023-03	ug/L															< 10.4	
N-Nitrosodimethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosodimethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodimethylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosodimethylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosodimethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosodimethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosodimethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosodimethylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosodimethylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosodimethylamine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosodimethylamine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosodimethylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosodimethylamine	2023-01	ug/L															< 10.9	
N-Nitrosodimethylamine	2023-03	ug/L															< 10.4	
N-Nitrosodi-n-butylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosodi-n-butylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-butylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosodi-n-butylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosodi-n-butylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosodi-n-butylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosodi-n-butylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosodi-n-butylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosodi-n-butylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosodi-n-butylamine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosodi-n-butylamine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosodi-n-butylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosodi-n-butylamine	2023-01	ug/L															< 10.9	
N-Nitrosodi-n-butylamine	2023-03	ug/L															< 10.4	
N-Nitrosodi-n-propylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosodi-n-propylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-propylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosodi-n-propylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosodi-n-propylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosodi-n-propylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosodi-n-propylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosodi-n-propylamine	2011-09	ug/L																
N-Nitrosodi-n-propylamine	2012-03	ug/L																
N-Nitrosodi-n-propylamine	2012-09	ug/L																
N-Nitrosodi-n-propylamine	2013-03	ug/L																
N-Nitrosodi-n-propylamine	2013-09	ug/L																
N-Nitrosodi-n-propylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosodi-n-propylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosodi-n-propylamine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosodi-n-propylamine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosodi-n-propylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosodi-n-propylamine	2023-01	ug/L															< 10.9	
N-Nitrosodi-n-propylamine	2023-03	ug/L															< 10.4	
N-Nitrosodiphenylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosodiphenylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiphenylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosodiphenylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosodiphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosodiphenylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosodiphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
N-Nitrosodiethylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosodiethylamine	2023-01	ug/L															
N-Nitrosodiethylamine	2023-03	ug/L					< 10			< 10							
N-Nitrosodimethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosodimethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosodimethylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosodimethylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodimethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodimethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosodimethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosodimethylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosodimethylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosodimethylamine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosodimethylamine	2016-06	ug/L															
N-Nitrosodimethylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosodimethylamine	2023-01	ug/L															
N-Nitrosodimethylamine	2023-03	ug/L					< 10			< 10							
N-Nitrosodi-n-butylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosodi-n-butylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosodi-n-butylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosodi-n-butylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-butylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-butylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosodi-n-butylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosodi-n-butylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosodi-n-butylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosodi-n-butylamine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosodi-n-butylamine	2016-06	ug/L															
N-Nitrosodi-n-butylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosodi-n-butylamine	2023-01	ug/L															
N-Nitrosodi-n-butylamine	2023-03	ug/L					< 10			< 10							
N-Nitrosodi-n-propylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosodi-n-propylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosodi-n-propylamine	2009-07	ug/L	< 10.0	**0.974 J**	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosodi-n-propylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-propylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-propylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosodi-n-propylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosodi-n-propylamine	2011-09	ug/L		< 10.0			< 10.0										
N-Nitrosodi-n-propylamine	2012-03	ug/L		< 10.0			< 10.0										
N-Nitrosodi-n-propylamine	2012-09	ug/L		< 10.0			< 10.0										
N-Nitrosodi-n-propylamine	2013-03	ug/L		< 10.5			< 11.8										
N-Nitrosodi-n-propylamine	2013-09	ug/L		< 10.1													
N-Nitrosodi-n-propylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosodi-n-propylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosodi-n-propylamine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosodi-n-propylamine	2016-06	ug/L															
N-Nitrosodi-n-propylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosodi-n-propylamine	2023-01	ug/L															
N-Nitrosodi-n-propylamine	2023-03	ug/L					< 10			< 10							
N-Nitrosodiphenylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosodiphenylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosodiphenylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosodiphenylamine	2009-09	ug/L	< 10.0	**0.557 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodiphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosodiphenylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosodiphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
N-Nitrosodiphenylamine	2011-09	ug/L																
N-Nitrosodiphenylamine	2012-03	ug/L																
N-Nitrosodiphenylamine	2012-09	ug/L																
N-Nitrosodiphenylamine	2013-03	ug/L																
N-Nitrosodiphenylamine	2013-09	ug/L																
N-Nitrosodiphenylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosodiphenylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosodiphenylamine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosodiphenylamine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosodiphenylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosodiphenylamine	2023-01	ug/L															< 10.9	
N-Nitrosodiphenylamine	2023-03	ug/L															< 10.4	
N-Nitrosomethylethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosomethylethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosomethylethylamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosomethylethylamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosomethylethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosomethylethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosomethylethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosomethylethylamine	2012-03	ug/L																
N-Nitrosomethylethylamine	2012-09	ug/L																
N-Nitrosomethylethylamine	2013-03	ug/L																
N-Nitrosomethylethylamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosomethylethylamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosomethylethylamine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosomethylethylamine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosomethylethylamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosomethylethylamine	2023-01	ug/L															< 10.9	
N-Nitrosomethylethylamine	2023-03	ug/L															< 10.4	
N-Nitrosopiperidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosopiperidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosopiperidine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosopiperidine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosopiperidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosopiperidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosopiperidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosopiperidine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosopiperidine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosopiperidine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosopiperidine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosopiperidine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosopiperidine	2023-01	ug/L															< 10.9	
N-Nitrosopiperidine	2023-03	ug/L															< 10.4	
N-Nitrosopyrrolidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
N-Nitrosopyrrolidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosopyrrolidine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
N-Nitrosopyrrolidine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
N-Nitrosopyrrolidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
N-Nitrosopyrrolidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
N-Nitrosopyrrolidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
N-Nitrosopyrrolidine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
N-Nitrosopyrrolidine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
N-Nitrosopyrrolidine	2016-03	ug/L			< 11.1	< 11.2												
N-Nitrosopyrrolidine	2016-06	ug/L			< 11.4	< 11.4												
N-Nitrosopyrrolidine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
N-Nitrosopyrrolidine	2023-01	ug/L															< 10.9	
N-Nitrosopyrrolidine	2023-03	ug/L															< 10.4	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
N-Nitrosodiphenylamine	2011-09	ug/L		< 10.0			< 10.0										
N-Nitrosodiphenylamine	2012-03	ug/L		< 10.0			< 10.0										
N-Nitrosodiphenylamine	2012-09	ug/L				< 10.0	< 10.0										
N-Nitrosodiphenylamine	2013-03	ug/L		< 10.5			< 11.8										
N-Nitrosodiphenylamine	2013-09	ug/L		< 10.1													
N-Nitrosodiphenylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosodiphenylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosodiphenylamine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosodiphenylamine	2016-06	ug/L															
N-Nitrosodiphenylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosodiphenylamine	2023-01	ug/L															
N-Nitrosodiphenylamine	2023-03	ug/L					< 10			< 10							
N-Nitrosomethylethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosomethylethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosomethylethylamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosomethylethylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosomethylethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosomethylethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosomethylethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosomethylethylamine	2012-03	ug/L					< 10.0										
N-Nitrosomethylethylamine	2012-09	ug/L					< 10.0										
N-Nitrosomethylethylamine	2013-03	ug/L					< 11.8										
N-Nitrosomethylethylamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosomethylethylamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosomethylethylamine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosomethylethylamine	2016-06	ug/L															
N-Nitrosomethylethylamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosomethylethylamine	2023-01	ug/L															
N-Nitrosomethylethylamine	2023-03	ug/L					< 10			< 10							
N-Nitrosopiperidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosopiperidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosopiperidine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosopiperidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosopiperidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosopiperidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosopiperidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosopiperidine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosopiperidine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosopiperidine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosopiperidine	2016-06	ug/L															
N-Nitrosopiperidine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosopiperidine	2023-01	ug/L															
N-Nitrosopiperidine	2023-03	ug/L					< 10			< 10							
N-Nitrosopyrrolidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
N-Nitrosopyrrolidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
N-Nitrosopyrrolidine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
N-Nitrosopyrrolidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosopyrrolidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
N-Nitrosopyrrolidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
N-Nitrosopyrrolidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
N-Nitrosopyrrolidine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
N-Nitrosopyrrolidine	2015-10	ug/L	< 11.8		< 10.3					< 11							
N-Nitrosopyrrolidine	2016-03	ug/L					< 10.9			< 11.2							
N-Nitrosopyrrolidine	2016-06	ug/L															
N-Nitrosopyrrolidine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
N-Nitrosopyrrolidine	2023-01	ug/L															
N-Nitrosopyrrolidine	2023-03	ug/L					< 10			< 10							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
o,o,o-Triethylphosphorothioate	2008-08	ug/L	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 33.3	< 30	< 30	< 30	< 30	< 30	< 33.3	< 30
o,o,o-Triethylphosphorothioate	2009-03	ug/L	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30
o,o,o-Triethylphosphorothioate	2009-07	ug/L	< 30	< 30.0	< 30.0	< 30		< 30		< 30			< 30.0		< 30	< 30	< 30	< 30
o,o,o-Triethylphosphorothioate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
o,o,o-Triethylphosphorothioate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
o,o,o-Triethylphosphorothioate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
o,o,o-Triethylphosphorothioate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
o,o,o-Triethylphosphorothioate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
o,o,o-Triethylphosphorothioate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
o,o,o-Triethylphosphorothioate	2016-03	ug/L			< 11.1	< 11.2												
o,o,o-Triethylphosphorothioate	2016-06	ug/L			< 11.4	< 11.4												
o,o,o-Triethylphosphorothioate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
o,o,o-Triethylphosphorothioate	2023-01	ug/L															< 10.9	
o,o,o-Triethylphosphorothioate	2023-03	ug/L															< 10.4	
o-Toluidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
o-Toluidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
o-Toluidine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
o-Toluidine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
o-Toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
o-Toluidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
o-Toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
o-Toluidine	2011-09	ug/L																
o-Toluidine	2012-03	ug/L																
o-Toluidine	2012-09	ug/L																
o-Toluidine	2013-03	ug/L																
o-Toluidine	2013-09	ug/L																
o-Toluidine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
o-Toluidine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
o-Toluidine	2016-03	ug/L			< 11.1	< 11.2												
o-Toluidine	2016-06	ug/L			< 11.4	< 11.4												
o-Toluidine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
o-Toluidine	2023-01	ug/L															< 10.9	
o-Toluidine	2023-03	ug/L															< 10.4	
p-(Dimethylamino)azobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
p-(Dimethylamino)azobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
p-(Dimethylamino)azobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
p-(Dimethylamino)azobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
p-(Dimethylamino)azobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
p-(Dimethylamino)azobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
p-(Dimethylamino)azobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
p-(Dimethylamino)azobenzene	2012-09	ug/L																
p-(Dimethylamino)azobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
p-(Dimethylamino)azobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
p-(Dimethylamino)azobenzene	2016-03	ug/L			< 11.1	< 11.2												
p-(Dimethylamino)azobenzene	2016-06	ug/L			< 11.4	< 11.4												
p-(Dimethylamino)azobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
p-(Dimethylamino)azobenzene	2023-01	ug/L															< 10.9	
p-(Dimethylamino)azobenzene	2023-03	ug/L															< 10.4	
Parathion	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Parathion	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Parathion	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Parathion	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	**0.191 J**		< 10.0	< 10.0	< 10.0	< 10.0	
Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Parathion	2011-09	ug/L										< 10.0						
Parathion	2012-03	ug/L										< 10.0						

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
o,o,o-Triethylphosphorothioate	2008-08	ug/L	< 30	< 30	< 30	< 30	< 30	< 33.3	< 30								
o,o,o-Triethylphosphorothioate	2009-03	ug/L	< 30	< 30	< 30	< 30	< 30	< 30	< 30								
o,o,o-Triethylphosphorothioate	2009-07	ug/L	< 30.0	< 30	< 30	< 30	< 30.0	< 34.1	< 30.0								
o,o,o-Triethylphosphorothioate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
o,o,o-Triethylphosphorothioate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
o,o,o-Triethylphosphorothioate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
o,o,o-Triethylphosphorothioate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
o,o,o-Triethylphosphorothioate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
o,o,o-Triethylphosphorothioate	2015-10	ug/L	< 11.8		< 10.3					< 11							
o,o,o-Triethylphosphorothioate	2016-03	ug/L					< 10.9			< 11.2							
o,o,o-Triethylphosphorothioate	2016-06	ug/L															
o,o,o-Triethylphosphorothioate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
o,o,o-Triethylphosphorothioate	2023-01	ug/L															
o,o,o-Triethylphosphorothioate	2023-03	ug/L					< 10			< 10							
o-Toluidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
o-Toluidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
o-Toluidine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
o-Toluidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
o-Toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
o-Toluidine	2010-09	ug/L	< 10.0	**0.314 J**	< 10.0	< 10.0	< 10.0										
o-Toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
o-Toluidine	2011-09	ug/L		< 10.0			< 10.0										
o-Toluidine	2012-03	ug/L		< 10.0			< 10.0										
o-Toluidine	2012-09	ug/L				< 10.0	< 10.0										
o-Toluidine	2013-03	ug/L		< 10.5			< 11.8										
o-Toluidine	2013-09	ug/L		< 10.1													
o-Toluidine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
o-Toluidine	2015-10	ug/L	< 11.8		< 10.3					< 11							
o-Toluidine	2016-03	ug/L					< 10.9			< 11.2							
o-Toluidine	2016-06	ug/L															
o-Toluidine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
o-Toluidine	2023-01	ug/L															
o-Toluidine	2023-03	ug/L					< 10			< 10							
p-(Dimethylamino)azobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
p-(Dimethylamino)azobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
p-(Dimethylamino)azobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
p-(Dimethylamino)azobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
p-(Dimethylamino)azobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
p-(Dimethylamino)azobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
p-(Dimethylamino)azobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
p-(Dimethylamino)azobenzene	2012-09	ug/L		< 10.0													
p-(Dimethylamino)azobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
p-(Dimethylamino)azobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
p-(Dimethylamino)azobenzene	2016-03	ug/L					< 10.9			< 11.2							
p-(Dimethylamino)azobenzene	2016-06	ug/L															
p-(Dimethylamino)azobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
p-(Dimethylamino)azobenzene	2023-01	ug/L															
p-(Dimethylamino)azobenzene	2023-03	ug/L					< 10			< 10							
Parathion	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Parathion	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Parathion	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Parathion	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Parathion	2011-09	ug/L					< 10.0										
Parathion	2012-03	ug/L					< 10.0										

Table 14

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Parathion	2012-09	ug/L										< 10.0						
Parathion	2013-03	ug/L										< 10.6						
Parathion	2013-09	ug/L										< 10.2						
Parathion	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Parathion	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Parathion	2016-03	ug/L			< 11.1	< 11.2												
Parathion	2016-06	ug/L			< 11.4	< 11.4												
Parathion	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Parathion	2023-01	ug/L															< 10.9	
Parathion	2023-03	ug/L															< 10.4	
PCBs - Aroclor 1016	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1016	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1016	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1016	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1016	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1016	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1016	2016-06	ug/L			< 0.909	< 0.93												
PCBs - Aroclor 1016	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1016	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1016	2023-03	ug/L															< 0.833	
PCBs - Aroclor 1221	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1221	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1221	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1221	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1221	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1221	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1221	2016-06	ug/L			< 0.909	< 0.93												
PCBs - Aroclor 1221	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1221	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1221	2023-03	ug/L															< 0.833	
PCBs - Aroclor 1232	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1232	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1232	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1232	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1232	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1232	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1232	2016-06	ug/L			< 0.909	< 0.93												
PCBs - Aroclor 1232	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1232	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1232	2023-03	ug/L															< 0.833	
PCBs - Aroclor 1242	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1242	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1242	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1242	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1242	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1242	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1242	2016-06	ug/L			< 0.909	< 0.93												
PCBs - Aroclor 1242	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1242	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1242	2023-03	ug/L															< 0.833	
PCBs - Aroclor 1248	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1248	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1248	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1248	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1248	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1248	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1248	2016-06	ug/L			< 0.909	< 0.93												

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Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Parathion	2012-09	ug/L					< 10.0										
Parathion	2013-03	ug/L					< 11.8										
Parathion	2013-09	ug/L															
Parathion	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Parathion	2015-10	ug/L	< 11.8		< 10.3					< 11							
Parathion	2016-03	ug/L					< 10.9			< 11.2							
Parathion	2016-06	ug/L															
Parathion	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Parathion	2023-01	ug/L															
Parathion	2023-03	ug/L					< 10			< 10							
PCBs - Aroclor 1016	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1016	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1016	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1016	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1016	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1016	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1016	2016-06	ug/L															
PCBs - Aroclor 1016	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1016	2023-01	ug/L															
PCBs - Aroclor 1016	2023-03	ug/L					< 0.87			< 0.8							
PCBs - Aroclor 1221	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1221	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1221	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1221	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1221	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1221	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1221	2016-06	ug/L															
PCBs - Aroclor 1221	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1221	2023-01	ug/L															
PCBs - Aroclor 1221	2023-03	ug/L					< 0.87			< 0.8							
PCBs - Aroclor 1232	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1232	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1232	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1232	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1232	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1232	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1232	2016-06	ug/L															
PCBs - Aroclor 1232	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1232	2023-01	ug/L															
PCBs - Aroclor 1232	2023-03	ug/L					< 0.87			< 0.8							
PCBs - Aroclor 1242	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1242	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1242	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1242	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1242	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1242	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1242	2016-06	ug/L															
PCBs - Aroclor 1242	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1242	2023-01	ug/L															
PCBs - Aroclor 1242	2023-03	ug/L					< 0.87			< 0.8							
PCBs - Aroclor 1248	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1248	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1248	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1248	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1248	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1248	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1248	2016-06	ug/L															

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
PCBs - Aroclor 1248	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1248	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1248	2023-03	ug/L															< 0.833	
PCBs - Aroclor 1254	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1254	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1254	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1254	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1254	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1254	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1254	2016-06	ug/L			< 0.909	< 0.93												
PCBs - Aroclor 1254	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1254	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1254	2023-03	ug/L															< 0.833	
PCBs - Aroclor 1260	2008-08	ug/L	< 0.8	< 0.909	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.899	< 0.889	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1260	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1260	2010-09	ug/L	< 0.800 UJ	< 0.800	< 0.800			< 0.800	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ	< 0.800 UJ		< 0.800	< 0.800	< 0.800	< 0.800	
PCBs - Aroclor 1260	2015-09	ug/L	< 0.889	< 0.889			< 0.889	< 0.941			< 0.889	< 0.879	< 0.889	< 0.889		< 0.899	< 0.889	
PCBs - Aroclor 1260	2015-10	ug/L							< 0.952	< 0.842					< 0.941			< 0.899
PCBs - Aroclor 1260	2016-03	ug/L			< 0.889	< 0.909												
PCBs - Aroclor 1260	2016-06	ug/L			< 0.909	< 0.93												
PCBs - Aroclor 1260	2020-08	ug/L	< 1	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 1.04	< 0.941	< 0.92	< 0.964	< 0.941	< 0.988	< 0.976	< 0.952	< 1
PCBs - Aroclor 1260	2023-01	ug/L															< 0.909	
PCBs - Aroclor 1260	2023-03	ug/L															< 0.833	
Pentachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Pentachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachlorobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Pentachlorobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Pentachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Pentachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Pentachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Pentachlorobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Pentachlorobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Pentachlorobenzene	2016-03	ug/L			< 11.1	< 11.2												
Pentachlorobenzene	2016-06	ug/L			< 11.4	< 11.4												
Pentachlorobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Pentachlorobenzene	2023-01	ug/L															< 10.9	
Pentachlorobenzene	2023-03	ug/L															< 10.4	
Pentachloronitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Pentachloronitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachloronitrobenzene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Pentachloronitrobenzene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Pentachloronitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Pentachloronitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Pentachloronitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Pentachloronitrobenzene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Pentachloronitrobenzene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Pentachloronitrobenzene	2016-03	ug/L			< 11.1	< 11.2												
Pentachloronitrobenzene	2016-06	ug/L			< 11.4	< 11.4												
Pentachloronitrobenzene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Pentachloronitrobenzene	2023-01	ug/L															< 10.9	
Pentachloronitrobenzene	2023-03	ug/L															< 10.4	
Pentachlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Pentachlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachlorophenol	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Pentachlorophenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Pentachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Pentachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	**0.247 J**	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	

Table 14

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2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
PCBs - Aroclor 1248	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1248	2023-01	ug/L															
PCBs - Aroclor 1248	2023-03	ug/L					< 0.87			< 0.8							
PCBs - Aroclor 1254	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1254	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1254	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1254	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1254	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1254	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1254	2016-06	ug/L															
PCBs - Aroclor 1254	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1254	2023-01	ug/L															
PCBs - Aroclor 1254	2023-03	ug/L					< 0.87			< 0.8							
PCBs - Aroclor 1260	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1260	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1260	2010-09	ug/L	< 0.800	< 0.800	< 0.800 UJ	< 0.800	< 0.800										
PCBs - Aroclor 1260	2015-09	ug/L		< 0.879		< 0.899	< 0.87	< 0.8	< 0.87								
PCBs - Aroclor 1260	2015-10	ug/L	< 0.952		< 0.87					< 0.909							
PCBs - Aroclor 1260	2016-03	ug/L					< 0.889			< 0.879							
PCBs - Aroclor 1260	2016-06	ug/L															
PCBs - Aroclor 1260	2020-08	ug/L	< 0.976	< 0.941	< 0.842	< 0.964	< 1.1	< 0.92	< 0.889	< 0.879							
PCBs - Aroclor 1260	2023-01	ug/L															
PCBs - Aroclor 1260	2023-03	ug/L					< 0.87			< 0.8							
Pentachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Pentachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Pentachlorobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Pentachlorobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pentachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pentachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Pentachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Pentachlorobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Pentachlorobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Pentachlorobenzene	2016-03	ug/L					< 10.9			< 11.2							
Pentachlorobenzene	2016-06	ug/L															
Pentachlorobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Pentachlorobenzene	2023-01	ug/L															
Pentachlorobenzene	2023-03	ug/L					< 10			< 10							
Pentachloronitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Pentachloronitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Pentachloronitrobenzene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Pentachloronitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pentachloronitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pentachloronitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Pentachloronitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Pentachloronitrobenzene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Pentachloronitrobenzene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Pentachloronitrobenzene	2016-03	ug/L					< 10.9			< 11.2							
Pentachloronitrobenzene	2016-06	ug/L															
Pentachloronitrobenzene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Pentachloronitrobenzene	2023-01	ug/L															
Pentachloronitrobenzene	2023-03	ug/L					< 10			< 10							
Pentachlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Pentachlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Pentachlorophenol	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Pentachlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pentachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pentachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										

Table 14

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Pentachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Pentachlorophenol	2011-09	ug/L									< 10.0							
Pentachlorophenol	2012-03	ug/L									< 10.0							
Pentachlorophenol	2012-09	ug/L									< 10.0							
Pentachlorophenol	2013-03	ug/L									< 10.6							
Pentachlorophenol	2013-09	ug/L									< 10.6							
Pentachlorophenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Pentachlorophenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Pentachlorophenol	2016-03	ug/L			< 11.1	< 11.2												
Pentachlorophenol	2016-06	ug/L			< 11.4	< 11.4												
Pentachlorophenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Pentachlorophenol	2023-01	ug/L															< 10.9	
Pentachlorophenol	2023-03	ug/L															< 10.4	
Phenacetin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Phenacetin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenacetin	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Phenacetin	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Phenacetin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Phenacetin	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Phenacetin	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Phenacetin	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Phenacetin	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Phenacetin	2016-03	ug/L			< 11.1	< 11.2												
Phenacetin	2016-06	ug/L			< 11.4	< 11.4												
Phenacetin	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Phenacetin	2023-01	ug/L															< 10.9	
Phenacetin	2023-03	ug/L															< 10.4	
Phenanthrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Phenanthrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Phenanthrene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Phenanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Phenanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Phenanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Phenanthrene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Phenanthrene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Phenanthrene	2016-03	ug/L			< 11.1	< 11.2												
Phenanthrene	2016-06	ug/L			< 11.4	< 11.4												
Phenanthrene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Phenanthrene	2023-01	ug/L															< 10.9	
Phenanthrene	2023-03	ug/L															< 10.4	
Phenol	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20
Phenol	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Phenol	2009-07	ug/L	< 20	< 20.0	< 20.0	< 20		< 20		< 20			< 20.0		< 20	< 20	< 20	< 20
Phenol	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Phenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Phenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Phenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Phenol	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Phenol	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Phenol	2016-03	ug/L			< 11.1	< 11.2												
Phenol	2016-06	ug/L			< 11.4	< 11.4												
Phenol	2016-08	ug/L																
Phenol	2017-03	ug/L																
Phenol	2017-08	ug/L																
Phenol	2018-03	ug/L																
Phenol	2018-08	ug/L																

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Pentachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Pentachlorophenol	2011-09	ug/L					< 10.0										
Pentachlorophenol	2012-03	ug/L					< 10.0										
Pentachlorophenol	2012-09	ug/L					< 10.0										
Pentachlorophenol	2013-03	ug/L					< 11.8										
Pentachlorophenol	2013-09	ug/L															
Pentachlorophenol	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Pentachlorophenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
Pentachlorophenol	2016-03	ug/L					< 10.9			< 11.2							
Pentachlorophenol	2016-06	ug/L															
Pentachlorophenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Pentachlorophenol	2023-01	ug/L															
Pentachlorophenol	2023-03	ug/L					< 10			< 10							
Phenacetin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Phenacetin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Phenacetin	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Phenacetin	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phenacetin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phenacetin	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Phenacetin	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Phenacetin	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Phenacetin	2015-10	ug/L	< 11.8		< 10.3					< 11							
Phenacetin	2016-03	ug/L					< 10.9			< 11.2							
Phenacetin	2016-06	ug/L															
Phenacetin	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Phenacetin	2023-01	ug/L															
Phenacetin	2023-03	ug/L					< 10			< 10							
Phenanthrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Phenanthrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Phenanthrene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Phenanthrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phenanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phenanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Phenanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Phenanthrene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Phenanthrene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Phenanthrene	2016-03	ug/L					< 10.9			< 11.2							
Phenanthrene	2016-06	ug/L															
Phenanthrene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Phenanthrene	2023-01	ug/L															
Phenanthrene	2023-03	ug/L					< 10			< 10							
Phenol	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 22.2	< 20								
Phenol	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20								
Phenol	2009-07	ug/L	< 20.0	< 20	< 20	< 20	< 20.0	< 22.7	< 20.0								
Phenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Phenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Phenol	2015-09	ug/L		< 11		< 11.2	**23.6**	< 11.2	< 11.2								
Phenol	2015-10	ug/L	< 11.8		< 10.3					< 11							
Phenol	2016-03	ug/L					< 10.9			< 11.2							
Phenol	2016-06	ug/L															
Phenol	2016-08	ug/L					< 11.8			< 10.6							
Phenol	2017-03	ug/L					< 10.5			< 10.9							
Phenol	2017-08	ug/L					< 10.6			< 10.4							
Phenol	2018-03	ug/L					< 12.5			< 12.3							
Phenol	2018-08	ug/L					< 13.2			< 10.6							

Table 14

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Phenol	2019-03	ug/L																
Phenol	2019-08	ug/L																< 10.8
Phenol	2020-03	ug/L																
Phenol	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Phenol	2021-03	ug/L																
Phenol	2021-08	ug/L																
Phenol	2022-08	ug/L																
Phenol	2023-01	ug/L															< 10.9	
Phenol	2023-03	ug/L															< 10.4	
Phenol	2023-08	ug/L																
Phorate	2008-08	ug/L	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 66.7	< 60	< 60	< 60	< 60	< 60	< 66.7	< 60
Phorate	2009-03	ug/L	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60
Phorate	2009-07	ug/L	< 60	< 60.0	< 60.0	< 60		< 60		< 60			< 60.0		< 60	< 60	< 60	< 60
Phorate	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Phorate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Phorate	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Phorate	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Phorate	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Phorate	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Phorate	2016-03	ug/L			< 11.1	< 11.2												
Phorate	2016-06	ug/L			< 11.4	< 11.4												
Phorate	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Phorate	2023-01	ug/L															< 10.9	
Phorate	2023-03	ug/L															< 10.4	
p-Phenylenediamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
p-Phenylenediamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
p-Phenylenediamine	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
p-Phenylenediamine	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
p-Phenylenediamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
p-Phenylenediamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0 R			< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R		< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R	
p-Phenylenediamine	2011-03	ug/L	< 10.0 UJ	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
p-Phenylenediamine	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
p-Phenylenediamine	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
p-Phenylenediamine	2016-03	ug/L			< 11.1	< 11.2												
p-Phenylenediamine	2016-06	ug/L			< 11.4	< 11.4												
p-Phenylenediamine	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
p-Phenylenediamine	2023-01	ug/L															~~< 10.9 R~~	
p-Phenylenediamine	2023-03	ug/L															< 10.4	
Pronamide	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Pronamide	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pronamide	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Pronamide	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Pronamide	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Pronamide	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Pronamide	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Pronamide	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Pronamide	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Pronamide	2016-03	ug/L			< 11.1	< 11.2												
Pronamide	2016-06	ug/L			< 11.4	< 11.4												
Pronamide	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Pronamide	2023-01	ug/L															< 10.9	
Pronamide	2023-03	ug/L															< 10.4	
Propionitrile	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Propionitrile	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Propionitrile	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
Propionitrile	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
Propionitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Phenol	2019-03	ug/L					< 13			< 11.1							
Phenol	2019-08	ug/L					< 10.8			< 10.9							
Phenol	2020-03	ug/L					< 13.7			< 12.5							
Phenol	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Phenol	2021-03	ug/L					< 11.1			< 12.2							
Phenol	2021-08	ug/L					< 12.5			< 10.8							
Phenol	2022-08	ug/L					~~< 10.4 R~~			~~< 10 R~~							
Phenol	2023-01	ug/L															
Phenol	2023-03	ug/L					< 10			< 10							
Phenol	2023-08	ug/L					< 9.62			< 11.4							
Phorate	2008-08	ug/L	< 60	< 60	< 60	< 60	< 60	< 66.7	< 60								
Phorate	2009-03	ug/L	< 60	< 60	< 60	< 60	< 60	< 60	< 60								
Phorate	2009-07	ug/L	< 60.0	< 60	< 60	< 60	< 60.0	< 68.2	< 60.0								
Phorate	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phorate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Phorate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Phorate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Phorate	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Phorate	2015-10	ug/L	< 11.8		< 10.3					< 11							
Phorate	2016-03	ug/L					< 10.9			< 11.2							
Phorate	2016-06	ug/L															
Phorate	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Phorate	2023-01	ug/L															
Phorate	2023-03	ug/L					< 10			< 10							
p-Phenylenediamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
p-Phenylenediamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
p-Phenylenediamine	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
p-Phenylenediamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
p-Phenylenediamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
p-Phenylenediamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R										
p-Phenylenediamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
p-Phenylenediamine	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
p-Phenylenediamine	2015-10	ug/L	< 11.8		< 10.3					< 11							
p-Phenylenediamine	2016-03	ug/L					< 10.9			< 11.2							
p-Phenylenediamine	2016-06	ug/L															
p-Phenylenediamine	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
p-Phenylenediamine	2023-01	ug/L															
p-Phenylenediamine	2023-03	ug/L					< 10			< 10							
Pronamide	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Pronamide	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Pronamide	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Pronamide	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pronamide	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pronamide	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Pronamide	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Pronamide	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Pronamide	2015-10	ug/L	< 11.8		< 10.3					< 11							
Pronamide	2016-03	ug/L					< 10.9			< 11.2							
Pronamide	2016-06	ug/L															
Pronamide	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Pronamide	2023-01	ug/L															
Pronamide	2023-03	ug/L					< 10			< 10							
Propionitrile	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Propionitrile	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Propionitrile	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
Propionitrile	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
Propionitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Propionitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Propionitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
Propionitrile	2012-09	ug/L														< 10.0		
Propionitrile	2015-09	ug/L	< 10	< 10			< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Propionitrile	2015-10	ug/L							< 10	< 10					< 10			< 10
Propionitrile	2016-03	ug/L			< 10	< 10												
Propionitrile	2016-06	ug/L			< 10	< 10												
Propionitrile	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Propionitrile	2023-01	ug/L															< 10	
Propionitrile	2023-03	ug/L															< 10	
Pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Pyrene	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Pyrene	2010-09	ug/L	< 10.0	< 10.0	**0.230 J**			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Pyrene	2012-03	ug/L			< 10.0													
Pyrene	2012-09	ug/L			< 10.0													
Pyrene	2013-03	ug/L																
Pyrene	2013-05	ug/L			< 11.2													
Pyrene	2013-09	ug/L			< 10.2													
Pyrene	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Pyrene	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Pyrene	2016-03	ug/L			< 11.1	< 11.2												
Pyrene	2016-06	ug/L			< 11.4	< 11.4												
Pyrene	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Pyrene	2023-01	ug/L															< 10.9	
Pyrene	2023-03	ug/L															< 10.4	
Safrole	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Safrole	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Safrole	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10
Safrole	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Safrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Safrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Safrole	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Safrole	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Safrole	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Safrole	2016-03	ug/L			< 11.1	< 11.2												
Safrole	2016-06	ug/L			< 11.4	< 11.4												
Safrole	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Safrole	2023-01	ug/L															< 10.9	
Safrole	2023-03	ug/L															< 10.4	
Selenium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium	2009-09	mg/L	< 0.005	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2010-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2010-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2011-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2011-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2012-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2012-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	**0.0124**	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2013-03	mg/L	< 0.00500	< 0.005		< 0.00500	< 0.00500		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00500	< 0.00500	< 0.005	< 0.005
Selenium	2013-05	mg/L			< 0.00500			< 0.00500										
Selenium	2013-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	**0.00198 J**	< 0.00500	< 0.00500	**0.00216 J**	**0.00192 J**	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2013-11	mg/L																

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Table 14
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2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Propionitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Propionitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Propionitrile	2012-09	ug/L				< 10.0											
Propionitrile	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Propionitrile	2015-10	ug/L	< 10		< 10					< 10							
Propionitrile	2016-03	ug/L					< 10			< 10							
Propionitrile	2016-06	ug/L															
Propionitrile	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10							
Propionitrile	2023-01	ug/L															
Propionitrile	2023-03	ug/L					< 10			< 10							
Pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Pyrene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Pyrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Pyrene	2012-03	ug/L					< 10.0										
Pyrene	2012-09	ug/L					< 10.0										
Pyrene	2013-03	ug/L					< 11.8										
Pyrene	2013-05	ug/L															
Pyrene	2013-09	ug/L															
Pyrene	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Pyrene	2015-10	ug/L	< 11.8		< 10.3					< 11							
Pyrene	2016-03	ug/L					< 10.9			< 11.2							
Pyrene	2016-06	ug/L															
Pyrene	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Pyrene	2023-01	ug/L															
Pyrene	2023-03	ug/L					< 10			< 10							
Safrole	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Safrole	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Safrole	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								
Safrole	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Safrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Safrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0										
Safrole	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Safrole	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Safrole	2015-10	ug/L	< 11.8		< 10.3					< 11							
Safrole	2016-03	ug/L					< 10.9			< 11.2							
Safrole	2016-06	ug/L															
Safrole	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Safrole	2023-01	ug/L															
Safrole	2023-03	ug/L					< 10			< 10							
Selenium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Selenium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Selenium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Selenium	2009-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500									
Selenium	2010-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500								
Selenium	2010-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500								
Selenium	2011-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500								
Selenium	2011-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500								
Selenium	2012-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500								
Selenium	2012-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500								
Selenium	2013-03	mg/L	< 0.005	< 0.005	< 0.00500		< 0.00500	< 0.005	< 0.005								
Selenium	2013-05	mg/L															
Selenium	2013-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	~~< 0.00500~~	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500		
Selenium	2013-11	mg/L								~~< 0.00500~~	**0.000637 J**	**0.00116 J**	< 0.00500	< 0.00500	**0.00143 J**		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Selenium	2014-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	**0.00110 J**	**0.000843 J**	**0.000727 J**	< 0.00500	**0.000681 J**	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2014-06	mg/L																
Selenium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2015-03	mg/L	< 0.005	< 0.005	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.005	< 0.00500
Selenium	2015-09	mg/L	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	
Selenium	2015-10	mg/L			< 0.005				< 0.005	< 0.005					< 0.005			< 0.005
Selenium	2016-03	mg/L	< 0.005	< 0.005	< 0.005	**0.000721 J**	**0.00198 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2016-06	mg/L			< 0.005	**0.00106 J**												
Selenium	2016-08	mg/L	< 0.005	< 0.005	< 0.005	**0.000697 J**	**0.00101 J**	< 0.005	**0.00198 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00336 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2017-11	mg/L																
Selenium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00153 J**	< 0.005
Selenium	2018-06	mg/L																
Selenium	2018-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00112 J**		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2018-09	mg/L					**0.00141 J**						< 0.005	< 0.005				
Selenium	2018-11	mg/L																
Selenium	2019-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00224 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00125 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00122 J**	**0.00483 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2020-03	mg/L	< 0.005	< 0.005	< 0.005			< 0.005		< 0.005	< 0.02	< 0.005	**0.0017 J**	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2020-04	mg/L				< 0.005	**0.00495 J**		< 0.005									
Selenium	2020-08	mg/L	**0.00107 J**	< 0.005	< 0.005	< 0.005	**0.0111**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2021-03	mg/L							< 0.005	< 0.005	< 0.005	< 0.005						
Selenium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00134 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00119 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2022-03	mg/L							< 0.005	< 0.02	< 0.005	< 0.005						
Selenium	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2023-01	mg/L															< 0.005	
Selenium	2023-03	mg/L							< 0.005	< 0.005	**0.00226 J**	< 0.005					< 0.005	
Selenium	2023-08	mg/L	**0.00154 J**	< 0.005	< 0.005	< 0.005	**0.00204 J**		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	2009-09	mg/L	< 0.02	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Silver	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2013-03	mg/L	< 0.0200	< 0.02		< 0.0200	< 0.0200		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0200	< 0.0200	< 0.02	< 0.02
Silver	2013-05	mg/L			< 0.0200			< 0.0200										
Silver	2013-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2013-11	mg/L																
Silver	2014-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2014-06	mg/L																
Silver	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2015-03	mg/L	< 0.001	< 0.001 J	**0.0000530 J**	< 0.00100	**0.0000530 J**	**0.0000830 J**	< 0.00100	< 0.00100	< 0.001	< 0.001 J	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.001	< 0.00100
Silver	2015-09	mg/L	< 0.001 J	< 0.001		< 0.001 J	< 0.001 J	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	
Silver	2015-10	mg/L			< 0.001				< 0.001 J	< 0.001					< 0.001			< 0.001
Silver	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.000165 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2016-06	mg/L			< 0.001	< 0.001												
Silver	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000802 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2017-11	mg/L																
Silver	2018-03	mg/L	**0.000184 J**	**0.000198 J**	< 0.001	< 0.001	**0.000157 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000146 J**	< 0.001	< 0.001
Silver	2018-06	mg/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Selenium	2014-03	mg/L	< 0.00500	< 0.00500	< 0.00500	**0.00133 J**	< 0.00500	< 0.00500	< 0.00500	~~**0.000864 J**~~	**0.00137 J**	**0.00161 J**	< 0.00500	< 0.00500	**0.00289 J**		
Selenium	2014-06	mg/L								~~< 0.00500 J~~	< 0.00500 J	< 0.00500 J	< 0.00500 J	< 0.00500 J	< 0.00500 J		
Selenium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	~~< 0.005~~	< 0.005	< 0.005	< 0.005	< 0.005	**0.0064**		
Selenium	2015-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.005	< 0.00500	**0.00470 J**	< 0.00500	< 0.00500	< 0.00500	**0.00410 J**		
Selenium	2015-09	mg/L		< 0.005		< 0.005	< 0.005	< 0.005	< 0.005								
Selenium	2015-10	mg/L	< 0.005		< 0.005					< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00404 J**		
Selenium	2016-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.000872 J**	< 0.005	< 0.005	**0.00169 J**	**0.00343 J**	**0.00255 J**	< 0.005	< 0.005	**0.00318 J**		
Selenium	2016-06	mg/L															
Selenium	2016-08	mg/L	< 0.005	< 0.005	< 0.005	**0.000672 J**	< 0.005	< 0.005	< 0.005	**0.00126 J**	**0.00269 J**	**0.00219 J**	**0.00067 J**	< 0.005	**0.00283 J**		
Selenium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00191 J**	< 0.005	< 0.005	**0.00103 J**	**0.00364 J**	**0.00392 J**	< 0.005	< 0.005	< 0.005		
Selenium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00289 J**	**0.00286 J**	< 0.005	< 0.005	< 0.005		
Selenium	2017-11	mg/L														**0.00427 J**	**0.0023 J**
Selenium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.000961 J**	< 0.005	< 0.005	**0.00265 J**	**0.00456 J**	< 0.005	< 0.005	< 0.005	**0.00198 J**	**0.00294 J**	**0.00239 J**
Selenium	2018-06	mg/L														**0.000906 J**	**0.00555**
Selenium	2018-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	~~**0.00202 J**~~	< 0.005	< 0.005	**0.00208 J**		< 0.005	**0.000974 J**	< 0.005			
Selenium	2018-09	mg/L													**0.00341 J**	**0.00165 J**	**0.00728**
Selenium	2018-11	mg/L														**0.00225 J**	**0.00121 J**
Selenium	2019-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00141 J**	< 0.005	< 0.005	**0.00156 J**		< 0.005	< 0.005	< 0.005	**0.0027 J**	< 0.005	**0.00367 J**
Selenium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00428 J**	**0.00135 J**	< 0.005	< 0.005	**0.00112 J**	**0.00264 J**	**0.00451 J**	< 0.005	< 0.005	< 0.005	**0.00332 J**	**0.00387 J**
Selenium	2020-03	mg/L	< 0.005	< 0.005		< 0.005	**0.00132 J**	< 0.005	< 0.005	**0.0021 J**	**0.00298 J**	**0.00354 J**	< 0.005		**0.00227 J**	**0.00129 J**	**0.0128**
Selenium	2020-04	mg/L			< 0.005									< 0.005			
Selenium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00524**	**0.00152 J**	< 0.005	< 0.005	**0.00145 J**			< 0.005	< 0.005	**0.00272 J**		**0.0068**
Selenium	2021-03	mg/L		< 0.005			**0.00116 J**			**0.00251 J**							
Selenium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00127 J**	< 0.005	< 0.005	**0.00178 J**			< 0.005	< 0.005	**0.00166 J**		**0.00264 J**
Selenium	2022-03	mg/L		< 0.02			**0.00111 J**			**0.00187 J**							
Selenium	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00124 J**	< 0.005	< 0.005	**0.0025 J**			**0.00112 J**	< 0.005	< 0.005		**0.0195**
Selenium	2023-01	mg/L															
Selenium	2023-03	mg/L		< 0.005			**0.00104 J**			~~**0.00137 J**~~							
Selenium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00289 J**			**0.00285 J**	< 0.005	**0.00216 J**		**0.0034 J**
Silver	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Silver	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Silver	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Silver	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200									
Silver	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Silver	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Silver	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Silver	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Silver	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Silver	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200								
Silver	2013-03	mg/L	< 0.02	< 0.02	< 0.0200		< 0.0200	< 0.02	< 0.02								
Silver	2013-05	mg/L															
Silver	2013-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2013-11	mg/L								~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2014-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2014-06	mg/L								~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	~~< 0.001~~	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Silver	2015-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.001	< 0.001 J	< 0.001	**0.0000720 J**	< 0.00100	< 0.00100	**0.0000800 J**	< 0.00100	< 0.00100		
Silver	2015-09	mg/L		< 0.001		< 0.001	**0.000125 J**	< 0.001	< 0.001								
Silver	2015-10	mg/L	< 0.001		< 0.001					< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Silver	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000175 J**	< 0.001	< 0.001	< 0.001		
Silver	2016-06	mg/L															
Silver	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Silver	2017-03	mg/L	**0.000145 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Silver	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Silver	2017-11	mg/L														< 0.001	< 0.001
Silver	2018-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000194 J**	**0.000211 J**
Silver	2018-06	mg/L														< 0.001	< 0.001

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Silver	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	**0.000336 J**			< 0.001	< 0.001	< 0.001	< 0.001
Silver	2018-09	mg/L					< 0.001						< 0.001	< 0.001				
Silver	2018-11	mg/L																
Silver	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-03	mg/L	< 0.001	< 0.001	< 0.001			< 0.001		< 0.001	< 0.004	< 0.001	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-04	mg/L				< 0.001	< 0.001		< 0.001									
Silver	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2021-03	mg/L							< 0.001	< 0.001	< 0.001	< 0.001						
Silver	2021-08	mg/L	< 0.001	< 0.001	**0.00121**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00154**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2022-03	mg/L							< 0.001	< 0.004	< 0.001	< 0.001						
Silver	2022-08	mg/L	**0.00117**	< 0.001	< 0.001	**0.00105 J+**	**0.00105 J+**		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2023-01	mg/L															< 0.001	
Silver	2023-03	mg/L							< 0.001	< 0.001	**0.00159**	< 0.001					< 0.001	
Silver	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Styrene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Styrene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 1.00
Styrene	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 1.00	< 1.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00
Styrene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
Styrene	2013-05	ug/L			< 1.00			< 1.00										
Styrene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2013-11	ug/L																
Styrene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2014-06	ug/L																
Styrene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2015-03	ug/L	< 1	**0.182 J**	**0.177 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	**0.282 J**	< 1.00
Styrene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Styrene	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Styrene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2016-06	ug/L			< 1	< 1												
Styrene	2016-08	ug/L	< 1	< 1	**0.116 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2017-11	ug/L																
Styrene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2018-06	ug/L																
Styrene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Styrene	2018-09	ug/L					< 1						< 1	< 1				
Styrene	2018-11	ug/L																
Styrene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2020-04	ug/L				< 1	< 1		< 1									
Styrene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2021-03	ug/L							< 1	< 1	< 1	< 1						
Styrene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2022-03	ug/L							< 1	< 1	< 1	< 1						
Styrene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2023-01	ug/L															< 1	
Styrene	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Silver	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001			
Silver	2018-09	mg/L													< 0.001	< 0.001	< 0.001
Silver	2018-11	mg/L														< 0.001	< 0.001
Silver	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-03	mg/L	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001
Silver	2020-04	mg/L			< 0.001									< 0.001			
Silver	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Silver	2021-03	mg/L		< 0.001			< 0.001			< 0.001							
Silver	2021-08	mg/L	< 0.001	**0.00073 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Silver	2022-03	mg/L		< 0.004			**0.000698 J**			< 0.001							
Silver	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Silver	2023-01	mg/L															
Silver	2023-03	mg/L		< 0.001			< 0.001			< 0.001							
Silver	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Styrene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Styrene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Styrene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Styrene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Styrene	2010-03	ug/L	< 1.00	< 2.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00								
Styrene	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00	< 1.00								
Styrene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Styrene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Styrene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Styrene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Styrene	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
Styrene	2013-05	ug/L															
Styrene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Styrene	2015-03	ug/L	< 1.00	< 1.00	**0.114 J**	< 1.00	< 1	**0.118 J**	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Styrene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Styrene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Styrene	2016-06	ug/L															
Styrene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Styrene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Styrene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Styrene	2017-11	ug/L														< 1	< 1
Styrene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2018-06	ug/L														< 1	< 1
Styrene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Styrene	2018-09	ug/L													< 1	< 1	< 1
Styrene	2018-11	ug/L														< 1	< 1
Styrene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Styrene	2020-04	ug/L			< 1									< 1			
Styrene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Styrene	2021-03	ug/L		< 1			< 1			< 1							
Styrene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Styrene	2022-03	ug/L		< 1			< 1			< 1							
Styrene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Styrene	2023-01	ug/L															
Styrene	2023-03	ug/L		< 1			< 1			< 1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Styrene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Sulfide	2008-08	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sulfide	2009-03	mg/L		< 5	< 5													< 5
Sulfide	2010-09	mg/L	< 1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0	
Sulfide	2015-09	mg/L	< 1	< 1			< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Sulfide	2015-10	mg/L							< 1	< 1					< 1			< 1
Sulfide	2016-03	mg/L			< 1	**0.559 J**												
Sulfide	2016-06	mg/L			< 1	< 1												
Sulfide	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Sulfide	2023-01	mg/L															< 1	
Sulfide	2023-03	mg/L															< 1	
Technical Chlordane	2008-09	ug/L		< 2	< 2												< 2	
Technical Chlordane	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Technical Chlordane	2009-07	ug/L			< 2.00									< 2.00			< 2	
Technical Chlordane	2009-09	ug/L			< 2.00									< 2.25			< 2	
Technical Chlordane	2010-03	ug/L			< 2.00									< 2.00			< 2.00	
Technical Chlordane	2010-09	ug/L	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	
Technical Chlordane	2011-03	ug/L			< 2.00				< 2.00								< 2.00	
Technical Chlordane	2015-09	ug/L	< 2.25	< 2.22			< 2.2	< 2.41			< 2.11	< 2.2	< 2.08	< 2.25		< 2.22	< 2.35	
Technical Chlordane	2015-10	ug/L							< 2.5	< 2.33					< 2.41			< 2.3
Technical Chlordane	2016-03	ug/L			< 2	< 2.22												
Technical Chlordane	2016-06	ug/L			< 2.27	< 2.27												
Technical Chlordane	2020-08	ug/L	< 2.5	< 2.35	< 2.44	< 2.35	< 2.35	< 2.35	< 2.35	< 2.6	< 2.35	< 2.3	< 2.41	< 2.35	< 2.47	< 2.44	< 2.38	< 2.5
Technical Chlordane	2023-01	ug/L															< 2.27	
Technical Chlordane	2023-03	ug/L															< 2.08	
Tetrachloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Tetrachloroethene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Tetrachloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	**0.181 J**	< 1.00	< 1.00	< 1	< 1
Tetrachloroethene	2013-05	ug/L			< 1.00			< 1.00										
Tetrachloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2013-11	ug/L																
Tetrachloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2014-06	ug/L																
Tetrachloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Tetrachloroethene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Tetrachloroethene	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Tetrachloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2016-06	ug/L			< 1	< 1												
Tetrachloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2017-08	ug/L	< 1	**0.399 J**	< 1	< 1	< 1	**0.189 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2017-11	ug/L																
Tetrachloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2018-06	ug/L																
Tetrachloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Tetrachloroethene	2018-09	ug/L					< 1						< 1	< 1				
Tetrachloroethene	2018-11	ug/L																
Tetrachloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 14
Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Styrene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Sulfide	2008-08	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
Sulfide	2009-03	mg/L	< 5				< 5	< 5	< 5								
Sulfide	2010-09	mg/L	< 1.0	< 1.8 U	< 1.1 U	< 1.0	< 1.0										
Sulfide	2015-09	mg/L		< 1		< 1	< 1	< 1	< 1								
Sulfide	2015-10	mg/L	< 1		**0.275 J**					< 1							
Sulfide	2016-03	mg/L					< 1			< 1							
Sulfide	2016-06	mg/L															
Sulfide	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10							
Sulfide	2023-01	mg/L															
Sulfide	2023-03	mg/L					< 1			< 1							
Technical Chlordane	2008-09	ug/L	< 2				< 2	< 2	< 2								
Technical Chlordane	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Technical Chlordane	2009-07	ug/L					< 2.00		< 2.00								
Technical Chlordane	2009-09	ug/L					< 2.00		< 2.00								
Technical Chlordane	2010-03	ug/L					< 2.00		< 2.00								
Technical Chlordane	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00										
Technical Chlordane	2011-03	ug/L					< 2.00										
Technical Chlordane	2015-09	ug/L		< 2.2		< 2.22	< 2.3	< 2.22	< 2.2								
Technical Chlordane	2015-10	ug/L	< 2.33		< 2.22					< 2.33							
Technical Chlordane	2016-03	ug/L					< 2.08			< 2.22							
Technical Chlordane	2016-06	ug/L															
Technical Chlordane	2020-08	ug/L	< 2.44	< 2.35	< 2.11	< 2.41	< 2.74	< 2.3	< 2.22	< 2.2							
Technical Chlordane	2023-01	ug/L															
Technical Chlordane	2023-03	ug/L					< 2.17			< 2							
Tetrachloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Tetrachloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Tetrachloroethene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Tetrachloroethene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Tetrachloroethene	2010-03	ug/L	< 1.00	< 2.00	< 1.00	< 2.00	< 2.00	< 2.00	< 2.00								
Tetrachloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	**0.681 J**	< 1								
Tetrachloroethene	2013-05	ug/L															
Tetrachloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		**0.187 J**	< 1.00	< 1.00	< 1.00	**1.96**		
Tetrachloroethene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	**1.92**		
Tetrachloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	**0.840 J**		
Tetrachloroethene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	**0.816 J**		
Tetrachloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	**2.39**		
Tetrachloroethene	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	**0.726 J**		
Tetrachloroethene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Tetrachloroethene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	**1.77**		
Tetrachloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.51**		
Tetrachloroethene	2016-06	ug/L															
Tetrachloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**2.07**		
Tetrachloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Tetrachloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.956 J**		
Tetrachloroethene	2017-11	ug/L														< 1	< 1
Tetrachloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	**0.946 J**	< 1	< 1
Tetrachloroethene	2018-06	ug/L														< 1	< 1
Tetrachloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Tetrachloroethene	2018-09	ug/L													**0.721 J**	< 1	< 1
Tetrachloroethene	2018-11	ug/L														< 1	< 1
Tetrachloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Tetrachloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2020-04	ug/L				< 1	< 1		< 1									
Tetrachloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2021-03	ug/L							< 1	< 1	< 1	< 1						
Tetrachloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2022-03	ug/L							< 1	< 1	< 1	< 1						
Tetrachloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2023-01	ug/L															< 1	
Tetrachloroethene	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Tetrachloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Thallium	2008-08	mg/L	< 0.002	**0.00534**	< 0.002	< 0.002	< 0.002	< 0.002	**0.00625**	< 0.002	< 0.002	< 0.002	**0.00238**	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium	2009-03	mg/L	< 0.002	**0.003**	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium	2009-07	mg/L		**0.00485**					< 0.002			< 0.002	< 0.00200					
Thallium	2009-09	mg/L	< 0.002	**0.00474**	< 0.00200	**0.00208**	< 0.00200	< 0.00200	**0.00968**	< 0.00200	< 0.00200	< 0.002	**0.00328**	< 0.002		**0.00428**	< 0.002	< 0.002
Thallium	2010-03	mg/L	< 0.00200	**0.00562**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00222**	< 0.00200	< 0.00200
Thallium	2010-09	mg/L	< 0.00200	**0.00380**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00346**	< 0.00200	< 0.00200	**0.00303**	< 0.00200	< 0.00200
Thallium	2011-03	mg/L	< 0.00200	**0.00337**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00206**	< 0.00200	< 0.00200	**0.00201**	< 0.00200	< 0.00200
Thallium	2011-09	mg/L	< 0.00200	**0.00342**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00404**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2012-03	mg/L	< 0.00200	**0.00312**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2012-09	mg/L	< 0.00200	**0.00345**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00953**	**0.00306**	**0.00987**	< 0.00200	**0.00661**	< 0.00200	< 0.00200	**0.00916**	< 0.00200	< 0.00200
Thallium	2013-03	mg/L	**0.00119 J**	**0.00684**		< 0.00200	< 0.00200		**0.0102**	< 0.002	**0.00104 J**	< 0.002	**0.00405**	**0.000853 J**	< 0.00200	**0.00166 J**	< 0.002	< 0.002
Thallium	2013-05	mg/L			< 0.00200			< 0.00200										
Thallium	2013-09	mg/L	**0.00116 J**	**0.00438**	< 0.00200	< 0.00200	< 0.00200	**0.00188 J**	**0.00428**	**0.000947 J**	**0.00122 J**	< 0.00200	**0.00491**	**0.00252**	**0.000995 J**	**0.00153 J**	< 0.00200	< 0.00200
Thallium	2013-11	mg/L																
Thallium	2014-03	mg/L	< 0.00200	**0.00233**	< 0.00200	< 0.00200	< 0.00200	**0.00155 J**	**0.00296**	**0.00290**	**0.00126 J**	< 0.00200	**0.00132 J**	**0.000804 J**	**0.000983 J**	**0.00452**	< 0.00200	< 0.00200
Thallium	2014-06	mg/L																
Thallium	2014-09	mg/L	**0.000652 J**	**0.00489**	< 0.001	**0.000061 J**	**0.000202 J**	**0.00191**	**0.00485**	**0.00396**	**0.00101**	**0.000047 J**	**0.00501**	**0.00236**	**0.00157**	**0.000954 J**	< 0.001	< 0.001
Thallium	2015-03	mg/L	**0.000622 J**	**0.00647**	**0.0000470 J**	**0.0000420 J**	**0.000122 J**	**0.000376 J**	**0.0112**	**0.000106 J**	**0.00052 J**	< 0.001	**0.00337**	**0.00219**	**0.00125**	**0.000477 J**	< 0.001	< 0.00100
Thallium	2015-09	mg/L	**0.00125**	**0.00555**		**0.00004 J**	**0.000039 J**	**0.000896 J**			**0.000596 J**	< 0.001	**0.00348**	**0.00212**		**0.000399 J**	< 0.001	
Thallium	2015-10	mg/L			< 0.001				**0.00388**	**0.000061 J**					**0.00121**			< 0.001
Thallium	2016-03	mg/L	**0.000168 J**	**0.00434**	< 0.001	**0.000028 J**	**0.000113 J**	**0.00022 J**	**0.00408**	< 0.001	**0.000628 J**	< 0.001	**0.00114**	**0.00143**	**0.00101**	**0.000272 J**	< 0.001	< 0.001
Thallium	2016-06	mg/L			< 0.001	< 0.001												
Thallium	2016-08	mg/L	**0.000659 J**	**0.00412**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00674**	**0.000033 J**	< 0.001	< 0.001	**0.00223**	**0.00184**	**0.000944 J**	**0.00119**	< 0.001	< 0.001
Thallium	2017-03	mg/L	**0.0016**	**0.00444**	< 0.001	**0.000072 J**	**0.000123 J**	**0.000342 J**	**0.0043**	< 0.001	< 0.001	< 0.001	**0.00185**	**0.00198**	**0.00156**	**0.000555 J**	< 0.001	< 0.001
Thallium	2017-08	mg/L	**0.00104**	**0.00406**	< 0.001	< 0.001	**0.000068 J**	**0.00101**	**0.00182**	**0.000084 J**	**0.0004 J**	< 0.001	**0.00347**	**0.00273**	**0.00117**	**0.000444 J**	< 0.001	< 0.001
Thallium	2017-11	mg/L																
Thallium	2018-03	mg/L	**0.000638 J**	**0.00578**	< 0.001	< 0.001	**0.000073 J**	**0.000875 J**	**0.00286**	< 0.001	**0.000423 J**	< 0.001	**0.00366**	**0.00226**	**0.00124**	**0.000901 J**	**0.000153 J**	< 0.001
Thallium	2018-06	mg/L																
Thallium	2018-08	mg/L	**0.000981 J**	**0.00364**	< 0.001	< 0.001		**0.00077 J**	**0.00155**	< 0.001	**0.000313 J**	< 0.001			**0.000961 J**	**0.000464 J**	< 0.001	< 0.001
Thallium	2018-09	mg/L					< 0.001						**0.00168**	**0.00227**				
Thallium	2018-11	mg/L																
Thallium	2019-03	mg/L	**0.00127**	**0.00404**	< 0.001	< 0.001	< 0.001	**0.00106**	**0.00218**	< 0.001	< 0.001	< 0.001	< 0.001	**0.000849 J**	**0.000478 J**	< 0.001	< 0.001	< 0.001
Thallium	2019-08	mg/L	< 0.001	**0.00429**	< 0.001	< 0.001	< 0.001	**0.000334 J**	**0.00067 J**	< 0.001	< 0.001	< 0.001	**0.00182**	**0.00239**	**0.00144**	**0.000408 J**	< 0.001	< 0.001
Thallium	2020-03	mg/L	**0.000873 J**	**0.00321**	< 0.001			**0.000342 J**		< 0.001	< 0.004	< 0.001	**0.000456 J**	**0.00216 J**	**0.00142**	**0.00101**	< 0.001	< 0.001
Thallium	2020-04	mg/L				< 0.001	< 0.001		**0.000865 J**									
Thallium	2020-08	mg/L	**0.000665 J**	**0.00279**	< 0.001	< 0.001	< 0.001	**0.000727 J**	**0.000689 J**	< 0.001	< 0.001	< 0.001	**0.00269**	**0.00301**	**0.00141**	**0.000554 J**	< 0.001	< 0.001
Thallium	2021-03	mg/L							**0.00135**	< 0.001	< 0.001	< 0.001						
Thallium	2021-08	mg/L	**0.000439 J**	**0.00369**	< 0.001	< 0.001	< 0.001	**0.000402 J**	**0.00119**	< 0.001	**0.000313 J**	< 0.001	**0.00331**	**0.00226**	**0.00149**	**0.00249**	< 0.001	< 0.001
Thallium	2022-03	mg/L							**0.00227**	< 0.004	**0.000288 J**	< 0.001						
Thallium	2022-08	mg/L	**0.000773 J**	**0.00285**	< 0.001	< 0.001	< 0.001		**0.00187**	< 0.001	< 0.001	< 0.001	**0.00175**	**0.00231**	**0.00133**	< 0.001	< 0.001	< 0.001
Thallium	2023-01	mg/L															< 0.001	
Thallium	2023-03	mg/L							**0.0041**	< 0.001	**0.00141**	< 0.001					< 0.001	
Thallium	2023-08	mg/L	**0.0012 J-**	**0.00277**	< 0.001 J	< 0.001	**0.00314**		**0.00211**	< 0.001	**0.000269 J**	< 0.001	**0.00153**	**0.00156**	**0.00139**	**0.0015 J-**	**0.000461 J**	< 0.001
Thionazin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10
Thionazin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Thionazin	2009-07	ug/L	< 10	< 10.0	< 10.0	< 10		< 10		< 10			< 10.0		< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Tetrachloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.985 J**	< 1	< 1
Tetrachloroethene	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Tetrachloroethene	2020-04	ug/L			< 1									< 1			
Tetrachloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	**0.657 J**		< 1
Tetrachloroethene	2021-03	ug/L		< 1			< 1			< 1							
Tetrachloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Tetrachloroethene	2022-03	ug/L		< 1			< 1			< 1							
Tetrachloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Tetrachloroethene	2023-01	ug/L															
Tetrachloroethene	2023-03	ug/L		< 1			< 1			< 1							
Tetrachloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Thallium	2008-08	mg/L	**0.00391**	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002								
Thallium	2009-03	mg/L	< 0.002	< 0.004	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002								
Thallium	2009-07	mg/L	**0.00590**				< 0.00200	< 0.00200									
Thallium	2009-09	mg/L	< 0.00200	< 0.00600	< 0.00200	< 0.00200	< 0.00200	< 0.00200									
Thallium	2010-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200								
Thallium	2010-09	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200								
Thallium	2011-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200								
Thallium	2011-09	mg/L	< 0.00200	< 0.00200	< 0.00400	< 0.00200	< 0.00200	< 0.00200	< 0.00200								
Thallium	2012-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200								
Thallium	2012-09	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200								
Thallium	2013-03	mg/L	**0.00301**	< 0.002	< 0.00200		< 0.00200	< 0.002	< 0.002								
Thallium	2013-05	mg/L															
Thallium	2013-09	mg/L	**0.00138 J**	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200		
Thallium	2013-11	mg/L								~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200		
Thallium	2014-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200		
Thallium	2014-06	mg/L								~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200		
Thallium	2014-09	mg/L	**0.00238**	< 0.001	< 0.001	**0.000143 J**	**0.000744 J**	**0.000146 J**	**0.000053 J**	~~< 0.001~~	< 0.001	< 0.001	**0.00006 J**	< 0.001	< 0.001		
Thallium	2015-03	mg/L	**0.000716 J**	< 0.00100	< 0.00100	**0.000119 J**	**0.000119 J**	**0.000066 J**	< 0.001	**0.0000960 J**	< 0.00100	< 0.00100	**0.0000460 J**	< 0.00100	< 0.00100		
Thallium	2015-09	mg/L		< 0.001		**0.000114 J**	**0.000046 J**	< 0.001	< 0.001								
Thallium	2015-10	mg/L	**0.0017**		< 0.001					< 0.001	< 0.001	< 0.001	**0.000041 J**	< 0.001	< 0.001		
Thallium	2016-03	mg/L	**0.0021**	< 0.001	< 0.001	**0.000144 J**	**0.000124 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Thallium	2016-06	mg/L															
Thallium	2016-08	mg/L	**0.00156**	< 0.001	< 0.001	**0.000151 J**	**0.00007 J**	**0.00004 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000035 J**		
Thallium	2017-03	mg/L	**0.00172**	< 0.001	< 0.001	**0.000204 J**	**0.000095 J**	< 0.001	**0.000229 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Thallium	2017-08	mg/L	**0.000966 J**	< 0.001	< 0.001	**0.000127 J**	**0.000122 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Thallium	2017-11	mg/L														< 0.001	< 0.001
Thallium	2018-03	mg/L	**0.00115**	< 0.001	< 0.001	**0.000181 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2018-06	mg/L														< 0.001	< 0.001
Thallium	2018-08	mg/L	**0.00105**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001			
Thallium	2018-09	mg/L													< 0.001	< 0.001	< 0.001
Thallium	2018-11	mg/L														< 0.001	< 0.001
Thallium	2019-03	mg/L	**0.00209**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2019-08	mg/L	**0.00139**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2020-03	mg/L	**0.000399 J**	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001
Thallium	2020-04	mg/L			< 0.001									< 0.001			
Thallium	2020-08	mg/L	**0.000552 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Thallium	2021-03	mg/L		< 0.001			< 0.001			< 0.001							
Thallium	2021-08	mg/L	**0.00293**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Thallium	2022-03	mg/L		< 0.004			< 0.001			< 0.001							
Thallium	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Thallium	2023-01	mg/L															
Thallium	2023-03	mg/L		< 0.001			< 0.001			< 0.001							
Thallium	2023-08	mg/L	**0.000636 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001		< 0.001
Thionazin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 11.1	< 10								
Thionazin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
Thionazin	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0	< 11.4	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Thionazin	2009-09	ug/L	< 10	< 10.0	< 10.0	< 10.0		< 10.0		< 10.0			< 10		< 10	< 11.2	< 10	< 10
Thionazin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 11.2
Thionazin	2010-09	ug/L	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	
Thionazin	2011-03	ug/L	< 10.0	< 10.0	< 10.0			< 10.0		< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	
Thionazin	2011-09	ug/L																
Thionazin	2012-03	ug/L																
Thionazin	2012-09	ug/L																
Thionazin	2013-03	ug/L																
Thionazin	2013-09	ug/L																
Thionazin	2015-09	ug/L	< 11.4	< 11.1			< 11.1	< 11.6			< 10.9	< 11.1	< 10.9	< 11.2		< 11.4	< 10.5	
Thionazin	2015-10	ug/L							< 10.4	< 10.5					< 11.8			< 11.8
Thionazin	2016-03	ug/L			< 11.1	< 11.2												
Thionazin	2016-06	ug/L			< 11.4	< 11.4												
Thionazin	2020-08	ug/L	< 11.8	< 11.6	< 12.2	< 11.8	< 11.8	< 11.8	< 11.5	< 10.9	< 11.4	< 11.8	< 11.6	< 11.1	< 11.9	< 11.6	< 11.9	< 11.6
Thionazin	2023-01	ug/L															< 10.9	
Thionazin	2023-03	ug/L															< 10.4	
Tin	2008-08	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tin	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin	2009-09	mg/L	< 0.1	< 0.100	**0.110**	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tin	2010-03	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Tin	2010-09	mg/L	< 0.100	< 0.100	< 0.100			< 0.100	< 0.100	< 0.100	< 0.100	< 0.100		< 0.100	< 0.100	< 0.100	< 0.100	
Tin	2011-03	mg/L	< 0.100	< 0.100	< 0.100			< 0.100	**0.149**	< 0.100	< 0.100	< 0.100	**0.172**	**0.159**	**0.193**	**0.158**	**0.206**	
Tin	2011-09	mg/L							< 0.100				< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	
Tin	2012-03	mg/L			< 0.100				< 0.100				< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	
Tin	2012-09	mg/L			< 0.100				< 0.100				< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	
Tin	2013-03	mg/L							< 0.1				< 0.1	< 0.1	< 0.100	< 0.100	< 0.1	
Tin	2013-05	mg/L			< 0.100													
Tin	2013-09	mg/L			< 0.100				< 0.100				< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	
Tin	2013-11	mg/L																
Tin	2014-03	mg/L							< 0.100				< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	
Tin	2014-06	mg/L																
Tin	2014-09	mg/L							**0.114**				**0.119**	**0.117**	**0.126**	**0.105**	**0.114**	
Tin	2015-03	mg/L							**0.0158 J**				< 0.100	< 0.100	**0.0126 J**	< 0.1	< 0.1	
Tin	2015-09	mg/L	< 0.005	< 0.005			< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	
Tin	2015-10	mg/L							< 0.005	< 0.005					< 0.005			< 0.005
Tin	2016-03	mg/L			< 0.005	< 0.005			**0.00102 J**				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2016-06	mg/L			< 0.005	< 0.005												
Tin	2016-08	mg/L			< 0.005				**0.02**				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2017-03	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2017-08	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2018-03	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2018-08	mg/L			< 0.005				< 0.005						< 0.005	**0.000802 J**	< 0.005	
Tin	2018-09	mg/L											< 0.005	< 0.005				
Tin	2019-03	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2019-08	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2020-03	mg/L			< 0.005								< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	
Tin	2020-04	mg/L							< 0.005									
Tin	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Tin	2021-03	mg/L							< 0.005									
Tin	2021-08	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Tin	2022-03	mg/L							< 0.005									
Tin	2022-08	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005		
Tin	2023-01	mg/L															< 0.005	
Tin	2023-03	mg/L							< 0.005								< 0.005	
Tin	2023-08	mg/L			< 0.005				< 0.005				< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Toluene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.2**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Thionazin	2009-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Thionazin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Thionazin	2010-09	ug/L	< 10.0	**0.318 J**	< 10.0	< 10.0	< 10.0										
Thionazin	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0									
Thionazin	2011-09	ug/L		< 10.0			< 10.0										
Thionazin	2012-03	ug/L		< 10.0			< 10.0										
Thionazin	2012-09	ug/L		< 10.0			< 10.0										
Thionazin	2013-03	ug/L		< 10.5			< 11.8										
Thionazin	2013-09	ug/L		< 10.1													
Thionazin	2015-09	ug/L		< 11		< 11.2	< 11.6	< 11.2	< 11.2								
Thionazin	2015-10	ug/L	< 11.8		< 10.3					< 11							
Thionazin	2016-03	ug/L					< 10.9			< 11.2							
Thionazin	2016-06	ug/L															
Thionazin	2020-08	ug/L	< 11.9	< 11.8	< 10.5	< 11	< 13.5	< 11.8	< 11.1	< 11.1							
Thionazin	2023-01	ug/L															
Thionazin	2023-03	ug/L					< 10			< 10							
Tin	2008-08	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1								
Tin	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Tin	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Tin	2009-09	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100									
Tin	2010-03	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100								
Tin	2010-09	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100										
Tin	2011-03	mg/L	**0.123**	**0.149**	**0.170**	**0.194**	**0.152**	< 0.100									
Tin	2011-09	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100										
Tin	2012-03	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100										
Tin	2012-09	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100										
Tin	2013-03	mg/L	< 0.1	< 0.1	< 0.100		< 0.100										
Tin	2013-05	mg/L															
Tin	2013-09	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100			~~< 0.100~~							
Tin	2013-11	mg/L								~~**0.349**~~							
Tin	2014-03	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100			~~< 0.100~~							
Tin	2014-06	mg/L								~~< 0.100~~							
Tin	2014-09	mg/L	**0.112**	**0.121**	**0.134**	**0.146**	**0.114**			~~**0.089 J**~~							
Tin	2015-03	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.1			< 0.100							
Tin	2015-09	mg/L		< 0.005		< 0.005	< 0.005	< 0.005	< 0.005								
Tin	2015-10	mg/L	< 0.005		< 0.005					< 0.005							
Tin	2016-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2016-06	mg/L															
Tin	2016-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2018-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2018-09	mg/L															
Tin	2019-03	mg/L	< 0.005	**0.00356 J**	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2020-03	mg/L	< 0.005	< 0.005		< 0.005	< 0.005			< 0.005							
Tin	2020-04	mg/L			< 0.005												
Tin	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005		< 0.005
Tin	2021-03	mg/L		< 0.005			< 0.005			< 0.005							
Tin	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2022-03	mg/L		< 0.02			< 0.005			< 0.005							
Tin	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Tin	2023-01	mg/L															
Tin	2023-03	mg/L		< 0.005			< 0.005			< 0.005							
Tin	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005							
Toluene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Toluene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Toluene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
Toluene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	**0.255 J**	< 1	**0.252 J**
Toluene	2013-05	ug/L			< 1.00			< 1.00										
Toluene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2013-11	ug/L																
Toluene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2014-06	ug/L																
Toluene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.214 J**	< 1	< 1	< 1.00	< 1.00	< 1	**0.223 J**	< 1	< 1.00
Toluene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			< 1	< 1	< 1	< 1		< 1	< 1	
Toluene	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Toluene	2016-03	ug/L	< 1	< 1 J	< 1	< 1	< 1	< 1	< 1 J	< 1 J	< 1	< 1	< 1	< 1	< 1	< 1 J	< 1	< 1
Toluene	2016-06	ug/L			< 1	< 1												
Toluene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2017-03	ug/L	**0.335 J**	**0.234 J**	**1.37**	< 1	< 1	< 1	**0.22 J**	**0.306 J**	< 1	< 1	< 1	< 1	**0.403 J**	**0.329 J**	**0.192 J**	< 1
Toluene	2017-08	ug/L	**0.282 J**	**0.774 J**	**0.66 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.369 J**	**0.36 J**	**1.32**	**0.445 J**
Toluene	2017-11	ug/L																
Toluene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.187 J**	**0.245 J**	< 1	< 1	< 1	< 1	< 1	**0.447 J**	< 1	**0.384 J**
Toluene	2018-06	ug/L																
Toluene	2018-08	ug/L	< 1	< 1	**0.821 J**	< 1		< 1	< 1	**0.569 J**	< 1	< 1			< 1	< 1	< 1	**0.434 J**
Toluene	2018-09	ug/L					< 1						< 1	< 1				
Toluene	2018-11	ug/L																
Toluene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2019-08	ug/L	< 1	**0.556 J**	**0.512 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	**0.463 J**	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2020-04	ug/L				< 1	< 1		< 1									
Toluene	2020-08	ug/L	< 1	**5.78**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2021-03	ug/L							< 1	< 1	< 1	< 1						
Toluene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2022-03	ug/L							< 1	< 1	< 1	< 1						
Toluene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.727 J**
Toluene	2023-01	ug/L															< 1	
Toluene	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Toluene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		**0.597 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Suspended Solids	2014-09	mg/L	**41.6**	**15.8**	**7.67**	**3.86**	**7**	**48.4**	**44.1**	**155**	**37.3**	**73.9**	**14.7**	**8.67**	< 1.88	**33**	**17**	**67.5**
Total Suspended Solids	2015-03	mg/L	**54.5**	**182**	**14.3**	< 1.76	**69.0**	**30.0**	**70.4**	**66.0**	**14**	**31.5**	< 1.76	< 1.76	< 2.5	**13**	**9.5**	**7.25**
Total Suspended Solids	2015-09	mg/L	**39.9**	**20.6**		**1.88**	**73.9**	**25**			**35.6**	**49**	**7.62**	< 1.88		**22**	**14.7**	
Total Suspended Solids	2015-10	mg/L			**12.4**				**41.5**	**87.8**					< 1.88			**10.4**
Total Suspended Solids	2016-01	mg/L				< 5.00												
Total Suspended Solids	2016-03	mg/L	**44.3**	**9.33**	**7.67**	**1.76**	**14.3**	**55.2**	**82.4 J**	**223**	**85.7**	**60.2**	< 9.55	< 18.3	**1.25 J**	**23**	**22.5**	**17.8**
Total Suspended Solids	2016-06	mg/L			**5.75**	**0.875 J**												
Total Suspended Solids	2016-08	mg/L	**51.3**	**12**	**6.75**	**1 J**	**50**	**27.6**	**66.2**	**204**	**83.1**	**100**	**37.6**	< 1.88	**1 J**	**32.6**	**21.3**	**17.1**
Total Suspended Solids	2017-03	mg/L	**12.4**	**6.75**	**7.88**	< 1.88	**40.6**	**53.9**	**48**	**160**	**41**	**75**	**2.63**	**7**	**2.88**	**12.5**	**13.5**	**7**
Total Suspended Solids	2017-08	mg/L	**45.8**	**7.13**	**8.88**	**0.875 J**	**25.3**	**10**	**43.4**	**150**	**37.1**	**86.6**	**5**	**3.75**	< 1.88	**15.3**	**12**	**10.9**
Total Suspended Solids	2017-11	mg/L																
Total Suspended Solids	2018-03	mg/L	**43.6**	**16.5**	**7.75**	**0.625 J**	**96**	**14.5**	**49.8**	**83.7**	**56.9**	**42.5**	**0.75 J**	**0.75 J**	**1.25 J**	**18**	**9**	**5**
Total Suspended Solids	2018-06	mg/L																
Total Suspended Solids	2018-08	mg/L	**33**	**8**	**6.12**	**1 J**		**20**	**43.1**	**159**	**62.9**	**99.3**			**1.25 J**	**25**	**14.5**	**6.25**
Total Suspended Solids	2018-09	mg/L					**64.8**						**36.5**	**6**				

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Toluene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Toluene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Toluene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Toluene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	< 1	< 1								
Toluene	2013-05	ug/L															
Toluene	2013-09	ug/L	< 1.00	**40.9**	**2.24**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	**0.221 J**	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2014-09	ug/L	< 1	**5.38**	**2.26**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Toluene	2015-03	ug/L	< 1.00	**0.313 J**	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2015-09	ug/L		**0.199 J**		< 1	< 1	< 1	< 1								
Toluene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Toluene	2016-03	ug/L	< 1	< 1 J	< 1	< 1	< 1 J	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Toluene	2016-06	ug/L															
Toluene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Toluene	2017-03	ug/L	**0.2 J**	< 1	< 1	< 1	**0.904 J**	**0.26 J**	**0.917 J**	< 1	< 1	< 1	< 1	< 1	< 1		
Toluene	2017-08	ug/L	< 1	< 1	**97.4**	< 1	**1.26**	**0.711 J**	**0.531 J**	< 1	< 1	< 1	< 1	< 1	< 1		
Toluene	2017-11	ug/L					**0.459 J**									< 1	< 1
Toluene	2018-03	ug/L	**0.167 J**	**0.236 J**	< 1	< 1	**0.179 J**	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2018-06	ug/L														< 1	< 1
Toluene	2018-08	ug/L	< 1	< 1	< 1	< 1	**6.56**	< 1	< 1	< 1		< 1	< 1	< 1			
Toluene	2018-09	ug/L													< 1	< 1	< 1
Toluene	2018-11	ug/L					< 1									< 1	< 1
Toluene	2019-03	ug/L	< 1	< 1	**3.6**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2019-08	ug/L	< 1	< 1	< 1	< 1	**0.446 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Toluene	2020-04	ug/L			< 1									< 1			
Toluene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Toluene	2021-03	ug/L		< 1			< 1			< 1							
Toluene	2021-08	ug/L	< 1	**0.609 J**	< 1	**0.638 J**	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Toluene	2022-03	ug/L		< 1			< 1			< 1							
Toluene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Toluene	2023-01	ug/L															
Toluene	2023-03	ug/L		< 1			< 1			< 1							
Toluene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Total Suspended Solids	2014-09	mg/L	**53**	**78**	**71.7**	**153**	**3.2**	**154**	**44**	**23.7**	**18.3**	**19.3**	**28.5**	**60**	**64**		
Total Suspended Solids	2015-03	mg/L	**47.0**	**82.7**	**34.7**	**13.5**	< 2.5	**72.5**	**4.67**	**5.76**	< 1.76	**1.65 J**	**12.2**	**14.6**	< 1.76		
Total Suspended Solids	2015-09	mg/L		**46.5**		**13**	**2**	**31.3**	< 1.88								
Total Suspended Solids	2015-10	mg/L	**33.5**		**28.1**					< 1.88	< 1.88	< 1.88	**2.2 J**	**10**	< 1.88		
Total Suspended Solids	2016-01	mg/L															
Total Suspended Solids	2016-03	mg/L	**23.6**	**40.6**	**44.4**	**12.9**	**3.25**	**31.3**	**4 J**	< 1.88	**9.88**	**0.875 J**	**1 J**	**12**	< 1.76		
Total Suspended Solids	2016-06	mg/L															
Total Suspended Solids	2016-08	mg/L	**34.6**	**41**	**16.2**	**22.6**	**2.88**	**47**	**2.13**	**3.5**	**0.875 J**	< 1.88	< 1.88	**24.3**	**3.38**		
Total Suspended Solids	2017-03	mg/L	**22**	**36.6**	**36**	**21.9**	**3.25**	**18.3**	**2.25**	< 1.88	< 1.88	< 1.88	< 1.88	**37.5**	**0.625 J**		
Total Suspended Solids	2017-08	mg/L	**32.5**	**40.5**	**59.2**	**12**	**5.63**	**15.4**	**2.75**	< 1.88	< 1.88	< 1.88	**1.13 J**	**54.1**	< 1.88		
Total Suspended Solids	2017-11	mg/L														**2.38**	< 1.88
Total Suspended Solids	2018-03	mg/L	**14.1**	**58.9**	**46**	**10.1**	**1.13 J**	**31**	**1.38 J**	**0.875 J**	< 1.88	< 1.88	< 1.88	**13.6**	< 1.88	**4**	**6.88**
Total Suspended Solids	2018-06	mg/L			**59**											**1.5 J**	< 1.88
Total Suspended Solids	2018-08	mg/L	**31.5**	**45.3**	**50.1**	**19.6**	**3.38**	**49**	< 5	< 1.88		**0.875 J**	**1.13 J**	**16**			
Total Suspended Solids	2018-09	mg/L													< 1.88	< 1.88	**1 J**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Total Suspended Solids	2018-11	mg/L																
Total Suspended Solids	2019-03	mg/L	< 1.88	7	10.6	1.13 J	44.9	28.4	40.8	158	15.2	64	< 1.88	1.25 J	< 1.88	5.37	11.5	7.5
Total Suspended Solids	2019-08	mg/L	39.5	10.6	6.75	1.25 J	1 J	36	68	110	35.3	90.5	1.13 J	8.5	2	6.25	17.3	8.87
Total Suspended Solids	2020-03	mg/L	19	9	6.25			48		130	46	60	< 1.88	6	1.25 J	11	14 J	4.63
Total Suspended Solids	2020-04	mg/L				0.875 J	7.13		25.5									
Total Suspended Solids	2020-08	mg/L	27.3	23.7 J	4.38	1.75 J	15.1	11.3	36.5	102	12.3	72.8	5	4.75	1.5 J	13.6	15.5	8.5
Total Suspended Solids	2021-03	mg/L							31.5	155	46	59						
Total Suspended Solids	2021-08	mg/L	31	19.3	9	< 5	65	27.5	25	94	20	67.7	0.875 J	16.3	1.5 J	14.7	8	8.5
Total Suspended Solids	2022-03	mg/L							26	134	66	31						
Total Suspended Solids	2022-08	mg/L	21.5	13.5	4.25	4.62	86		24	126	47	66	2.38	3.75	1.88	12.3	4.25	4.88
Total Suspended Solids	2023-01	mg/L															5	
Total Suspended Solids	2023-03	mg/L							36	154	47	57					12.8	
Total Suspended Solids	2023-08	mg/L	25	13	5	4	89		31.7	113	36.7	47.3	6.25	21.7	1.88	8.75	9.67	3.5
Toxaphene	2008-08	ug/L	< 0.53			< 0.54	< 0.62	< 0.52	< 0.61	< 0.47	< 0.53	< 0.53	< 0.56	< 0.56	< 0.58	< 0.53		< 0.53
Toxaphene	2008-09	ug/L		< 2	< 2												< 2	
Toxaphene	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Toxaphene	2009-07	ug/L			< 2.00									< 2.00			< 2	
Toxaphene	2009-09	ug/L			< 2.00									< 2.25			< 2	
Toxaphene	2010-03	ug/L			< 2.00									< 2.00			< 2.00	
Toxaphene	2010-09	ug/L	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	
Toxaphene	2011-03	ug/L			< 2.00				< 2.00								< 2.00	
Toxaphene	2015-09	ug/L	< 2.25	< 2.22			< 2.2	< 2.41			< 2.11	< 2.2	< 2.08	< 2.25		< 2.22	< 2.35	
Toxaphene	2015-10	ug/L							< 2.5	< 2.33					< 2.41			< 2.3
Toxaphene	2016-03	ug/L			< 2	< 2.22												
Toxaphene	2016-06	ug/L			< 2.27	< 2.27												
Toxaphene	2020-08	ug/L	< 2.5	< 2.35	< 2.44	< 2.35	< 2.35	< 2.35	< 2.35	< 2.6	< 2.35	< 2.3	< 2.41	< 2.35	< 2.47	< 2.44	< 2.38	< 2.5
Toxaphene	2023-01	ug/L															< 2.27	
Toxaphene	2023-03	ug/L															< 2.08	
trans-1,2-Dichloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	1.17	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
trans-1,2-Dichloroethene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	
trans-1,2-Dichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2013-03	ug/L	< 1.00	0.357 J		< 1.00	< 1.00		0.749 J	0.264 J	0.373 J	< 1	< 1	< 1	< 1.00	0.338 J	< 1	< 1
trans-1,2-Dichloroethene	2013-05	ug/L			< 1.00			< 1.00										
trans-1,2-Dichloroethene	2013-09	ug/L	< 1.00	0.448 J	< 1.00	< 1.00	< 1.00	< 1.00	0.678 J	0.229 J	0.418 J	< 1.00	< 1.00	0.364 J	< 1.00	0.541 J	< 1.00	< 1.00
trans-1,2-Dichloroethene	2013-11	ug/L																
trans-1,2-Dichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.648 J	< 1.00	0.497 J	< 1.00	< 1.00	< 1.00	0.305 J	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2014-06	ug/L																
trans-1,2-Dichloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	0.72 J	0.263 J	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2015-03	ug/L	< 1	0.274 J	< 1.00	< 1.00	< 1.00	< 1.00	0.494 J	0.250 J	0.337 J	< 1	< 1.00	< 1.00	< 1	0.425 J	< 1	< 1.00
trans-1,2-Dichloroethene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			0.309 J	< 1	< 1	< 1		< 1	< 1	
trans-1,2-Dichloroethene	2015-10	ug/L			< 1				0.974 J	< 1					< 1			< 1
trans-1,2-Dichloroethene	2016-03	ug/L	< 1	0.261 J	< 1	< 1	< 1	< 1	< 1	0.235 J	0.237 J	< 1	< 1	< 1	< 1	0.502 J	< 1	< 1
trans-1,2-Dichloroethene	2016-06	ug/L			< 1	< 1												
trans-1,2-Dichloroethene	2016-08	ug/L	< 1	0.275 J	< 1	< 1	< 1	< 1	0.42 J	< 1	< 1	< 1	< 1	< 1	< 1	0.472 J	< 1	< 1
trans-1,2-Dichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	0.528 J	< 1	< 1	< 1	< 1	< 1	< 1	0.256 J	< 1	< 1
trans-1,2-Dichloroethene	2017-08	ug/L	< 1	0.222 J	< 1	< 1	< 1	< 1	0.454 J	< 1	< 1	< 1	< 1	< 1	< 1	0.426 J	< 1	< 1
trans-1,2-Dichloroethene	2017-11	ug/L																
trans-1,2-Dichloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	0.498 J	0.297 J	< 1	< 1	< 1	< 1	< 1	0.475 J	< 1	< 1
trans-1,2-Dichloroethene	2018-06	ug/L																
trans-1,2-Dichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	0.525 J	< 1	< 1	< 1			< 1	0.456 J	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Total Suspended Solids	2018-11	mg/L														1.75 J	0.75 J
Total Suspended Solids	2019-03	mg/L	13.1	23.8	78.3	36	0.875 J	< 1.88	3.38	< 1.88		1.13 J	< 1.88	26.8	< 1.88	4.75	< 1.88
Total Suspended Solids	2019-08	mg/L	33	72	44.7	5.25	2.63	175	3.63	< 1.88	1.13 J	< 1.88	< 1.88	25	< 1.88	< 1.88	1.75 J
Total Suspended Solids	2020-03	mg/L	27	60		6.5	3.38	25	1.25 J	3.25	7.37	< 1.88	1.13 J		1.88	1.38 J	1 J
Total Suspended Solids	2020-04	mg/L			37									13.3			
Total Suspended Solids	2020-08	mg/L	26.6	30	42.7	7.75	2.38	13.7	2.38	1.63 J			< 1.88	17.9	< 1.88		< 1.88
Total Suspended Solids	2021-03	mg/L		53			1.13 J			25.7							
Total Suspended Solids	2021-08	mg/L	36.5	40.9	47.6	13	2.13	22.5	2.75	< 1.88			< 1.88	9.75	< 1.88		1.5 J
Total Suspended Solids	2022-03	mg/L		22			0.875 J			2.75							
Total Suspended Solids	2022-08	mg/L	21.8	59	34	7.5	< 1.88	22	6.75	< 1.88			1.63 J	10	< 1.88		4.75
Total Suspended Solids	2023-01	mg/L															
Total Suspended Solids	2023-03	mg/L		47			< 1.88			12.6							
Total Suspended Solids	2023-08	mg/L	17.5	76	33.7	8	< 1.88	19	6.75	0.875 J			2	12.5	1 J		1.13 J
Toxaphene	2008-08	ug/L		< 0.47	< 0.51	< 0.55											
Toxaphene	2008-09	ug/L	< 2				< 2	< 2	< 2								
Toxaphene	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Toxaphene	2009-07	ug/L					< 2.00		< 2.00								
Toxaphene	2009-09	ug/L					< 2.00		< 2.00								
Toxaphene	2010-03	ug/L					< 2.00		< 2.00								
Toxaphene	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00										
Toxaphene	2011-03	ug/L					< 2.00										
Toxaphene	2015-09	ug/L		< 2.2		< 2.22	< 2.3	< 2.22	< 2.2								
Toxaphene	2015-10	ug/L	< 2.33		< 2.22					< 2.33							
Toxaphene	2016-03	ug/L					< 2.08			< 2.22							
Toxaphene	2016-06	ug/L															
Toxaphene	2020-08	ug/L	< 2.44	< 2.35	< 2.11	< 2.41	< 2.74	< 2.3	< 2.22	< 2.2							
Toxaphene	2023-01	ug/L															
Toxaphene	2023-03	ug/L					< 2.17			< 2							
trans-1,2-Dichloroethene	2008-08	ug/L	< 1	< 1	1.27	< 1	< 1	< 1	< 1								
trans-1,2-Dichloroethene	2009-03	ug/L	< 1	< 1	3.16	< 1	< 1	< 1	< 1								
trans-1,2-Dichloroethene	2009-07	ug/L	< 1.00	< 1	2.7	< 1	< 1.00										
trans-1,2-Dichloroethene	2009-09	ug/L	< 1.00	< 5.00	1.84	< 1.00	< 1.00										
trans-1,2-Dichloroethene	2010-03	ug/L	1.13	< 1.00	1.59	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2010-09	ug/L	< 1.00	< 1.00	2.72	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2011-03	ug/L	< 1.00	< 1.00	1.59	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2011-09	ug/L	1.02	< 1.00	2.22	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2012-03	ug/L	< 1.00	< 1.00	2.00	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2012-09	ug/L	1.07	< 1.00	1.36	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2013-03	ug/L	0.805 J	< 1	< 25.0		< 1.00	< 1	< 1								
trans-1,2-Dichloroethene	2013-05	ug/L															
trans-1,2-Dichloroethene	2013-09	ug/L	0.782 J	< 1.00	1.24	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2014-03	ug/L	0.762 J	< 1.00	1.04	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2014-09	ug/L	0.36 J	< 1	0.917 J	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2015-03	ug/L	0.753 J	< 1.00	1.65	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
trans-1,2-Dichloroethene	2015-10	ug/L	1.31		2.26					< 1	< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2016-03	ug/L	1.19	< 1	1.45	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2016-06	ug/L															
trans-1,2-Dichloroethene	2016-08	ug/L	0.979 J	< 1	1.3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2017-03	ug/L	0.759 J	< 1	1.29	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2017-08	ug/L	0.723 J	< 1	1.66	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2017-11	ug/L														< 1	< 1
trans-1,2-Dichloroethene	2018-03	ug/L	0.878 J	< 1	1.52	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2018-06	ug/L														< 1	< 1
trans-1,2-Dichloroethene	2018-08	ug/L	0.837 J	< 1	2.06	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
trans-1,2-Dichloroethene	2018-09	ug/L					< 1						< 1	< 1				
trans-1,2-Dichloroethene	2018-11	ug/L																
trans-1,2-Dichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.449 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.529 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-03	ug/L	< 1	**0.274 J**	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	**0.31 J**	< 1	< 1
trans-1,2-Dichloroethene	2020-04	ug/L				< 1	< 1		**0.357 J**									
trans-1,2-Dichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.4 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.372 J**	< 1	< 1
trans-1,2-Dichloroethene	2021-03	ug/L							**0.336 J**	< 1	< 1	< 1						
trans-1,2-Dichloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	**0.381 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2022-03	ug/L							**0.382 J**	< 1	< 1	< 1						
trans-1,2-Dichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2023-01	ug/L															< 1	
trans-1,2-Dichloroethene	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
trans-1,2-Dichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2009-07	ug/L	< 5	< 5.00		< 5		< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	
trans-1,3-Dichloropropene	2009-09	ug/L	< 5	< 5.00		< 5.00		< 5.00	< 5.00	< 25.0	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00
trans-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2013-03	ug/L	< 5.00	< 5		< 5.00	< 5.00		< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5.00	< 5	< 5
trans-1,3-Dichloropropene	2013-05	ug/L			< 5.00			< 5.00										
trans-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2013-11	ug/L																
trans-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2014-06	ug/L																
trans-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2015-03	ug/L	< 5	< 5	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5	< 5.00
trans-1,3-Dichloropropene	2015-09	ug/L	< 5	< 5		< 5	< 5	< 5			< 5	< 5	< 5	< 5		< 5	< 5	
trans-1,3-Dichloropropene	2015-10	ug/L			< 5				< 5	< 5					< 5			< 5
trans-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2016-06	ug/L			< 5	< 5												
trans-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2017-11	ug/L																
trans-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-06	ug/L																
trans-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-09	ug/L					< 5						< 5	< 5				
trans-1,3-Dichloropropene	2018-11	ug/L																
trans-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-03	ug/L	< 5	< 5	< 5			< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-04	ug/L				< 5	< 5		< 5									
trans-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2021-03	ug/L							< 5	< 5	< 5	< 5						
trans-1,3-Dichloropropene	2021-08	ug/L	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2022-03	ug/L							< 5	< 5	< 5	< 5						
trans-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2023-01	ug/L															< 5	
trans-1,3-Dichloropropene	2023-03	ug/L							< 5	< 5	< 5	< 5					< 5	
trans-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
trans-1,2-Dichloroethene	2018-09	ug/L													< 1	< 1	< 1
trans-1,2-Dichloroethene	2018-11	ug/L														< 1	< 1
trans-1,2-Dichloroethene	2019-03	ug/L	**0.929 J**	< 1	**1.03**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2019-08	ug/L	**1.2**	< 1	**1.66**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-03	ug/L	**0.789 J**	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-04	ug/L			**0.817 J**									< 1			
trans-1,2-Dichloroethene	2020-08	ug/L	**1**	< 1	**1.38**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
trans-1,2-Dichloroethene	2021-03	ug/L		< 1			< 1			< 1							
trans-1,2-Dichloroethene	2021-08	ug/L	**1.38 J+**	< 1	**1.52**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
trans-1,2-Dichloroethene	2022-03	ug/L		< 1			< 1			< 1							
trans-1,2-Dichloroethene	2022-08	ug/L	**0.83 J**	< 1	**1.07**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
trans-1,2-Dichloroethene	2023-01	ug/L															
trans-1,2-Dichloroethene	2023-03	ug/L		< 1			< 1			< 1							
trans-1,2-Dichloroethene	2023-08	ug/L	**0.516 J**	< 1	**1.02**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
trans-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
trans-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5								
trans-1,3-Dichloropropene	2009-07	ug/L	< 5.00	< 5	< 5	< 5	< 5.00										
trans-1,3-Dichloropropene	2009-09	ug/L	< 5.00	< 25.0	< 5.00	< 5.00	< 5.00										
trans-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2013-03	ug/L	< 5	< 5	< 125		< 5.00	< 5	< 5								
trans-1,3-Dichloropropene	2013-05	ug/L															
trans-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2013-11	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2014-06	ug/L									< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2015-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5	< 5	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2015-09	ug/L		< 5		< 5	< 5	< 5	< 5								
trans-1,3-Dichloropropene	2015-10	ug/L	< 5		< 5					< 5	< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2016-06	ug/L															
trans-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2017-11	ug/L														< 5	< 5
trans-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-06	ug/L														< 5	< 5
trans-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5			
trans-1,3-Dichloropropene	2018-09	ug/L													< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-11	ug/L														< 5	< 5
trans-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-03	ug/L	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-04	ug/L			< 5									< 5			
trans-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
trans-1,3-Dichloropropene	2021-03	ug/L		< 5			< 5			< 5							
trans-1,3-Dichloropropene	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
trans-1,3-Dichloropropene	2022-03	ug/L		< 5			< 5			< 5							
trans-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5
trans-1,3-Dichloropropene	2023-01	ug/L															
trans-1,3-Dichloropropene	2023-03	ug/L		< 5			< 5			< 5							
trans-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5		< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
trans-1,4-Dichloro-2-butene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2009-07	ug/L	< 10	< 10.0		< 10		< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	
trans-1,4-Dichloro-2-butene	2009-09	ug/L	< 10	< 10.0		< 10.0		< 10.0	< 10.0	< 50.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	
trans-1,4-Dichloro-2-butene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2013-03	ug/L	< 10.0	< 10		< 10.0	< 10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10
trans-1,4-Dichloro-2-butene	2013-05	ug/L			< 10.0			< 10.0										
trans-1,4-Dichloro-2-butene	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2013-11	ug/L																
trans-1,4-Dichloro-2-butene	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2014-06	ug/L																
trans-1,4-Dichloro-2-butene	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
trans-1,4-Dichloro-2-butene	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
trans-1,4-Dichloro-2-butene	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
trans-1,4-Dichloro-2-butene	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2016-06	ug/L			< 10	< 10												
trans-1,4-Dichloro-2-butene	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2017-11	ug/L																
trans-1,4-Dichloro-2-butene	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-06	ug/L																
trans-1,4-Dichloro-2-butene	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-09	ug/L					< 10						< 10	< 10				
trans-1,4-Dichloro-2-butene	2018-11	ug/L																
trans-1,4-Dichloro-2-butene	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-04	ug/L				< 10	< 10		< 10									
trans-1,4-Dichloro-2-butene	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2021-03	ug/L							< 10	< 10	< 10	< 10						
trans-1,4-Dichloro-2-butene	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2022-03	ug/L							< 10	< 10	< 10	< 10						
trans-1,4-Dichloro-2-butene	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2023-01	ug/L															< 10	
trans-1,4-Dichloro-2-butene	2023-03	ug/L							< 10	< 10	< 10	< 10					< 10	
trans-1,4-Dichloro-2-butene	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Trichloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**1.11**	**1.99**	**4.98**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**4.08**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2009-07	ug/L	< 1	< 1.00		< 1		< 1	< 1	< 1	**3.9**	< 1	< 1.00	< 1.00	< 1	< 1	< 1	
Trichloroethene	2009-09	ug/L	< 1	< 1.00		< 1.00		< 1.00	< 1.00	< 5.00	**3.85**	< 1	< 1	< 1	< 1	< 1	< 1	
Trichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.47**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**3.99**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	**1.27**	**2.88**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.98**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.90**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**3.35**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2013-03	ug/L	< 1.00	**0.271 J**		< 1.00	< 1.00		< 1	< 1	**3.63**	< 1	< 1	< 1	< 1.00	< 1.00	< 1	< 1
Trichloroethene	2013-05	ug/L			< 1.00			< 1.00										
Trichloroethene	2013-09	ug/L	< 1.00	**0.239 J**	< 1.00	< 1.00	< 1.00	< 1.00	**0.265 J**	< 1.00	**2.44**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2013-11	ug/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
trans-1,4-Dichloro-2-butene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
trans-1,4-Dichloro-2-butene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10								
trans-1,4-Dichloro-2-butene	2009-07	ug/L	< 10.0	< 10	< 10	< 10	< 10.0										
trans-1,4-Dichloro-2-butene	2009-09	ug/L	< 10.0	< 50.0	< 10.0	< 10.0	< 10.0										
trans-1,4-Dichloro-2-butene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2013-03	ug/L	< 10	< 10	< 250		< 10.0	< 10	< 10								
trans-1,4-Dichloro-2-butene	2013-05	ug/L															
trans-1,4-Dichloro-2-butene	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2013-11	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2014-06	ug/L									< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
trans-1,4-Dichloro-2-butene	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2016-06	ug/L															
trans-1,4-Dichloro-2-butene	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2017-11	ug/L														< 10	< 10
trans-1,4-Dichloro-2-butene	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-06	ug/L														< 10	< 10
trans-1,4-Dichloro-2-butene	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
trans-1,4-Dichloro-2-butene	2018-09	ug/L													< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-11	ug/L														< 10	< 10
trans-1,4-Dichloro-2-butene	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-04	ug/L			< 10									< 10			
trans-1,4-Dichloro-2-butene	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
trans-1,4-Dichloro-2-butene	2021-03	ug/L		< 10			< 10			< 10							
trans-1,4-Dichloro-2-butene	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
trans-1,4-Dichloro-2-butene	2022-03	ug/L		< 10			< 10			< 10							
trans-1,4-Dichloro-2-butene	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
trans-1,4-Dichloro-2-butene	2023-01	ug/L															
trans-1,4-Dichloro-2-butene	2023-03	ug/L		< 10			< 10			< 10							
trans-1,4-Dichloro-2-butene	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Trichloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Trichloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1								
Trichloroethene	2009-07	ug/L	< 1.00	< 1	< 1	< 1	< 1.00										
Trichloroethene	2009-09	ug/L	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00										
Trichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2013-03	ug/L	< 1	< 1	< 25.0		< 1.00	**0.586 J**	< 1								
Trichloroethene	2013-05	ug/L															
Trichloroethene	2013-09	ug/L	< 1.00	< 1.00	**0.228 J**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	**0.460 J**		
Trichloroethene	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		

Table 14

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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Trichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**2.31**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2014-06	ug/L																
Trichloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	**0.286 J**	**0.236 J**	< 1	**2.19**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.246 J**	**1.46**	< 1	< 1.00	< 1.00	< 1	< 1	< 1	< 1.00
Trichloroethene	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			**1.34**	< 1	< 1	< 1		< 1	< 1	
Trichloroethene	2015-10	ug/L			< 1				< 1	< 1					< 1			< 1
Trichloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.24**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2016-06	ug/L			< 1	< 1												
Trichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.417 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2017-03	ug/L	**0.233 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2017-11	ug/L																
Trichloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.261 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2018-06	ug/L																
Trichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Trichloroethene	2018-09	ug/L					< 1						< 1	< 1				
Trichloroethene	2018-11	ug/L																
Trichloroethene	2019-03	ug/L	< 1	**0.529 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2020-03	ug/L	< 1	< 1	< 1			< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2020-04	ug/L				< 1	< 1		< 1									
Trichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2021-03	ug/L							< 1	< 1	< 1	< 1						
Trichloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2022-03	ug/L							< 1	< 1	< 1	< 1						
Trichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2023-01	ug/L															< 1	
Trichloroethene	2023-03	ug/L							< 1	< 1	< 1	< 1					< 1	
Trichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vanadium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2009-09	mg/L	< 0.05	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2010-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2010-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2011-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2011-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2012-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2012-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2013-03	mg/L	< 0.0500	< 0.05		< 0.0500	**0.00467 J**		< 0.05	**0.0101 J**	**0.00451 J**	**0.00448 J**	< 0.05	< 0.05	< 0.0500	< 0.0500	**0.00457 J**	**0.00995 J**
Vanadium	2013-05	mg/L			**0.00291 J**			< 0.0500										
Vanadium	2013-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.00391 J**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.00540 J**
Vanadium	2013-11	mg/L																
Vanadium	2014-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.00382 J**	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.00679 J**
Vanadium	2014-06	mg/L																
Vanadium	2014-09	mg/L	**0.00049 J**	< 0.005	**0.00053 J**	**0.000913 J**	**0.00107 J**	**0.000551 J**	**0.000522 J**	**0.00215 J**	**0.00075 J**	**0.000883 J**	< 0.005	**0.000549 J**	**0.000654 J**	**0.000482 J**	**0.00274 J**	**0.00103 J**
Vanadium	2015-03	mg/L	< 0.005	**0.00551**	**0.000554 J**	**0.000641 J**	**0.00253 J**	< 0.00500	< 0.00500	**0.00119 J**	< 0.005	**0.00064 J**	**0.000527 J**	**0.000503 J**	< 0.005	< 0.005	**0.000449 J**	< 0.00500
Vanadium	2015-09	mg/L	< 0.005	**0.000775 J**		**0.001 J**	**0.00324 J**	< 0.005			< 0.005	**0.000588 J**	< 0.005	< 0.005		< 0.005	**0.000544 J**	
Vanadium	2015-10	mg/L			**0.000942 J**				< 0.005	**0.00143 J**					**0.000708 J**			**0.000456 J**
Vanadium	2016-03	mg/L	< 0.005	< 0.005	< 0.005	**0.000753 J**	**0.00145 J**	**0.000323 J**	**0.000329 J**	**0.00195 J**	**0.000471 J**	**0.000718 J**	< 0.005	< 0.005	**0.000363 J**	< 0.005	**0.000522 J**	**0.000471 J**
Vanadium	2016-06	mg/L			< 0.005	**0.000613 J**												
Vanadium	2016-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00165 J**	**0.00288 J**	< 0.005	**0.00248 J**	**0.0022 J**	**0.000546 J**	**0.000679 J**	**0.000316 J**	< 0.005	**0.000515 J**	**0.000293 J**	**0.000434 J**	**0.000289 J**
Vanadium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00201 J**	< 0.005	< 0.005	**0.00208 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00101 J**	< 0.005	< 0.005	< 0.005
Vanadium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00117 J**	< 0.005	< 0.005	**0.00161 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.000982 J**	< 0.005	< 0.005	< 0.005
Vanadium	2017-11	mg/L																
Vanadium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	**0.000926 J**	**0.00318 J**	< 0.005	< 0.005	**0.00104 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.000871 J**	< 0.005	< 0.005	< 0.005
Vanadium	2018-06	mg/L																

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Trichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	**0.225 J**		
Trichloroethene	2015-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2015-09	ug/L		< 1		< 1	< 1	< 1	< 1								
Trichloroethene	2015-10	ug/L	< 1		< 1					< 1	< 1	< 1	< 1	< 1	< 1		
Trichloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	**0.25 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.44 J**		
Trichloroethene	2016-06	ug/L															
Trichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	**0.288 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Trichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Trichloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	**0.208 J**	**0.457 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.226 J**		
Trichloroethene	2017-11	ug/L														< 1	< 1
Trichloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2018-06	ug/L														< 1	< 1
Trichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Trichloroethene	2018-09	ug/L													< 1	< 1	< 1
Trichloroethene	2018-11	ug/L														< 1	< 1
Trichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2020-03	ug/L	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Trichloroethene	2020-04	ug/L			< 1									< 1			
Trichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Trichloroethene	2021-03	ug/L		< 1			< 1			< 1							
Trichloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Trichloroethene	2022-03	ug/L		< 1			< 1			< 1							
Trichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Trichloroethene	2023-01	ug/L															
Trichloroethene	2023-03	ug/L		< 1			< 1			< 1							
Trichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Vanadium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Vanadium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Vanadium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05								
Vanadium	2009-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500									
Vanadium	2010-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2010-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2011-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2011-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2012-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2012-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2013-03	mg/L	< 0.05	**0.00728 J**	**0.00441 J**		< 0.0500	**0.00749 J**	< 0.05								
Vanadium	2013-05	mg/L															
Vanadium	2013-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	~~**0.0100 J**~~	**0.00501 J**	**0.00519 J**	**0.00785 J**	**0.00556 J**	**0.00402 J**		
Vanadium	2013-11	mg/L								~~**0.00787 J**~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500		
Vanadium	2014-03	mg/L	< 0.0500	< 0.0500	< 0.0500	**0.0134 J**	< 0.0500	**0.00635 J**	< 0.0500	~~**0.00602 J**~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500	**0.00304 J**		
Vanadium	2014-06	mg/L								~~**0.00338 J**~~	< 0.0500	**0.00259 J**	< 0.0500	< 0.0500	< 0.0500		
Vanadium	2014-09	mg/L	**0.000468 J**	**0.00232 J**	**0.00175 J**	**0.00189 J**	**0.00133 J**	**0.00256 J**	**0.000899 J**	~~**0.00212 J**~~	**0.0015 J**	**0.00185 J**	**0.000583 J**	**0.00112 J**	**0.0015 J**		
Vanadium	2015-03	mg/L	< 0.00500	**0.00296 J**	**0.00136 J**	**0.000861 J**	< 0.005	**0.00224 J**	< 0.005	**0.00109 J**	**0.000756 J**	**0.00129 J**	< 0.00500	< 0.00500	**0.000564 J**		
Vanadium	2015-09	mg/L		**0.00199 J**		**0.00063 J**	< 0.005	< 0.005	< 0.005								
Vanadium	2015-10	mg/L	< 0.005		**0.00135 J**					**0.00166 J**	**0.000822 J**	**0.00114 J**	**0.000474 J**	**0.000832 J**	**0.000715 J**		
Vanadium	2016-03	mg/L	< 0.005	**0.00144 J**	**0.00135 J**	**0.000537 J**	**0.00058 J**	< 0.005	**0.000274 J**	**0.00153 J**	**0.000769 J**	**0.000867 J**	**0.000365 J**	**0.000488 J**	**0.000456 J**		
Vanadium	2016-06	mg/L															
Vanadium	2016-08	mg/L	**0.000334 J**	**0.00132 J**	**0.00129 J**	**0.000579 J**	**0.000503 J**	**0.000594 J**	< 0.005	**0.00143 J**	**0.000697 J**	**0.00105 J**	**0.000545 J**	**0.000641 J**	**0.00065 J**		
Vanadium	2017-03	mg/L	< 0.005	**0.00139 J**	**0.00147 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00176 J**	< 0.005	**0.00103 J**	< 0.005	< 0.005	< 0.005		
Vanadium	2017-08	mg/L	< 0.005	**0.00105 J**	**0.0011 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00116 J**	< 0.005	**0.000947 J**	< 0.005	< 0.005	< 0.005		
Vanadium	2017-11	mg/L														< 0.005	< 0.005
Vanadium	2018-03	mg/L	< 0.005	**0.00189 J**	**0.00156 J**	**0.00109 J**	< 0.005	< 0.005	< 0.005	**0.0018 J**	< 0.005	**0.00117 J**	< 0.005	< 0.005	< 0.005	**0.000867 J**	**0.000894 J**
Vanadium	2018-06	mg/L														**0.00295 J**	**0.000787 J**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Analytical Data Summary - Upper Bedrock Appendix II
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Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Vanadium	2018-08	mg/L	< 0.005	< 0.005	**0.00356 J**	**0.000991 J**		< 0.005	< 0.005	**0.00161 J**	**0.000797 J**	**0.00068 J**			< 0.005	< 0.005	**0.000665 J**	**0.000622 J**
Vanadium	2018-09	mg/L					**0.00282 J**						< 0.005	< 0.005				
Vanadium	2018-11	mg/L																
Vanadium	2019-03	mg/L	< 0.005	< 0.005	**0.000864 J**	< 0.005	**0.00165 J**	< 0.005	< 0.005	**0.00217 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00216 J**	< 0.005	< 0.005
Vanadium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0022 J**	< 0.005	< 0.005	< 0.005	**0.0018 J**	**0.000901 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00106 J**	< 0.005	< 0.005
Vanadium	2020-03	mg/L	< 0.005	< 0.005	< 0.005			< 0.005		**0.00239 J**	< 0.02	< 0.005	< 0.005	< 0.02	**0.00104 J**	< 0.005	< 0.005	< 0.005
Vanadium	2020-04	mg/L				**0.000858 J**	**0.00108 J**		< 0.005									
Vanadium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00102 J**	< 0.005	< 0.005
Vanadium	2021-03	mg/L							< 0.005	**0.00238 J**	< 0.005	< 0.005						
Vanadium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00282 J**	< 0.005	< 0.005	**0.00176 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00118 J**	< 0.005	**0.00119 J**
Vanadium	2022-03	mg/L							< 0.005	< 0.02	< 0.005	< 0.005						
Vanadium	2022-08	mg/L	< 0.005 J	< 0.005	< 0.005	**0.00285 J**	**0.00396 J**		< 0.005	**0.00164 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0015 J**	< 0.005
Vanadium	2023-01	mg/L															< 0.005	
Vanadium	2023-03	mg/L							< 0.005	**0.00237 J**	< 0.005	< 0.005					< 0.005	
Vanadium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00111 J**	**0.00347 J**		< 0.005	**0.00123 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vinyl Acetate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl Acetate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl Acetate	2009-07	ug/L	< 2	< 2.00		< 2		< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2	
Vinyl Acetate	2009-09	ug/L	< 2	< 2.00		< 2.00		< 2.00	< 2.00	< 10.0	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	
Vinyl Acetate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2012-03	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00	< 10.0	< 10.0	< 10.0	< 2.00	< 2.00	< 10.0	< 10.0	< 2.00	< 2.00	< 2.00	< 10.0
Vinyl Acetate	2012-09	ug/L	< 4.00	< 10.0	< 10.0	< 4.00	< 4.00	< 10.0	< 10.0	< 10.0	< 10.0	< 4.00	< 10.0	< 10.0	< 4.00	< 4.00	< 4.00	< 4.00
Vinyl Acetate	2013-03	ug/L	< 2.00	< 2		< 2.00	< 2.00		< 2	< 2	< 2	< 2	< 2	< 2	< 2.00	< 2.00	< 2	**1.05 J**
Vinyl Acetate	2013-05	ug/L			< 2.00			< 2.00										
Vinyl Acetate	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2013-11	ug/L																
Vinyl Acetate	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2014-06	ug/L																
Vinyl Acetate	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl Acetate	2015-03	ug/L	< 10	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Vinyl Acetate	2015-09	ug/L	< 10	< 10		< 10	< 10	< 10			< 10	< 10	< 10	< 10		< 10	< 10	
Vinyl Acetate	2015-10	ug/L			< 10				< 10	< 10					< 10			< 10
Vinyl Acetate	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2016-06	ug/L			< 10	< 10												
Vinyl Acetate	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2017-11	ug/L																
Vinyl Acetate	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2018-06	ug/L																
Vinyl Acetate	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Vinyl Acetate	2018-09	ug/L					< 10						< 10	< 10				
Vinyl Acetate	2018-11	ug/L																
Vinyl Acetate	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2020-03	ug/L	< 10	< 10	< 10			< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2020-04	ug/L				< 10	< 10		< 10									
Vinyl Acetate	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2021-03	ug/L							< 10	< 10	< 10	< 10						
Vinyl Acetate	2021-08	ug/L	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2022-03	ug/L							< 10	< 10	< 10	< 10						
Vinyl Acetate	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2023-01	ug/L															< 10	
Vinyl Acetate	2023-03	ug/L							< 10	< 10	< 10	< 10					< 10	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
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Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Vanadium	2018-08	mg/L	< 0.005	**0.00146 J**	**0.00133 J**	< 0.005	~~**0.00091 J**~~	< 0.005	< 0.005	**0.00146 J**		**0.00104 J**	**0.000694 J**	< 0.005			
Vanadium	2018-09	mg/L													**0.000696 J**	**0.00205 J**	**0.001 J**
Vanadium	2018-11	mg/L														**0.00284 J**	**0.0013 J**
Vanadium	2019-03	mg/L	< 0.005	< 0.005	**0.0016 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00179 J**		< 0.005	< 0.005	**0.000964 J**	< 0.005	**0.00242 J**	**0.00083 J**
Vanadium	2019-08	mg/L	< 0.005	**0.00128 J**	**0.00105 J**	**0.000924 J**	< 0.005	< 0.005	< 0.005	**0.00117 J**	< 0.005	< 0.005	**0.000864 J**	**0.00112 J**	< 0.005	**0.00124 J**	**0.000962 J**
Vanadium	2020-03	mg/L	< 0.005	**0.00157 J**		< 0.005	< 0.005	< 0.005	< 0.005	**0.00197 J**	**0.00125 J**	**0.00104 J**	< 0.005		**0.00102 J**	**0.00542**	< 0.005
Vanadium	2020-04	mg/L			**0.00162 J**									< 0.005			
Vanadium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00198 J**			< 0.005	< 0.005	< 0.005		< 0.005
Vanadium	2021-03	mg/L		**0.00129 J**			< 0.005			**0.00392 J**							
Vanadium	2021-08	mg/L	< 0.005	**0.00164 J**	**0.00139 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00165 J**			< 0.005	< 0.005	< 0.005		< 0.005
Vanadium	2022-03	mg/L		< 0.02			< 0.005			**0.0013 J**							
Vanadium	2022-08	mg/L	< 0.005	**0.00152 J**	**0.00123 J**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00124 J**			< 0.005	< 0.005	< 0.005		< 0.005
Vanadium	2023-01	mg/L															
Vanadium	2023-03	mg/L		**0.00156 J**			< 0.005			~~**0.00154 J**~~							
Vanadium	2023-08	mg/L	< 0.005	**0.00179 J**	**0.0014 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005		**0.00137 J**
Vinyl Acetate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Vinyl Acetate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2								
Vinyl Acetate	2009-07	ug/L	< 2.00	< 2	< 2	< 2	< 2.00										
Vinyl Acetate	2009-09	ug/L	< 2.00	< 10.0	< 2.00	< 2.00	< 2.00										
Vinyl Acetate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2012-03	ug/L	< 10.0	< 2.00	< 2.00	< 2.00	< 10.0	< 10.0	< 10.0								
Vinyl Acetate	2012-09	ug/L	< 4.00	< 4.00	< 10.0	< 4.00	< 4.00	< 10.0	< 10.0								
Vinyl Acetate	2013-03	ug/L	< 2	< 2	< 50.0		< 2.00	< 2	< 2								
Vinyl Acetate	2013-05	ug/L															
Vinyl Acetate	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2013-11	ug/L									< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2014-06	ug/L									< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2		
Vinyl Acetate	2015-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2015-09	ug/L		< 10		< 10	< 10	< 10	< 10								
Vinyl Acetate	2015-10	ug/L	< 10		< 10					< 10	< 10	< 10	< 10	< 10	< 10		
Vinyl Acetate	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Vinyl Acetate	2016-06	ug/L															
Vinyl Acetate	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Vinyl Acetate	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Vinyl Acetate	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Vinyl Acetate	2017-11	ug/L														< 10	< 10
Vinyl Acetate	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2018-06	ug/L														< 10	< 10
Vinyl Acetate	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10			
Vinyl Acetate	2018-09	ug/L													< 10	< 10	< 10
Vinyl Acetate	2018-11	ug/L														< 10	< 10
Vinyl Acetate	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2020-03	ug/L	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10
Vinyl Acetate	2020-04	ug/L			< 10									< 10			
Vinyl Acetate	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Vinyl Acetate	2021-03	ug/L		< 10			< 10			< 10							
Vinyl Acetate	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Vinyl Acetate	2022-03	ug/L		< 10			< 10			< 10							
Vinyl Acetate	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Vinyl Acetate	2023-01	ug/L															
Vinyl Acetate	2023-03	ug/L		< 10			< 10			< 10							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 — **Analytical Data Summary - Upper Bedrock Appendix II**

Permit No. 57-SDP-03-75C — **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Vinyl Acetate	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Chloride	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	3.3	~~6.17~~	2.07	< 1	< 1	1.11	< 1	< 1	< 1	< 1
Vinyl Chloride	2009-03	ug/L	< 0.26	< 0.26	< 0.26	< 0.26	< 1	1.14	2.61	~~3.88~~	2.32	0.26 J	< 0.26	0.33 J	< 0.26	0.51 J	< 0.26	< 0.26
Vinyl Chloride	2009-07	ug/L	< 0.26	< 0.260		< 0.26		0.44 J	< 0.26	~~4.18~~	< 0.26	< 0.26	< 0.260	< 0.260	< 0.26	< 0.26	< 0.26	
Vinyl Chloride	2009-09	ug/L	< 0.24	< 0.240		< 1.00		1.20	2.58	~~< 5.00~~	2.04	< 0.24	0.27 J	0.33 J	< 0.24	0.31 J	< 0.24	
Vinyl Chloride	2010-03	ug/L	< 0.240	< 0.240	0.370 J	< 0.240	< 0.240	0.270 J	2.81	~~3.35~~	1.62	< 0.240	< 0.240	< 0.240	< 0.240	0.260 J	< 0.240	< 0.240
Vinyl Chloride	2010-09	ug/L	< 0.240	< 0.240	0.290 J	< 1.00	< 1.00	0.870 J	2.19	~~2.79~~	1.39	< 0.240	< 1.00	0.640 J	< 0.240	< 0.240	< 0.240	< 1.00
Vinyl Chloride	2011-03	ug/L	< 0.100	0.110 J	0.130 J	< 1.00	< 10.0	0.300 J	2.56	~~3.32~~	1.73	0.150 J	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2011-09	ug/L	< 0.100	< 0.100	0.200 J	< 0.100	< 0.100	0.830 J	2.10	~~1.59~~	0.840 J	< 0.100	< 0.100	0.190 J	< 0.100	< 0.100	< 0.100	< 0.100
Vinyl Chloride	2012-03	ug/L	< 0.100	< 0.100	0.130	< 0.100	< 0.100	0.740	1.44	~~1.32~~	1.79	< 0.100	< 0.100	0.130	< 0.100	0.190	< 0.100	< 0.100
Vinyl Chloride	2012-09	ug/L	< 0.100	< 0.100	0.190	< 0.100	< 0.100	0.290	2.02 J	~~1.94~~	1.21	0.130	0.220	0.360	< 0.100	< 1.00	0.140 J	< 0.100
Vinyl Chloride	2013-03	ug/L	< 1.00	< 1		< 1.00	< 1.00		1.55	~~1.33~~	0.797 J	0.35 J	0.17 J	< 1	< 1.00	< 1.00	< 1	< 1
Vinyl Chloride	2013-05	ug/L			< 1.00			< 1.00										
Vinyl Chloride	2013-09	ug/L	0.127 J	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	1.63	~~1.12~~	0.863 J	< 1.00	0.147 J	0.408 J	< 1.00	0.427 J	< 1.00	< 1.00
Vinyl Chloride	2013-11	ug/L																
Vinyl Chloride	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.167 J	1.25	~~< 1.00~~	1.22	< 1.00	< 1.00	0.290 J	< 1.00	0.308 J	< 1.00	< 1.00
Vinyl Chloride	2014-06	ug/L																
Vinyl Chloride	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	0.38 J	< 1	~~< 1~~	0.708 J	< 1	< 1	< 1	< 1	0.814 J	< 1	< 1
Vinyl Chloride	2015-03	ug/L	< 1	< 1	< 1.00	< 1.00	< 1.00	< 1.00	1.08	1.17	0.745 J	< 1	< 1.00	< 1.00	< 1	0.436 J	< 1	< 1.00
Vinyl Chloride	2015-09	ug/L	< 1	< 1		< 1	< 1	< 1			0.726 J	< 1	< 1	< 1		0.512 J	< 1	
Vinyl Chloride	2015-10	ug/L			< 1				1.19	0.683 J					< 1			< 1
Vinyl Chloride	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	1.29	< 1	0.765 J	< 1	< 1	< 1	< 1	0.648 J	< 1	< 1
Vinyl Chloride	2016-06	ug/L			< 1	< 1												
Vinyl Chloride	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	1.15	0.771 J	< 1	< 1	< 1	< 1	< 1	0.698 J	< 1	< 1
Vinyl Chloride	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	1.68	< 1	< 1	< 1	< 1	< 1	< 1	0.875 J	< 1	< 1
Vinyl Chloride	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	0.835 J	< 1	< 1	< 1	< 1	0.197 J	< 1	0.357 J	< 1	< 1
Vinyl Chloride	2017-11	ug/L																
Vinyl Chloride	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	1	0.845 J	0.359 J	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2018-06	ug/L																
Vinyl Chloride	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1	1.14	< 1	< 1	< 1			< 1	0.669 J	< 1	< 1
Vinyl Chloride	2018-09	ug/L					< 1						< 1	< 1				
Vinyl Chloride	2018-11	ug/L																
Vinyl Chloride	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	1.05	< 1	< 1	< 1	< 1	< 1	< 1	0.854 J	< 1	< 1
Vinyl Chloride	2019-08	ug/L	0.219 J	< 1	< 1	< 1	< 1	< 1	< 1	0.209 J	0.364 J	< 1	< 1	0.251 J	< 1	< 1	< 1	< 1
Vinyl Chloride	2020-03	ug/L	< 1	< 1	0.309 J			< 1		0.293 J	0.27 J	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2020-04	ug/L				< 1	< 1		0.902 J									
Vinyl Chloride	2020-08	ug/L	< 1	0.369 J	0.225 J	< 1	< 1	< 1	1.05	< 1	0.262 J	< 1	< 1	0.219 J	< 1	0.728 J	< 1	< 1
Vinyl Chloride	2021-03	ug/L							0.695 J	< 1	0.182 J	< 1						
Vinyl Chloride	2021-08	ug/L	< 1	< 1	0.538 J+	< 1	< 10	< 1	0.724 J	< 1	< 1	< 1	< 1	< 1	< 1	0.229 J	< 1	< 1
Vinyl Chloride	2022-03	ug/L							0.684 J	< 1	< 1	< 1						
Vinyl Chloride	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1		0.628 J	< 1	< 1	< 1	< 1	< 1	< 1	0.491 J	< 1	< 1
Vinyl Chloride	2023-01	ug/L															< 1	
Vinyl Chloride	2023-03	ug/L							0.546 J	< 1	< 1	< 1					< 1	
Vinyl Chloride	2023-08	ug/L	< 1	0.655 J	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Xylenes, Total	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2009-07	ug/L	< 3	< 3.00		< 3		< 3	< 3	< 3	< 3	< 3	< 3.00	< 3.00	< 3	< 3	< 3	
Xylenes, Total	2009-09	ug/L	< 3	< 3.00		< 3.00		< 3.00	< 3.00	< 15.0	< 3.00	< 3	< 3	< 3	< 3	< 3	< 3	
Xylenes, Total	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 30.0	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2011-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2012-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2012-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2013-03	ug/L	< 3.00	< 3		< 3.00	< 3.00		< 3	0.306 J	1.17 J	< 3	< 3	< 3	< 3.00	< 3.00	< 3	0.204 J
Xylenes, Total	2013-05	ug/L			< 3.00			< 3.00										
Xylenes, Total	2013-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	0.297 J	< 3.00	0.412 J	0.943 J	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Vinyl Acetate	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10		< 10
Vinyl Chloride	2008-08	ug/L	< 1	**2**	**9.81**	**1.18**	< 1	< 1	< 1								
Vinyl Chloride	2009-03	ug/L	**1.79**	**1.23**	**23.2**	**1.52**	< 0.26	< 0.26	< 0.26								
Vinyl Chloride	2009-07	ug/L	**1.25**	**1.59**	**19.8**	< 0.26	< 0.260										
Vinyl Chloride	2009-09	ug/L	**1.74**	< 5.00	**14.1**	**2.44**	< 0.240										
Vinyl Chloride	2010-03	ug/L	**1.88**	**1.20**	**15.7**	**2.56**	< 0.240	< 0.240	< 0.240								
Vinyl Chloride	2010-09	ug/L	**1.60**	**1.04**	**18.3**	**1.31**	< 0.240	< 1.00	< 1.00								
Vinyl Chloride	2011-03	ug/L	**1.69**	< 1.00	**16.9**	< 1.00	< 1.00	< 0.100	< 1.00								
Vinyl Chloride	2011-09	ug/L	**1.35**	**0.720 J**	**21.8**	**0.340 J**	< 0.100	**0.100 J**	< 0.100								
Vinyl Chloride	2012-03	ug/L	**1.17**	< 0.100	**20.5**	< 0.100	< 0.100	< 0.100	< 0.100								
Vinyl Chloride	2012-09	ug/L	**1.61 J**	**0.180 J**	**12.2**	< 1.00	< 0.100	< 0.100	< 0.100								
Vinyl Chloride	2013-03	ug/L	< 1	**0.111 J**	< 25.0		< 1.00	< 1	< 1								
Vinyl Chloride	2013-05	ug/L															
Vinyl Chloride	2013-09	ug/L	**0.817 J**	< 1.00	**7.82**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2013-11	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2014-03	ug/L	< 1.00	< 1.00	**8.20**	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2014-06	ug/L									< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2014-09	ug/L	**0.783 J**	**0.256 J**	**3.99**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2015-03	ug/L	**1.10**	< 1.00	**12.8**	< 1.00	< 1	< 1	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2015-09	ug/L		**0.21 J**		< 1	< 1	< 1	< 1								
Vinyl Chloride	2015-10	ug/L	**1.06**		**11.5**					< 1	< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2016-03	ug/L	**1.56**	< 1	**5.78**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2016-06	ug/L															
Vinyl Chloride	2016-08	ug/L	**0.946 J**	< 1	**7.38**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2017-03	ug/L	**1.55**	< 1	**5.16**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2017-08	ug/L	**0.79 J**	< 1	**7.49**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2017-11	ug/L														< 1	< 1
Vinyl Chloride	2018-03	ug/L	**1.39**	**0.155 J**	**7.27**	< 1	< 1	< 1	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2018-06	ug/L														< 1	< 1
Vinyl Chloride	2018-08	ug/L	**1.05**	< 1	**9.4**	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1			
Vinyl Chloride	2018-09	ug/L													< 1	< 1	< 1
Vinyl Chloride	2018-11	ug/L														< 1	< 1
Vinyl Chloride	2019-03	ug/L	**1.08**	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2020-03	ug/L	**0.709 J**	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1
Vinyl Chloride	2020-04	ug/L			**1.63**									< 1			
Vinyl Chloride	2020-08	ug/L	< 1	< 1	**5.79**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Vinyl Chloride	2021-03	ug/L		< 1			< 1			< 1							
Vinyl Chloride	2021-08	ug/L	**1.19 J+**	< 1	**8.14**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Vinyl Chloride	2022-03	ug/L		< 1			< 1			< 1							
Vinyl Chloride	2022-08	ug/L	**1.08**	< 1	**5.37**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Vinyl Chloride	2023-01	ug/L															
Vinyl Chloride	2023-03	ug/L		< 1			< 1			< 1							
Vinyl Chloride	2023-08	ug/L	**1.65**	< 1	**6.35**	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1		< 1
Xylenes, Total	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3								
Xylenes, Total	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3								
Xylenes, Total	2009-07	ug/L	< 3.00	< 3	< 3	< 3	< 3.00										
Xylenes, Total	2009-09	ug/L	< 3.00	< 15.0	< 3.00	< 3.00	< 3.00										
Xylenes, Total	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2011-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2012-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2012-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2013-03	ug/L	< 3	< 3	< 75.0		< 3.00	< 3	< 3								
Xylenes, Total	2013-05	ug/L															
Xylenes, Total	2013-09	ug/L	< 3.00	< 3.00	**0.131 J**	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Xylenes, Total	2013-11	ug/L																
Xylenes, Total	2014-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2014-06	ug/L																
Xylenes, Total	2014-09	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3 J	< 3 J	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2015-03	ug/L	< 3	< 3	**0.307 J**	< 3.00	< 3.00	< 3.00	**0.185 J**	**0.432 J**	**0.283 J**	< 3	< 3.00	< 3.00	< 3	< 3	< 3	< 3.00
Xylenes, Total	2015-09	ug/L	< 3	< 3		< 3	< 3	< 3			< 3	< 3	< 3	< 3		< 3	< 3	
Xylenes, Total	2015-10	ug/L			< 3				< 3	< 3					< 3			< 3
Xylenes, Total	2016-03	ug/L	< 3	**0.185 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	**0.181 J**	< 3	< 3	< 3
Xylenes, Total	2016-06	ug/L			**0.316 J**	< 3												
Xylenes, Total	2016-08	ug/L	< 3	**0.449 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	**0.226 J**	**0.204 J**	< 3
Xylenes, Total	2017-03	ug/L	**1.07 J**	< 3	**0.807 J**	< 3	< 3	< 3	**0.54 J**	**0.233 J**	**0.239 J**	**0.61 J**	< 3	< 3	**0.725 J**	< 3	< 3	< 3
Xylenes, Total	2017-08	ug/L	**0.338 J**	**1.45 J**	**1.29 J**	< 3	< 3	< 3	< 3	**0.259 J**	< 3	**0.245 J**	< 3	**0.674 J**	**0.638 J**	< 3	**1.77 J**	< 3
Xylenes, Total	2017-11	ug/L																
Xylenes, Total	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	**0.238 J**	< 3	**0.151 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2018-06	ug/L																
Xylenes, Total	2018-08	ug/L	< 3	< 3	**0.586 J**	< 3		< 3	< 3	**0.419 J**	< 3	< 3			< 3	< 3	< 3	< 3
Xylenes, Total	2018-09	ug/L					< 3						< 3	< 3				
Xylenes, Total	2018-11	ug/L																
Xylenes, Total	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	**2.99 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2019-08	ug/L	< 3	**0.51 J**	**0.435 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2020-03	ug/L	< 3	< 3	< 3			< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2020-04	ug/L				< 3	< 3		< 3									
Xylenes, Total	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2021-03	ug/L							< 3	< 3	< 3	< 3						
Xylenes, Total	2021-08	ug/L	< 3	< 3	< 3	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2022-03	ug/L							< 3	< 3	< 3	< 3						
Xylenes, Total	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2023-01	ug/L															< 3	
Xylenes, Total	2023-03	ug/L							< 3	**0.439 J**	< 3	< 3					< 3	
Xylenes, Total	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Zinc	2008-08	mg/L	**0.077**	< 0.05	< 0.05	< 0.05	< 0.05	~~**0.45**~~	**0.07**	< 0.05	< 0.05	< 0.05	~~**0.129**~~	**0.139**	**0.092**	< 0.05	< 0.05	< 0.05
Zinc	2009-03	mg/L	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	~~< 0.05~~	**0.121**	< 0.05	**0.071**	< 0.05	~~< 0.05~~	< 0.05	**0.103**	< 0.05	< 0.05	< 0.05
Zinc	2009-07	mg/L	< 0.05	**0.095**	< 0.05	< 0.05	< 0.05	~~**0.486**~~	< 0.05	< 0.05	**0.376**	< 0.05	~~**0.157**~~	**0.098**	**0.066**	< 0.05	< 0.05	< 0.05
Zinc	2009-09	mg/L	**0.116**	**0.0348**	**0.0264**	**0.0976**	**0.0645**	~~**0.234**~~	**0.510**	**0.141**	**0.202**	**0.26**	~~**0.184**~~	**0.151**	**0.127**	**0.044**	**0.0633**	**0.0363**
Zinc	2010-03	mg/L	**0.175**	**0.0431**	**0.0346**	**0.0905**	**0.0654**	~~**0.383**~~	**0.0675**	**0.110**	**0.181**	**0.105**	~~**0.159**~~	**0.102**	**0.175**	**0.0858**	**0.0771**	**0.0571**
Zinc	2010-09	mg/L	**0.0491**	**0.0419**	**0.0325**	**0.0367**	**0.0254**	~~**0.779**~~	**0.0328**	< 0.0200	**0.0641**	**0.0466**	~~**0.198**~~	**0.140**	**0.103**	**0.0402**	**0.0251**	**0.0688**
Zinc	2011-03	mg/L	**0.145**	**0.0472**	**0.0364**	**0.0303**	< 0.0200	~~**0.654**~~	**0.0519**	**0.0204**	**0.120**	< 0.0200	~~**0.140**~~	**0.0589**	**0.0661**	< 0.0200	**0.0213**	< 0.0200
Zinc	2011-09	mg/L	**0.0362**	**0.0497**	< 0.0200	< 0.0200	< 0.0200	~~**0.406**~~	< 0.0400	**0.0267**	**0.0416**	< 0.0200	~~**0.149**~~	**0.0981**	**0.112**	**0.0292**	< 0.0200	< 0.0200
Zinc	2012-03	mg/L	**0.0349**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	~~**0.248**~~	< 0.0600	< 0.0200	**0.540**	< 0.0200	~~**0.135**~~	**0.0632**	**0.106**	< 0.0200	< 0.0200	< 0.0200
Zinc	2012-09	mg/L	**0.0551**	< 0.0200	< 0.0200	< 0.0200	< 0.0200	~~**0.230**~~	**0.0605**	**0.114**	**2.96**	**0.0404**	~~**0.254**~~	**0.0637**	**0.0662**	**0.0393**	**0.0640**	< 0.0200
Zinc	2013-03	mg/L	**0.172**	**0.0672**		**0.0574**	**0.0559**		**0.0997**	**0.0544**	**0.279**	**0.0495**	~~**0.226**~~	**0.0999**	**0.109**	**0.0507**	**0.161**	**0.0871**
Zinc	2013-05	mg/L			**0.0291**			~~**0.296**~~										
Zinc	2013-09	mg/L	**0.108**	**0.0218**	**0.0180 J**	**0.0791**	**0.0961**	~~**0.502**~~	**0.139**	**0.0476**	**0.184**	**0.0197 J**	~~**0.235**~~	**0.117**	**0.169**	**0.0419**	**0.0368**	**0.0477**
Zinc	2013-11	mg/L																
Zinc	2014-03	mg/L	< 0.0200	< 0.0200	**0.00962 J**	< 0.0200	< 0.0200	~~**0.920**~~	**0.0550**	**0.227**	**0.281**	**0.167**	~~**0.131**~~	**0.0492**	**0.107**	**0.0507**	< 0.0200	< 0.0200
Zinc	2014-06	mg/L																
Zinc	2014-09	mg/L	**0.0188**	**0.00802 J**	**0.0117**	< 0.01	< 0.01	~~**0.421**~~	**0.0306**	**0.155**	**0.0924**	< 0.01	~~**0.148**~~	**0.0788**	**0.101**	**0.00891 J**	**0.0325**	< 0.01
Zinc	2015-03	mg/L	**0.0354**	**0.0476**	**0.0319**	< 0.0100	< 0.0100	**0.0702**	**0.0766**	< 0.0100	**0.0887**	< 0.01	**0.103**	**0.0752**	**0.0549**	< 0.01	< 0.01	< 0.0100
Zinc	2015-09	mg/L	**0.0504**	**0.0139**		< 0.01	< 0.01	**0.0778**			**0.0309**	< 0.01	**0.108**	**0.0633**		< 0.01	< 0.01	
Zinc	2015-10	mg/L			**0.0305**				**0.011**	< 0.01					**0.0504**			< 0.01
Zinc	2016-03	mg/L	< 0.01	< 0.01	**0.0078 J**	< 0.01	< 0.01	**0.0134**	**0.0204**	< 0.01	**0.0658**	< 0.01	**0.0551**	**0.0511**	**0.0588**	**0.00802 J**	< 0.01	< 0.01
Zinc	2016-06	mg/L			**0.00689 J**	< 0.01												
Zinc	2016-08	mg/L	**0.058**	**0.00847 J**	< 0.01	< 0.01	< 0.01	**0.112**	**0.0337**	**0.00543 J**	**0.0689**	< 0.01	**0.0959**	**0.0665**	**0.0721**	**0.0233**	< 0.01	< 0.01
Zinc	2017-03	mg/L	**0.138**	< 0.02	**0.0125 J**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0321**	< 0.02	**0.0612**	**0.055**	**0.0986**	**0.0165 J**	< 0.02	< 0.02
Zinc	2017-08	mg/L	**0.028**	< 0.02	< 0.02	< 0.02	< 0.02	**0.0563**	**0.0123 J**	< 0.02	**0.0457**	< 0.02	**0.121**	**0.0828**	**0.0888**	< 0.02	< 0.02	< 0.02
Zinc	2017-11	mg/L																
Zinc	2018-03	mg/L	**0.0349**	**0.0563**	< 0.02	< 0.02	< 0.02	**0.0702**	< 0.02	< 0.02	**0.0437**	< 0.02	**0.113**	**0.0613**	**0.0531**	**0.0263**	< 0.02	< 0.02

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Table 14
Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Xylenes, Total	2013-11	ug/L									< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2014-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2014-06	ug/L									< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2014-09	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2015-03	ug/L	< 3.00	< 3.00	**1.37 J**	< 3.00	< 3	< 3	< 3		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2015-09	ug/L		< 3		< 3	< 3	< 3	< 3								
Xylenes, Total	2015-10	ug/L	< 3		< 3					< 3	< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2016-03	ug/L	< 3	< 3	< 3	< 3	**0.262 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2016-06	ug/L															
Xylenes, Total	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	**0.583 J**	< 3	< 3	< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2017-03	ug/L	< 3	< 3	**0.169 J**	< 3	**2.17 J**	< 3	**1.31 J**	< 3	< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2017-08	ug/L	< 3	**0.235 J**	**0.187 J**	**0.529 J**	**2.38 J**	**1.11 J**	**0.956 J**	< 3	< 3	< 3	< 3	< 3	**0.136 J**		
Xylenes, Total	2017-11	ug/L														< 3	< 3
Xylenes, Total	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2018-06	ug/L														< 3	< 3
Xylenes, Total	2018-08	ug/L	< 3	< 3	< 3	< 3	**7.29**	< 3	< 3	< 3		< 3	< 3	< 3			
Xylenes, Total	2018-09	ug/L													< 3	< 3	< 3
Xylenes, Total	2018-11	ug/L					< 3									< 3	< 3
Xylenes, Total	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2020-03	ug/L	< 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3
Xylenes, Total	2020-04	ug/L			< 3									< 3			
Xylenes, Total	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Xylenes, Total	2021-03	ug/L		< 3			< 3			< 3							
Xylenes, Total	2021-08	ug/L	< 3	**0.724 J**	**0.734 J**	**0.467 J**	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Xylenes, Total	2022-03	ug/L		< 3			< 3			< 3							
Xylenes, Total	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Xylenes, Total	2023-01	ug/L															
Xylenes, Total	2023-03	ug/L		< 3			< 3			< 3							
Xylenes, Total	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3		< 3
Zinc	2008-08	mg/L	~~**0.686**~~	< 0.05	< 0.05	< 0.05	< 0.05	**0.064**	< 0.05								
Zinc	2009-03	mg/L	~~< 0.05~~	**0.426**	**0.189**	< 0.05	< 0.05	< 0.05	< 0.05								
Zinc	2009-07	mg/L	~~**1.93**~~	< 0.05	< 0.05	**0.061**	< 0.05	< 0.05	< 0.05								
Zinc	2009-09	mg/L	~~**0.498**~~	< 0.0600	**0.0560**	**0.102**	**0.0499**	**0.0982**									
Zinc	2010-03	mg/L	~~**0.106**~~	< 0.0200	**0.0617**	**0.157**	**0.0720**	**0.145**	**0.0710**								
Zinc	2010-09	mg/L	~~**0.185**~~	< 0.0600	< 0.0200	**0.0588**	**0.0805**	**0.0221**	**0.0302**								
Zinc	2011-03	mg/L	~~**0.0781**~~	< 0.100	**0.0334**	**0.105**	< 0.0200	**0.0586**	**0.0500**								
Zinc	2011-09	mg/L	~~**0.0952**~~	< 0.0600	< 0.0400	< 0.0200	< 0.0200	**0.0219**	**0.113**								
Zinc	2012-03	mg/L	~~**0.475**~~	< 0.0600	< 0.0600	< 0.0200	< 0.0200	**0.0236**	**0.0305**								
Zinc	2012-09	mg/L	~~**0.128**~~	< 0.0600	< 0.0400	**0.0684**	< 0.0200	**0.114**	**0.0426**								
Zinc	2013-03	mg/L	~~**0.582**~~	**0.061**	**0.0499**		**0.0375**	**0.0628**	**0.061**								
Zinc	2013-05	mg/L															
Zinc	2013-09	mg/L	~~**0.230**~~	**0.0928**	**0.0719**	**0.147**	**0.0233**	**0.494**	**0.0339**	~~< 0.0200~~	< 0.0200	**0.0305**	< 0.0200	**0.00976 J**	**0.0329**		
Zinc	2013-11	mg/L								~~**0.147**~~	**0.0827**	**0.101**	**0.154**	**0.159**	**0.0939**		
Zinc	2014-03	mg/L	~~**0.206**~~	< 0.0200	**0.0142 J**	**0.199**	**0.0365**	**0.0379**	< 0.0200	~~< 0.0200 J~~	**0.00854 J**	**0.00826 J**	< 0.0200	**0.0212**	**0.0154 J**		
Zinc	2014-06	mg/L								~~< 0.0600~~	< 0.120	< 0.0600	< 0.0600	< 0.0200	< 0.0600		
Zinc	2014-09	mg/L	~~**0.46**~~	< 0.01	< 0.01	**0.0417**	**0.00837 J**	**0.0217**	**0.00894 J**	~~< 0.01~~	< 0.01	< 0.01	**0.0171**	**0.00763 J**	< 0.01		
Zinc	2015-03	mg/L	**0.0684**	< 0.0100	< 0.0100	**0.0141**	< 0.01	**0.0391**	< 0.01	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100		
Zinc	2015-09	mg/L		< 0.01		**0.0139**	< 0.01	< 0.01	< 0.01								
Zinc	2015-10	mg/L	**0.123**		< 0.01					< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Zinc	2016-03	mg/L	**0.113**	< 0.01	< 0.01	**0.0147**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Zinc	2016-06	mg/L															
Zinc	2016-08	mg/L	**0.103**	< 0.01	< 0.01	**0.0244**	< 0.01	**0.00525 J**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Zinc	2017-03	mg/L	**0.184**	< 0.02	< 0.02	**0.0209**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Zinc	2017-08	mg/L	**0.0658**	< 0.02	< 0.02	**0.0129 J**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Zinc	2017-11	mg/L														< 0.02	**0.0143 J**
Zinc	2018-03	mg/L	**0.17**	< 0.02	< 0.02	**0.0199 J**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	AW-1 (DwnGrad)	AW-2 (DwnGrad)	AW-3 (DwnGrad)	AW-4 (DwnGrad)	AW-5 (DwnGrad)	AW-7 (DwnGrad)	MW-12 (DwnGrad)	MW-13 (DwnGrad)	MW-16 (DwnGrad)	MW-17 (DwnGrad)	MW-20 (DwnGrad)	MW-21 (DwnGrad)	MW-23 (DwnGrad)	MW-24 (DwnGrad)	MW-26 (DwnGrad)	MW-28 (DwnGrad)
Zinc	2018-06	mg/L																
Zinc	2018-08	mg/L	**0.0403**	**0.012 J**	< 0.02	< 0.02		**0.0539**	< 0.02	< 0.02	**0.0281**	< 0.02			**0.0547**	**0.012 J**	< 0.02	< 0.02
Zinc	2018-09	mg/L					< 0.02						**0.0311**	**0.0718**				
Zinc	2018-11	mg/L																
Zinc	2019-03	mg/L	**0.0404**	< 0.02	< 0.02	< 0.02	< 0.02	**0.11**	**0.0108 J**	< 0.02	**0.0742**	< 0.02	**0.0289**	**0.0329**	**0.0351**	< 0.02	< 0.02	< 0.02
Zinc	2019-08	mg/L	**0.0107 J**	**0.014 J**	< 0.02	< 0.02	< 0.02	**0.0219**	< 0.02	< 0.02	**0.0129 J**	< 0.02	**0.0983**	**0.0725**	**0.1**	**0.0202**	< 0.02	< 0.02
Zinc	2020-03	mg/L	**0.0442**	**0.0103 J**	< 0.02			**0.0226**		**0.018 J**	< 0.08	< 0.02	**0.0333**	**0.0897**	**0.113**	**0.0148 J**	< 0.02	< 0.02
Zinc	2020-04	mg/L				< 0.02	< 0.02		< 0.02									
Zinc	2020-08	mg/L	**0.0153 J**	< 0.02	< 0.02	< 0.02	< 0.02	**0.106**	< 0.02	< 0.02	**0.0254**	< 0.02	**0.101**	**0.0972**	**0.101**	**0.01 J**	< 0.02	< 0.02
Zinc	2021-03	mg/L							< 0.02	< 0.02	**0.0147 J**	< 0.02						
Zinc	2021-08	mg/L	**0.0146 J**	**0.0163 J**	< 0.02	< 0.02	< 0.02	**0.0575**	< 0.02	< 0.02	**0.0204**	< 0.02	**0.111**	**0.0804**	**0.0626**	< 0.02	< 0.02	< 0.02
Zinc	2022-03	mg/L							< 0.02	< 0.08	**0.0306**	< 0.02						
Zinc	2022-08	mg/L	**0.0197 J**	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	**0.0576**	< 0.02	**0.0638**	**0.0673**	**0.0708**	< 0.02	< 0.02	**0.0118 J**
Zinc	2023-01	mg/L															< 0.02	
Zinc	2023-03	mg/L							< 0.02	< 0.02	< 0.02	< 0.02					< 0.02	
Zinc	2023-08	mg/L	**0.0261**	**0.0312**	< 0.02	< 0.02	**0.00717 J**		< 0.02	< 0.02	**0.0537**	< 0.02	**0.082**	**0.0627**	**0.1**	**0.0138 J**	< 0.02	< 0.02

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1
Permit No. 57-SDP-03-75C

Analytical Data Summary - Upper Bedrock Appendix II
2023 Annual Water Quality Report

Constituent	Date	Units	MW-30 (DwnGrad)	MW-32 (DwnGrad)	MW-34 (DwnGrad)	MW-35 (DwnGrad)	MW-37 (Bkgrnd)	VP-3 (DwnGrad)	VP-4 (DwnGrad)	MW-101A (Bkgrnd)	MW-102A (Delin)	MW-103A (Delin)	MW-105A (Delin)	MW-106A (Delin)	MW-107A (Delin)	MW-108A (Delin)	MW-109A (Delin)
Zinc	2018-06	mg/L														< 0.02	< 0.02
Zinc	2018-08	mg/L	**0.0756**	< 0.02	< 0.02	**0.0182 J**	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02			
Zinc	2018-09	mg/L													< 0.02	< 0.02	**0.0108 J**
Zinc	2018-11	mg/L														**0.0705**	< 0.02
Zinc	2019-03	mg/L	**0.129**	**0.0153 J**	< 0.02	**0.0288**	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0205**
Zinc	2019-08	mg/L	**0.079**	< 0.02	< 0.02	**0.0217**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2020-03	mg/L	**0.0435**	< 0.02		**0.0333**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.0285**		< 0.02	< 0.02	< 0.02
Zinc	2020-04	mg/L			< 0.02									< 0.02			
Zinc	2020-08	mg/L	**0.026**	< 0.02	< 0.02	**0.0209**	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	< 0.02	< 0.02		< 0.02
Zinc	2021-03	mg/L		< 0.02			< 0.02			< 0.02							
Zinc	2021-08	mg/L	**0.185**	< 0.02	< 0.02	**0.0291**	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	< 0.02	< 0.02		< 0.02
Zinc	2022-03	mg/L		< 0.08			< 0.02			< 0.02							
Zinc	2022-08	mg/L	**0.0532**	< 0.02	< 0.02	**0.0209**	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	< 0.02	< 0.02		< 0.02
Zinc	2023-01	mg/L															
Zinc	2023-03	mg/L		< 0.02			< 0.02			< 0.02							
Zinc	2023-08	mg/L	**0.0833**	< 0.02	< 0.02	**0.0324**	< 0.02	**0.00734 J**	< 0.02	< 0.02			< 0.02	< 0.02	< 0.02		< 0.02

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,1,1,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,1,1,2-Tetrachloroethane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,1,1,2-Tetrachloroethane	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 2.00	< 2.00	< 2.00	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2013-11	ug/L												
1,1,1,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2014-06	ug/L												
1,1,1,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2015-06	ug/L						< 1	< 1					
1,1,1,2-Tetrachloroethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2015-10	ug/L			< 1	< 1							< 1	< 1
1,1,1,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2016-06	ug/L					< 1							
1,1,1,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2017-11	ug/L												
1,1,1,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-06	ug/L												
1,1,1,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-09	ug/L							< 1	< 1				
1,1,1,2-Tetrachloroethane	2018-11	ug/L											< 1	
1,1,1,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2019-04	ug/L												
1,1,1,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-04	ug/L	< 1		< 1									
1,1,1,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1,2-Tetrachloroethane	2021-03	ug/L				< 1								
1,1,1,2-Tetrachloroethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1,2-Tetrachloroethane	2022-03	ug/L				< 1								
1,1,1,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1,2-Tetrachloroethane	2023-03	ug/L				< 1								
1,1,1,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,1,1-Trichloroethane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,1,1-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
1,1,1-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2013-11	ug/L												
1,1,1-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2014-06	ug/L												
1,1,1-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
1,1,1-Trichloroethane	2015-06	ug/L						< 1	< 1					
1,1,1-Trichloroethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2015-10	ug/L			< 1	< 1							< 1	< 1
1,1,1-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2016-06	ug/L					< 1							
1,1,1-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2017-11	ug/L												
1,1,1-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2018-06	ug/L												
1,1,1-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2018-09	ug/L							< 1	< 1				
1,1,1-Trichloroethane	2018-11	ug/L											< 1	
1,1,1-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2019-04	ug/L												
1,1,1-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-04	ug/L	< 1		< 1									
1,1,1-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1-Trichloroethane	2021-03	ug/L				< 1								
1,1,1-Trichloroethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1-Trichloroethane	2022-03	ug/L				< 1								
1,1,1-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,1-Trichloroethane	2023-03	ug/L				< 1								
1,1,1-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,1,1,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1								
1,1,1,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1								
1,1,1,2-Tetrachloroethane	2009-07	ug/L	< 1	< 1									
1,1,1,2-Tetrachloroethane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
1,1,1,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 2.00								
1,1,1,2-Tetrachloroethane	2013-03	ug/L	< 1	< 1	< 1.00								
1,1,1,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,1,2-Tetrachloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2015-06	ug/L											
1,1,1,2-Tetrachloroethane	2015-09	ug/L	< 1	< 1	< 1								
1,1,1,2-Tetrachloroethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,1,1,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1,2-Tetrachloroethane	2016-06	ug/L											
1,1,1,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1,2-Tetrachloroethane	2017-11	ug/L										< 1	< 1
1,1,1,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-06	ug/L										< 1	< 1
1,1,1,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,1,1,2-Tetrachloroethane	2018-09	ug/L									< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2018-11	ug/L										< 1	< 1
1,1,1,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,1,1,2-Tetrachloroethane	2019-04	ug/L											< 1
1,1,1,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2020-04	ug/L											
1,1,1,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,1,1,2-Tetrachloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,1,1,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,1,1,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1								
1,1,1-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1								
1,1,1-Trichloroethane	2009-07	ug/L	< 1	< 1									
1,1,1-Trichloroethane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2013-03	ug/L	< 1	< 1	< 1.00								
1,1,1-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,1-Trichloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2015-06	ug/L											
1,1,1-Trichloroethane	2015-09	ug/L	< 1	< 1	< 1								
1,1,1-Trichloroethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,1,1-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1-Trichloroethane	2016-06	ug/L											
1,1,1-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,1-Trichloroethane	2017-11	ug/L										< 1	< 1
1,1,1-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2018-06	ug/L										< 1	< 1
1,1,1-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,1,1-Trichloroethane	2018-09	ug/L									< 1	< 1	< 1
1,1,1-Trichloroethane	2018-11	ug/L										< 1	< 1
1,1,1-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,1,1-Trichloroethane	2019-04	ug/L											< 1
1,1,1-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2020-04	ug/L											
1,1,1-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,1,1-Trichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,1,1-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,1,1-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2008-08	ug/L	< 1	< 1	< 1								
1,1,2,2-Tetrachloroethane	2009-03	ug/L	< 1	< 1	< 1								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,1,2,2-Tetrachloroethane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,1,2,2-Tetrachloroethane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,1,2,2-Tetrachloroethane	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2013-11	ug/L												
1,1,2,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2014-06	ug/L												
1,1,2,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2015-06	ug/L						< 1	< 1					
1,1,2,2-Tetrachloroethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2015-10	ug/L			< 1	< 1							< 1	< 1
1,1,2,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2016-06	ug/L					< 1							
1,1,2,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2017-11	ug/L												
1,1,2,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-06	ug/L												
1,1,2,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-09	ug/L							< 1	< 1				
1,1,2,2-Tetrachloroethane	2018-11	ug/L											< 1	
1,1,2,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2019-04	ug/L												
1,1,2,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-04	ug/L	< 1		< 1									
1,1,2,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2,2-Tetrachloroethane	2021-03	ug/L				< 1								
1,1,2,2-Tetrachloroethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2,2-Tetrachloroethane	2022-03	ug/L				< 1								
1,1,2,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2,2-Tetrachloroethane	2023-03	ug/L				< 1								
1,1,2,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,1,2-Trichloroethane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,1,2-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
1,1,2-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2013-11	ug/L												
1,1,2-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2014-06	ug/L												
1,1,2-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
1,1,2-Trichloroethane	2015-06	ug/L						< 1	< 1					
1,1,2-Trichloroethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2015-10	ug/L			< 1	< 1							< 1	< 1
1,1,2-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2016-06	ug/L					< 1							
1,1,2-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2017-11	ug/L												
1,1,2-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2018-06	ug/L												
1,1,2-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2018-09	ug/L							< 1	< 1				
1,1,2-Trichloroethane	2018-11	ug/L											< 1	
1,1,2-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2019-04	ug/L												
1,1,2-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-04	ug/L	< 1		< 1									
1,1,2-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2-Trichloroethane	2021-03	ug/L				< 1								
1,1,2-Trichloroethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2-Trichloroethane	2022-03	ug/L				< 1								
1,1,2-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1,2-Trichloroethane	2023-03	ug/L				< 1								
1,1,2-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,1-Dichloroethane	2008-08	ug/L	**6.14**	**2.46**	**1.74**	**21.4**	< 1	< 1	< 1	**13.2**	**2.08**	< 1	< 1	< 1
1,1-Dichloroethane	2009-03	ug/L	**4.12**	**2.15**	**1.66**	**21.9**	< 1	< 1	< 1	**8.01**	**1.1**	< 1	< 1	< 1
1,1-Dichloroethane	2009-07	ug/L	**21.1**	**1.89**	**1.7**	< 1		< 1	< 1.00	**12.3**	< 1			
1,1-Dichloroethane	2009-09	ug/L	**21.2**	**2.41**	**1.61**	**18.4**		< 1	< 1	**12**	< 1			

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,1,2,2-Tetrachloroethane	2009-07	ug/L	< 1	< 1									
1,1,2,2-Tetrachloroethane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
1,1,2,2-Tetrachloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2013-03	ug/L	< 1	< 1	< 1.00								
1,1,2,2-Tetrachloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,2,2-Tetrachloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2015-06	ug/L											
1,1,2,2-Tetrachloroethane	2015-09	ug/L	< 1	< 1	< 1								
1,1,2,2-Tetrachloroethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,1,2,2-Tetrachloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2,2-Tetrachloroethane	2016-06	ug/L											
1,1,2,2-Tetrachloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2,2-Tetrachloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2,2-Tetrachloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2,2-Tetrachloroethane	2017-11	ug/L										< 1	< 1
1,1,2,2-Tetrachloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-06	ug/L										< 1	< 1
1,1,2,2-Tetrachloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,1,2,2-Tetrachloroethane	2018-09	ug/L									< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2018-11	ug/L										< 1	< 1
1,1,2,2-Tetrachloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,1,2,2-Tetrachloroethane	2019-04	ug/L											< 1
1,1,2,2-Tetrachloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2020-04	ug/L											
1,1,2,2-Tetrachloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,1,2,2-Tetrachloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,1,2,2-Tetrachloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,1,2,2-Tetrachloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2008-08	ug/L	< 1	< 1	< 1								
1,1,2-Trichloroethane	2009-03	ug/L	< 1	< 1	< 1								
1,1,2-Trichloroethane	2009-07	ug/L	< 1	< 1									
1,1,2-Trichloroethane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2013-03	ug/L	< 1	< 1	< 1.00								
1,1,2-Trichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,1,2-Trichloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2015-06	ug/L											
1,1,2-Trichloroethane	2015-09	ug/L	< 1	< 1	< 1								
1,1,2-Trichloroethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,1,2-Trichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2-Trichloroethane	2016-06	ug/L											
1,1,2-Trichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2-Trichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2-Trichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,1,2-Trichloroethane	2017-11	ug/L										< 1	< 1
1,1,2-Trichloroethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2018-06	ug/L										< 1	< 1
1,1,2-Trichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,1,2-Trichloroethane	2018-09	ug/L									< 1	< 1	< 1
1,1,2-Trichloroethane	2018-11	ug/L										< 1	< 1
1,1,2-Trichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,1,2-Trichloroethane	2019-04	ug/L											< 1
1,1,2-Trichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2020-04	ug/L											
1,1,2-Trichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,1,2-Trichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,1,2-Trichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,1,2-Trichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,1-Dichloroethane	2008-08	ug/L	< 1	**3.76**	< 1								
1,1-Dichloroethane	2009-03	ug/L	< 1	**3.32**	< 1								
1,1-Dichloroethane	2009-07	ug/L	< 1	**2.24**									
1,1-Dichloroethane	2009-09	ug/L	< 1.00	**3.09**	< 1.00								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,1-Dichloroethane	2010-03	ug/L	**20.2**	**6.51**	**1.82**	**15.9**	< 1.00	< 1.00	< 1.00	**11.6**	**1.06**	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2010-09	ug/L	**2.74**	**1.75**	**1.72**	**15.1**	< 1.00	< 1.00	< 1.00	**8.79**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2011-03	ug/L	**1.38**	**1.67**	**1.04**	**15.7**	< 1.00	< 1.00	< 1.00	**12.6**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2011-09	ug/L	**4.04**	**1.93**	**1.58**	**11.4**	< 1.00	< 1.00	< 1.00	**5.12**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2012-03	ug/L	**1.14**	**1.77**	**1.49**	**13.6**	< 1.00	< 1.00	< 1.00	**6.51**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2012-09	ug/L	< 1.00	**1.76**	**1.41**	**13.6**	< 1.00	< 1.00	< 1.00	**3.93**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2013-03	ug/L	**1.58**	**1.73**	**1.41**	**12.9**	< 1	< 1	< 1	**7.74**	< 1.00	< 1	< 1	< 1
1,1-Dichloroethane	2013-09	ug/L	**3.42**	**1.70**	**1.71**	**11.3**	< 1.00	< 1.00	< 1.00	**4.21**	**0.594 J**	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2013-11	ug/L												
1,1-Dichloroethane	2014-03	ug/L	**5.05**	**13.8**	**1.36**	**4.77**	< 1.00	< 1.00	< 1.00	**2.48**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2014-06	ug/L												
1,1-Dichloroethane	2014-09	ug/L	**3.99**	**1.55**	**1.64**	**8.23**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	2015-03	ug/L	**2.74**	< 1	**0.534 J**	**7.94**	< 1	< 1	< 1.00	**2.16**	**0.793 J**	< 1	< 1.00	< 1.00
1,1-Dichloroethane	2015-06	ug/L						< 1	< 1					
1,1-Dichloroethane	2015-09	ug/L	**6.42**	< 1			< 1	< 1	< 1	**1.6**	**0.483 J**	< 1		
1,1-Dichloroethane	2015-10	ug/L			**1.33**	**8.58**							< 1	< 1
1,1-Dichloroethane	2016-03	ug/L	< 1	< 1	**1.11**	**5.15**	< 1	< 1	< 1	**3.23**	**1.66**	< 1	< 1	< 1
1,1-Dichloroethane	2016-06	ug/L					< 1							
1,1-Dichloroethane	2016-08	ug/L	**4.07**	< 1	**0.992 J**	**5.74**	< 1	< 1	< 1	**2.31**	**1.18**	< 1	< 1	< 1
1,1-Dichloroethane	2017-03	ug/L	**9.33**	< 1	**1.23**	**3.7**	< 1	< 1	< 1	**2.69**	< 1	< 1	< 1	< 1
1,1-Dichloroethane	2017-08	ug/L	**6.8**	< 1	**0.748 J**	**3.23**	< 1	< 1	< 1	**1.24**	**0.938 J**	< 1	< 1	< 1
1,1-Dichloroethane	2017-11	ug/L												
1,1-Dichloroethane	2018-03	ug/L	**6.18**	< 1	**1.08**	**5.11**	< 1	< 1	< 1	**1.54**	**1.17**	< 1	< 1	< 1
1,1-Dichloroethane	2018-06	ug/L												
1,1-Dichloroethane	2018-08	ug/L	**3.36**	< 1	**1.25**	**3.45**	< 1	< 1			**0.878 J**	< 1	< 1	< 1
1,1-Dichloroethane	2018-09	ug/L							< 1	**1.23**				
1,1-Dichloroethane	2018-11	ug/L											< 1	
1,1-Dichloroethane	2019-03	ug/L	**3.91**	**1.47**	**1.1**	**2.31**	< 1	< 1	< 1	**2.03**	**0.458 J**	< 1	< 1	< 1
1,1-Dichloroethane	2019-04	ug/L												
1,1-Dichloroethane	2019-08	ug/L	**4.84**	< 1	**1.4**	**1.19**	< 1	< 1	< 1	**2.03**	**0.951 J**	< 1	< 1	< 1
1,1-Dichloroethane	2020-03	ug/L		< 1		**0.959 J**	< 1	< 1	< 1	**2.73**	**0.993 J**	< 1	< 1	< 1
1,1-Dichloroethane	2020-04	ug/L	**3.57**		**0.911 J**									
1,1-Dichloroethane	2020-08	ug/L	**3.25**	< 1	**1.27**	**1.88**	< 1	< 1	< 1	**1.88**	**0.908 J**			< 1
1,1-Dichloroethane	2021-03	ug/L				**1.01**								
1,1-Dichloroethane	2021-08	ug/L	**1.86**	< 10	**1.13**	**0.798 J**	< 1	< 1	< 1	**1.32**	**0.791 J**			< 1
1,1-Dichloroethane	2022-03	ug/L				**1.29**								
1,1-Dichloroethane	2022-08	ug/L	**2.09**	< 1	**1.47**	**1.79**	< 1	< 1	< 1	**1.3**	< 1			< 1
1,1-Dichloroethane	2023-03	ug/L				**1.7**								
1,1-Dichloroethane	2023-08	ug/L	**1.29**	< 1	**0.857 J**	**1.7**	< 1	< 1	< 1	**1.09**	< 1			< 1
1,1-Dichloroethene	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2009-07	ug/L	< 2	< 2	< 2	< 2		< 2	< 2.00	< 2.00	< 2			
1,1-Dichloroethene	2009-09	ug/L	< 2.00	< 2	< 2.00	< 10.0		< 2	< 2	< 2	< 2			
1,1-Dichloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2012-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2012-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2013-03	ug/L	< 2.00	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	< 2.00	< 2	< 2	< 2
1,1-Dichloroethene	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2013-11	ug/L												
1,1-Dichloroethene	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2014-06	ug/L												
1,1-Dichloroethene	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2015-03	ug/L	< 2.00	< 2	< 2.00	< 2.00	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2.00	< 2.00
1,1-Dichloroethene	2015-06	ug/L						< 2	< 2					
1,1-Dichloroethene	2015-09	ug/L	< 2	< 2			< 2	< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2015-10	ug/L			< 2	< 2							< 2	< 2
1,1-Dichloroethene	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2016-06	ug/L					< 2							
1,1-Dichloroethene	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2017-11	ug/L												
1,1-Dichloroethene	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2018-06	ug/L												
1,1-Dichloroethene	2018-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
1,1-Dichloroethene	2018-09	ug/L							< 2	< 2				
1,1-Dichloroethene	2018-11	ug/L											< 2	
1,1-Dichloroethene	2019-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2019-04	ug/L												
1,1-Dichloroethene	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-03	ug/L		< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-04	ug/L	< 2		< 2									
1,1-Dichloroethene	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
1,1-Dichloroethene	2021-03	ug/L				< 2								
1,1-Dichloroethene	2021-08	ug/L	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
1,1-Dichloroethene	2022-03	ug/L				< 2								
1,1-Dichloroethene	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
1,1-Dichloroethene	2023-03	ug/L				< 2								
1,1-Dichloroethene	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
1,1-Dichloropropene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,1-Dichloropropene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,1-Dichloropropene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloropropene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,1-Dichloroethane	2010-03	ug/L	< 1.00	**1.62**	< 1.00								
1,1-Dichloroethane	2010-09	ug/L	< 1.00	**1.45**	< 1.00								
1,1-Dichloroethane	2011-03	ug/L	< 1.00	**1.42**	< 1.00								
1,1-Dichloroethane	2011-09	ug/L	< 1.00	**1.09**	< 1.00								
1,1-Dichloroethane	2012-03	ug/L	< 1.00	**1.19**	< 1.00								
1,1-Dichloroethane	2012-09	ug/L	< 1.00	**1.24**	< 1.00								
1,1-Dichloroethane	2013-03	ug/L	< 1	**0.949 J**	< 1.00								
1,1-Dichloroethane	2013-09	ug/L	< 1.00	**0.693 J**	< 1.00		< 1.00	< 1.00	< 1.00	**1.97**	**0.635 J**		
1,1-Dichloroethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	**1.88**	< 1.00		
1,1-Dichloroethane	2014-03	ug/L	< 1.00	**0.705 J**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	**2.03**	< 1.00		
1,1-Dichloroethane	2014-09	ug/L	< 1	**0.618 J**	< 1		< 1	< 1	< 1	**4.8**	**0.416 J**		
1,1-Dichloroethane	2015-03	ug/L	**0.231 J**	< 1.00	< 1		< 1.00	< 1.00	< 1.00	**3.02**	< 1.00		
1,1-Dichloroethane	2015-06	ug/L											
1,1-Dichloroethane	2015-09	ug/L	< 1	**0.348 J**	< 1								
1,1-Dichloroethane	2015-10	ug/L				< 1	< 1	< 1		**6.86**	< 1		
1,1-Dichloroethane	2016-03	ug/L	**0.325 J**	< 1	< 1	< 1	< 1	< 1		**6.41**	< 1		
1,1-Dichloroethane	2016-06	ug/L											
1,1-Dichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**4.63**	< 1		
1,1-Dichloroethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**3.72**	< 1		
1,1-Dichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**3.67**	**0.34 J**		
1,1-Dichloroethane	2017-11	ug/L										< 1	**1.58**
1,1-Dichloroethane	2018-03	ug/L	**0.402 J**	**0.235 J**	< 1	< 1	< 1	< 1		**3.13**	**0.294 J**	< 1	**1.46**
1,1-Dichloroethane	2018-06	ug/L										< 1	**1.42**
1,1-Dichloroethane	2018-08	ug/L	**0.229 J**	**0.26 J**	< 1	< 1		< 1		**2.73**			
1,1-Dichloroethane	2018-09	ug/L									< 1	< 1	**1.51**
1,1-Dichloroethane	2018-11	ug/L										< 1	**1.1**
1,1-Dichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	**4.19**	< 1	< 1	
1,1-Dichloroethane	2019-04	ug/L											**1.34**
1,1-Dichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**6.97**	**0.417 J**	< 1	**1.26**
1,1-Dichloroethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**2.84**	< 1	< 1	**0.991 J**
1,1-Dichloroethane	2020-04	ug/L											
1,1-Dichloroethane	2020-08	ug/L	**0.231 J**	< 1	< 1	< 1	< 1			**6.47**	< 1	< 1	**1.15**
1,1-Dichloroethane	2021-03	ug/L	< 1		< 1	< 1							**1.14**
1,1-Dichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			**3.38**	< 1	< 1	**0.977 J**
1,1-Dichloroethane	2022-03	ug/L	< 1		< 1	< 1							**1.02**
1,1-Dichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			**3.06**	< 1	< 1	**1.07**
1,1-Dichloroethane	2023-03	ug/L	< 1		< 1	< 1							**0.959 J**
1,1-Dichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			**2.49**	< 1	< 1	**0.897 J**
1,1-Dichloroethene	2008-08	ug/L	< 2	< 2	< 2								
1,1-Dichloroethene	2009-03	ug/L	< 2	< 2	< 2								
1,1-Dichloroethene	2009-07	ug/L	< 2	< 2									
1,1-Dichloroethene	2009-09	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2010-09	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2011-03	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2011-09	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2012-03	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2012-09	ug/L	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2013-03	ug/L	< 2	< 2	< 2.00								
1,1-Dichloroethene	2013-09	ug/L	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2013-11	ug/L					< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2014-03	ug/L	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2014-06	ug/L					< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2014-09	ug/L	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2		
1,1-Dichloroethene	2015-03	ug/L	< 2.00	< 2.00	< 2		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2015-06	ug/L											
1,1-Dichloroethene	2015-09	ug/L	< 2	< 2	< 2								
1,1-Dichloroethene	2015-10	ug/L				< 2	< 2	< 2		< 2	< 2		
1,1-Dichloroethene	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
1,1-Dichloroethene	2016-06	ug/L											
1,1-Dichloroethene	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
1,1-Dichloroethene	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
1,1-Dichloroethene	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
1,1-Dichloroethene	2017-11	ug/L										< 2	< 2
1,1-Dichloroethene	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2
1,1-Dichloroethene	2018-06	ug/L										< 2	< 2
1,1-Dichloroethene	2018-08	ug/L	< 2	< 2	< 2	< 2		< 2		< 2			
1,1-Dichloroethene	2018-09	ug/L									< 2	< 2	< 2
1,1-Dichloroethene	2018-11	ug/L										< 2	< 2
1,1-Dichloroethene	2019-03	ug/L	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	
1,1-Dichloroethene	2019-04	ug/L											< 2
1,1-Dichloroethene	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2
1,1-Dichloroethene	2020-04	ug/L											
1,1-Dichloroethene	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
1,1-Dichloroethene	2021-03	ug/L	< 2		< 2	< 2							< 2
1,1-Dichloroethene	2021-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
1,1-Dichloroethene	2022-03	ug/L	< 2		< 2	< 2							< 2
1,1-Dichloroethene	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
1,1-Dichloroethene	2023-03	ug/L	< 2		< 2	< 2							< 2
1,1-Dichloroethene	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
1,1-Dichloropropene	2008-08	ug/L	< 1	< 1	< 1								
1,1-Dichloropropene	2009-03	ug/L	< 1	< 1	< 1								
1,1-Dichloropropene	2009-07	ug/L	< 1	< 1									
1,1-Dichloropropene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,1-Dichloropropene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1-Dichloropropene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,1-Dichloropropene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
1,1-Dichloropropene	2012-09	ug/L		< 4.00										
1,1-Dichloropropene	2015-06	ug/L						< 1	< 1					
1,1-Dichloropropene	2015-09	ug/L	< 1	< 1				< 1	< 1	< 1	< 1			
1,1-Dichloropropene	2015-10	ug/L			< 1	< 1								
1,1-Dichloropropene	2016-03	ug/L												
1,1-Dichloropropene	2016-06	ug/L					< 1							
1,1-Dichloropropene	2016-08	ug/L					< 1							
1,1-Dichloropropene	2018-11	ug/L											< 1	
1,1-Dichloropropene	2019-03	ug/L											< 1	
1,1-Dichloropropene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			
1,2,3-Trichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,2,3-Trichloropropane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,2,3-Trichloropropane	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
1,2,3-Trichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2013-11	ug/L												
1,2,3-Trichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2014-06	ug/L												
1,2,3-Trichloropropane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
1,2,3-Trichloropropane	2015-06	ug/L						< 1	< 1					
1,2,3-Trichloropropane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2015-10	ug/L			< 1	< 1							< 1	< 1
1,2,3-Trichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2016-06	ug/L					< 1							
1,2,3-Trichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2017-11	ug/L												
1,2,3-Trichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2018-06	ug/L												
1,2,3-Trichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2018-09	ug/L							< 1	< 1				
1,2,3-Trichloropropane	2018-11	ug/L											< 1	
1,2,3-Trichloropropane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2019-04	ug/L												
1,2,3-Trichloropropane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-04	ug/L	< 1		< 1									
1,2,3-Trichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2,3-Trichloropropane	2021-03	ug/L				< 1								
1,2,3-Trichloropropane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2,3-Trichloropropane	2022-03	ug/L				< 1								
1,2,3-Trichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2,3-Trichloropropane	2023-03	ug/L				< 1								
1,2,3-Trichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2,4,5-Tetrachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2,4,5-Tetrachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2,4,5-Tetrachlorobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1,2,4,5-Tetrachlorobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
1,2,4,5-Tetrachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2,4,5-Tetrachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,2,4,5-Tetrachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,2,4,5-Tetrachlorobenzene	2015-06	ug/L						< 10.5	< 11.1					
1,2,4,5-Tetrachlorobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
1,2,4,5-Tetrachlorobenzene	2015-10	ug/L			< 10.3	< 10.5								
1,2,4,5-Tetrachlorobenzene	2016-03	ug/L												
1,2,4,5-Tetrachlorobenzene	2016-06	ug/L					< 11.4							
1,2,4,5-Tetrachlorobenzene	2016-08	ug/L					< 11							
1,2,4,5-Tetrachlorobenzene	2018-11	ug/L											< 11.6	
1,2,4,5-Tetrachlorobenzene	2019-03	ug/L											< 12.2	
1,2,4,5-Tetrachlorobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
1,2,4-Trichlorobenzene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trichlorobenzene	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
1,2,4-Trichlorobenzene	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
1,2,4-Trichlorobenzene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 10.0
1,2,4-Trichlorobenzene	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00				< 5.00				
1,2,4-Trichlorobenzene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00				< 5.00				
1,2,4-Trichlorobenzene	2012-09	ug/L		< 5.00										
1,2,4-Trichlorobenzene	2015-06	ug/L						< 5	< 5					
1,2,4-Trichlorobenzene	2015-09	ug/L	< 5	< 5				< 5	< 5	< 5	< 5			
1,2,4-Trichlorobenzene	2015-10	ug/L			< 5	< 5								
1,2,4-Trichlorobenzene	2016-03	ug/L												
1,2,4-Trichlorobenzene	2016-06	ug/L					< 5							
1,2,4-Trichlorobenzene	2016-08	ug/L					< 5							
1,2,4-Trichlorobenzene	2018-11	ug/L											**0.928 J**	
1,2,4-Trichlorobenzene	2019-03	ug/L											< 5	
1,2,4-Trichlorobenzene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			
1,2-Dibromo-3-chloropropane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,1-Dichloropropene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,1-Dichloropropene	2012-09	ug/L											
1,1-Dichloropropene	2015-06	ug/L											
1,1-Dichloropropene	2015-09	ug/L	< 1	< 1	< 1								
1,1-Dichloropropene	2015-10	ug/L				< 1							
1,1-Dichloropropene	2016-03	ug/L			< 1	< 1							
1,1-Dichloropropene	2016-06	ug/L											
1,1-Dichloropropene	2016-08	ug/L			< 1	< 1							
1,1-Dichloropropene	2018-11	ug/L											
1,1-Dichloropropene	2019-03	ug/L											
1,1-Dichloropropene	2020-08	ug/L	< 1	< 1	< 1	< 1							
1,2,3-Trichloropropane	2008-08	ug/L	< 1	< 1	< 1								
1,2,3-Trichloropropane	2009-03	ug/L	< 1	< 1	< 1								
1,2,3-Trichloropropane	2009-07	ug/L	< 1	< 1									
1,2,3-Trichloropropane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
1,2,3-Trichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2013-03	ug/L	< 1	< 1	< 1.00								
1,2,3-Trichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2,3-Trichloropropane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2015-06	ug/L											
1,2,3-Trichloropropane	2015-09	ug/L	< 1	< 1	< 1								
1,2,3-Trichloropropane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,2,3-Trichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2,3-Trichloropropane	2016-06	ug/L											
1,2,3-Trichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2,3-Trichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2,3-Trichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2,3-Trichloropropane	2017-11	ug/L										< 1	< 1
1,2,3-Trichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2018-06	ug/L										< 1	< 1
1,2,3-Trichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,2,3-Trichloropropane	2018-09	ug/L									< 1	< 1	< 1
1,2,3-Trichloropropane	2018-11	ug/L										< 1	< 1
1,2,3-Trichloropropane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,2,3-Trichloropropane	2019-04	ug/L											< 1
1,2,3-Trichloropropane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2020-04	ug/L											
1,2,3-Trichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,2,3-Trichloropropane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,2,3-Trichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,2,3-Trichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2,4,5-Tetrachlorobenzene	2008-08	ug/L	< 10	< 10	< 10								
1,2,4,5-Tetrachlorobenzene	2009-03	ug/L	< 10	< 10	< 10								
1,2,4,5-Tetrachlorobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
1,2,4,5-Tetrachlorobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2,4,5-Tetrachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2,4,5-Tetrachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2,4,5-Tetrachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2,4,5-Tetrachlorobenzene	2015-06	ug/L											
1,2,4,5-Tetrachlorobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
1,2,4,5-Tetrachlorobenzene	2015-10	ug/L				< 10.6							
1,2,4,5-Tetrachlorobenzene	2016-03	ug/L			< 10	< 10							
1,2,4,5-Tetrachlorobenzene	2016-06	ug/L											
1,2,4,5-Tetrachlorobenzene	2016-08	ug/L			< 11.1	< 11.5							
1,2,4,5-Tetrachlorobenzene	2018-11	ug/L											
1,2,4,5-Tetrachlorobenzene	2019-03	ug/L											
1,2,4,5-Tetrachlorobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
1,2,4-Trichlorobenzene	2008-08	ug/L	< 5	< 5	< 5								
1,2,4-Trichlorobenzene	2009-03	ug/L	< 5	< 5	< 5								
1,2,4-Trichlorobenzene	2009-07	ug/L	< 5	< 5									
1,2,4-Trichlorobenzene	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
1,2,4-Trichlorobenzene	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
1,2,4-Trichlorobenzene	2010-09	ug/L	< 5.00	< 5.00	< 5.00								
1,2,4-Trichlorobenzene	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
1,2,4-Trichlorobenzene	2012-09	ug/L											
1,2,4-Trichlorobenzene	2015-06	ug/L											
1,2,4-Trichlorobenzene	2015-09	ug/L	< 5	< 5	< 5								
1,2,4-Trichlorobenzene	2015-10	ug/L				< 5							
1,2,4-Trichlorobenzene	2016-03	ug/L			< 5	< 5							
1,2,4-Trichlorobenzene	2016-06	ug/L											
1,2,4-Trichlorobenzene	2016-08	ug/L			< 5	< 5							
1,2,4-Trichlorobenzene	2018-11	ug/L											
1,2,4-Trichlorobenzene	2019-03	ug/L											
1,2,4-Trichlorobenzene	2020-08	ug/L	< 5	< 5	< 5	< 5							
1,2-Dibromo-3-chloropropane	2008-08	ug/L	< 10	< 10	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,2-Dibromo-3-chloropropane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
1,2-Dibromo-3-chloropropane	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
1,2-Dibromo-3-chloropropane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 10.0	< 10.0	< 10.0	< 20.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2013-11	ug/L												
1,2-Dibromo-3-chloropropane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2014-06	ug/L												
1,2-Dibromo-3-chloropropane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
1,2-Dibromo-3-chloropropane	2015-06	ug/L						< 10	< 10					
1,2-Dibromo-3-chloropropane	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
1,2-Dibromo-3-chloropropane	2015-10	ug/L			< 10	< 10							< 10	< 10
1,2-Dibromo-3-chloropropane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromo-3-chloropropane	2016-06	ug/L					< 10							
1,2-Dibromo-3-chloropropane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2017-11	ug/L												
1,2-Dibromo-3-chloropropane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-06	ug/L												
1,2-Dibromo-3-chloropropane	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-09	ug/L							< 5	< 5				
1,2-Dibromo-3-chloropropane	2018-11	ug/L											< 5	
1,2-Dibromo-3-chloropropane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2019-04	ug/L												
1,2-Dibromo-3-chloropropane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-04	ug/L	< 5		< 5									
1,2-Dibromo-3-chloropropane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
1,2-Dibromo-3-chloropropane	2021-03	ug/L				< 5								
1,2-Dibromo-3-chloropropane	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
1,2-Dibromo-3-chloropropane	2022-03	ug/L				< 5								
1,2-Dibromo-3-chloropropane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
1,2-Dibromo-3-chloropropane	2023-03	ug/L				< 5								
1,2-Dibromo-3-chloropropane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
1,2-Dibromoethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
1,2-Dibromoethane	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
1,2-Dibromoethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
1,2-Dibromoethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2013-11	ug/L												
1,2-Dibromoethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,2-Dibromoethane	2014-06	ug/L												
1,2-Dibromoethane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
1,2-Dibromoethane	2015-06	ug/L						< 10	< 10					
1,2-Dibromoethane	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
1,2-Dibromoethane	2015-10	ug/L			< 10	< 10							< 10	< 10
1,2-Dibromoethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane	2016-06	ug/L					< 10							
1,2-Dibromoethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2017-11	ug/L												
1,2-Dibromoethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2018-06	ug/L												
1,2-Dibromoethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dibromoethane	2018-09	ug/L							< 1	< 1				
1,2-Dibromoethane	2018-11	ug/L											< 1	
1,2-Dibromoethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2019-04	ug/L												
1,2-Dibromoethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-04	ug/L	< 1		< 1									
1,2-Dibromoethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dibromoethane	2021-03	ug/L				< 1								
1,2-Dibromoethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dibromoethane	2022-03	ug/L				< 1								
1,2-Dibromoethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dibromoethane	2023-03	ug/L				< 1								
1,2-Dibromoethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichlorobenzene	2008-08	ug/L	< 1	**1.8**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2009-03	ug/L	< 1	**1.48**	< 1	**1.17**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2009-07	ug/L	< 1	**1.59**	< 1	< 1		< 1	< 1.00	< 1.00	< 1			

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,2-Dibromo-3-chloropropane	2009-03	ug/L	< 10	< 10	< 10								
1,2-Dibromo-3-chloropropane	2009-07	ug/L	< 10	< 10									
1,2-Dibromo-3-chloropropane	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2010-09	ug/L	< 20.0	< 20.0	< 20.0								
1,2-Dibromo-3-chloropropane	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2013-03	ug/L	< 10	< 10	< 10.0								
1,2-Dibromo-3-chloropropane	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
1,2-Dibromo-3-chloropropane	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromo-3-chloropropane	2015-06	ug/L											
1,2-Dibromo-3-chloropropane	2015-09	ug/L	< 10	< 10	< 10								
1,2-Dibromo-3-chloropropane	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
1,2-Dibromo-3-chloropropane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
1,2-Dibromo-3-chloropropane	2016-06	ug/L											
1,2-Dibromo-3-chloropropane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
1,2-Dibromo-3-chloropropane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
1,2-Dibromo-3-chloropropane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
1,2-Dibromo-3-chloropropane	2017-11	ug/L										< 5	< 5
1,2-Dibromo-3-chloropropane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-06	ug/L										< 5	< 5
1,2-Dibromo-3-chloropropane	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
1,2-Dibromo-3-chloropropane	2018-09	ug/L									< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2018-11	ug/L										< 5	< 5
1,2-Dibromo-3-chloropropane	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
1,2-Dibromo-3-chloropropane	2019-04	ug/L											< 5
1,2-Dibromo-3-chloropropane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2020-04	ug/L											
1,2-Dibromo-3-chloropropane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2021-03	ug/L	< 5		< 5	< 5							< 5
1,2-Dibromo-3-chloropropane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2022-03	ug/L	< 5		< 5	< 5							< 5
1,2-Dibromo-3-chloropropane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	2023-03	ug/L	< 5		< 5	< 5							< 5
1,2-Dibromo-3-chloropropane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
1,2-Dibromoethane	2008-08	ug/L	< 10	< 10	< 10								
1,2-Dibromoethane	2009-03	ug/L	< 10	< 10	< 10								
1,2-Dibromoethane	2009-07	ug/L	< 10	< 10									
1,2-Dibromoethane	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2013-03	ug/L	< 10	< 10	< 10.0								
1,2-Dibromoethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
1,2-Dibromoethane	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
1,2-Dibromoethane	2015-06	ug/L											
1,2-Dibromoethane	2015-09	ug/L	< 10	< 10	< 10								
1,2-Dibromoethane	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
1,2-Dibromoethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
1,2-Dibromoethane	2016-06	ug/L											
1,2-Dibromoethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dibromoethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dibromoethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dibromoethane	2017-11	ug/L										< 1	< 1
1,2-Dibromoethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dibromoethane	2018-06	ug/L										< 1	< 1
1,2-Dibromoethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,2-Dibromoethane	2018-09	ug/L									< 1	< 1	< 1
1,2-Dibromoethane	2018-11	ug/L										< 1	< 1
1,2-Dibromoethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,2-Dibromoethane	2019-04	ug/L											< 1
1,2-Dibromoethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dibromoethane	2020-04	ug/L											
1,2-Dibromoethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dibromoethane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dibromoethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dibromoethane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dibromoethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dibromoethane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dibromoethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2008-08	ug/L	< 1	< 1	< 1								
1,2-Dichlorobenzene	2009-03	ug/L	< 1	< 1	< 1								
1,2-Dichlorobenzene	2009-07	ug/L	< 1	< 1									

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,2-Dichlorobenzene	2009-09	ug/L	< 1.00	**2.41**	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,2-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	**1.48**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2010-09	ug/L	< 1.00	**1.46**	< 1.00	**1.48**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2011-03	ug/L	< 1.00	**1.36**	< 1.00	**1.20**	< 1.00	< 1.00	< 1.00	**1.28**	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2011-09	ug/L	< 1.00	**1.50**	< 1.00	**1.39**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2012-03	ug/L	< 1.00	**1.12**	< 1.00	**1.00**	< 1.00	< 1.00	< 1.00	**1.08**	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2012-09	ug/L	< 1.00	**1.13**	< 1.00	**1.08**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2013-03	ug/L	< 1.00	**0.620 J**	< 1	**1.57**	< 1	< 1	< 1	**0.889 J**	< 1.00	< 1	< 1	< 1
1,2-Dichlorobenzene	2013-09	ug/L	< 1.00	**1.50**	< 1.00	**1.68**	< 1.00	< 1.00	< 1.00	**1.05**	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2013-11	ug/L												
1,2-Dichlorobenzene	2014-03	ug/L	< 1.00	**3.01**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.607 J**	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2014-06	ug/L												
1,2-Dichlorobenzene	2014-09	ug/L	< 1	**1.71**	< 1	**1.99**	< 1	< 1	< 1	**0.934 J**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2015-03	ug/L	< 1.00	< 1	< 1.00	**1.32**	< 1	< 1	< 1.00	**0.720 J**	< 1	< 1	< 1.00	< 1.00
1,2-Dichlorobenzene	2015-06	ug/L						< 1	< 1					
1,2-Dichlorobenzene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	**0.316 J**	< 1	< 1		
1,2-Dichlorobenzene	2015-10	ug/L			< 1	**1.52**							< 1	< 1
1,2-Dichlorobenzene	2016-03	ug/L	< 1	< 1	< 1	**2.13**	< 1	< 1	< 1	**1.06**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2016-06	ug/L					< 1							
1,2-Dichlorobenzene	2016-08	ug/L	< 1	< 1	< 1	**1.74**	< 1	< 1	< 1	**0.594 J**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2017-03	ug/L	< 1	< 1	< 1	**2.26**	< 1	< 1	< 1	**0.643 J**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2017-08	ug/L	< 1	< 1	< 1	**1.44**	< 1	< 1	< 1	**0.704 J**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2017-11	ug/L												
1,2-Dichlorobenzene	2018-03	ug/L	< 1	< 1	< 1	**1.44**	< 1	< 1	< 1	**0.435 J**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2018-06	ug/L												
1,2-Dichlorobenzene	2018-08	ug/L	< 1	< 1	< 1	**1.26**	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2018-09	ug/L							< 1	**0.659 J**				
1,2-Dichlorobenzene	2018-11	ug/L											< 1	
1,2-Dichlorobenzene	2019-03	ug/L	< 1	**0.756 J**	< 1	**2.22**	< 1	< 1	< 1	**0.613 J**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2019-04	ug/L												
1,2-Dichlorobenzene	2019-08	ug/L	< 1	< 1	< 1	**1.16**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2020-03	ug/L		< 1		**2**	< 1	< 1	< 1	**1.02**	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2020-04	ug/L	< 1		< 1									
1,2-Dichlorobenzene	2020-08	ug/L	< 1	< 1	< 1	**1.56**	< 1	< 1	< 1	**1.03**	< 1			< 1
1,2-Dichlorobenzene	2021-03	ug/L				**2.16**								
1,2-Dichlorobenzene	2021-08	ug/L	< 1	< 10	< 1	**1.58**	< 1	< 1	< 1	**0.857 J**	< 1			< 1
1,2-Dichlorobenzene	2022-03	ug/L				**1.08**								
1,2-Dichlorobenzene	2022-08	ug/L	< 1	< 1	< 1	**1.6**	< 1	< 1	< 1	**0.764 J**	< 1			< 1
1,2-Dichlorobenzene	2023-03	ug/L				**0.955 J**								
1,2-Dichlorobenzene	2023-08	ug/L	< 1	< 1	< 1	**0.495 J**	< 1	< 1	< 1	**0.648 J**	< 1			< 1
1,2-Dichloroethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2009-03	ug/L	< 0.2	**0.28 J**	< 0.2	**1.29**	< 0.2	< 0.2	< 0.2	**0.31 J**	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloroethane	2009-07	ug/L	< 1 J	**0.28 J**	< 1	< 1 J		< 1	< 0.200	**0.470 J**	< 1			
1,2-Dichloroethane	2009-09	ug/L	< 1.00	**0.39 J**	< 1.00	< 5.00		< 0.315	< 0.315	**0.41 J**	< 0.315			
1,2-Dichloroethane	2010-03	ug/L	**0.330 J**	< 0.315	< 0.315	**1.08**	< 0.315	< 0.315	< 0.315	**0.360 J**	< 0.315	< 0.315	< 0.315	< 0.315
1,2-Dichloroethane	2010-09	ug/L	< 0.315	< 0.315	< 0.315	**1.09**	< 1.00	< 1.00	< 1.00	**0.370 J**	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	**0.890 J**	< 0.180	< 0.180	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2011-09	ug/L	< 0.180	**0.310 J**	< 0.180	**0.710 J**	< 0.180	< 0.180	< 0.180	**0.210 J**	< 0.180	< 0.180	< 0.180	< 0.180
1,2-Dichloroethane	2012-03	ug/L	< 0.180	**0.250**	< 0.180	**0.900**	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180	< 0.180
1,2-Dichloroethane	2012-09	ug/L	< 0.180	< 1.00	< 0.180	**0.640**	< 0.180	< 0.180	< 0.180	**0.200**	< 0.180	< 0.180	< 0.180	< 0.180
1,2-Dichloroethane	2013-03	ug/L	< 1.00	< 1.00	< 1	**0.995 J**	< 1	< 1	< 1	**0.413 J**	< 1.00	< 1	< 1	< 1
1,2-Dichloroethane	2013-09	ug/L	< 1.00	**0.250 J**	< 1.00	**0.722 J**	< 1.00	< 1.00	< 1.00	**0.254 J**	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2013-11	ug/L												
1,2-Dichloroethane	2014-03	ug/L	< 1.00	**0.940 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2014-06	ug/L												
1,2-Dichloroethane	2014-09	ug/L	< 1	< 1	< 1	**0.443 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2015-03	ug/L	< 1.00	< 1	< 1.00	**0.315 J**	< 1	< 1	< 1.00	**0.231 J**	< 1	< 1	< 1.00	< 1.00
1,2-Dichloroethane	2015-06	ug/L						< 1	< 1					
1,2-Dichloroethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2015-10	ug/L			< 1	**0.572 J**							< 1	< 1
1,2-Dichloroethane	2016-03	ug/L	< 1	< 1	< 1	**0.801 J**	< 1	< 1	< 1	**0.277 J**	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2016-06	ug/L					< 1							
1,2-Dichloroethane	2016-08	ug/L	< 1	< 1	< 1	**0.768 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2017-03	ug/L	**0.347 J**	< 1	< 1	**0.846 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2017-08	ug/L	**0.399 J**	< 1	< 1	**0.475 J**	< 1	< 1	< 1	**0.274 J**	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2017-11	ug/L												
1,2-Dichloroethane	2018-03	ug/L	**0.268 J**	< 1	< 1	**0.36 J**	< 1	< 1	< 1	**0.299 J**	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2018-06	ug/L												
1,2-Dichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloroethane	2018-09	ug/L							< 1	< 1				
1,2-Dichloroethane	2018-11	ug/L											< 1	
1,2-Dichloroethane	2019-03	ug/L	< 1	< 1	< 1	**0.448 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2019-04	ug/L												
1,2-Dichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-04	ug/L	< 1		< 1									
1,2-Dichloroethane	2020-08	ug/L	**0.436 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloroethane	2021-03	ug/L				< 1								
1,2-Dichloroethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloroethane	2022-03	ug/L				< 1								
1,2-Dichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloroethane	2023-03	ug/L				< 1								
1,2-Dichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2009-03	ug/L	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	**0.47 J**	< 0.4	< 0.4	< 0.4	< 0.4
1,2-Dichloropropane	2009-07	ug/L	< 0.4	< 0.4	< 0.4	< 0.4		< 0.4	< 1.00	< 1.00	< 0.4			
1,2-Dichloropropane	2009-09	ug/L	< 1.00	< 0.195	< 1.00	< 5.00		< 0.195	< 0.195	< 0.195	< 0.195			
1,2-Dichloropropane	2010-03	ug/L	**0.580 J**	**0.350 J**	< 0.195	**1.05**	< 0.195	< 0.195	< 0.195	**0.430 J**	< 0.195	< 0.195	< 0.195	< 0.195

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,2-Dichlorobenzene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2013-03	ug/L	< 1	**0.453 J**	< 1.00								
1,2-Dichlorobenzene	2013-09	ug/L	< 1.00	**0.457 J**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2014-09	ug/L	< 1	**0.47 J**	< 1		< 1	< 1	< 1	< 1	< 1		
1,2-Dichlorobenzene	2015-03	ug/L	**0.152 J**	**0.352 J**	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2015-06	ug/L											
1,2-Dichlorobenzene	2015-09	ug/L	< 1	< 1	< 1								
1,2-Dichlorobenzene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,2-Dichlorobenzene	2016-03	ug/L	< 1	**0.407 J**	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichlorobenzene	2016-06	ug/L											
1,2-Dichlorobenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichlorobenzene	2017-03	ug/L	< 1	**0.363 J**	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichlorobenzene	2017-08	ug/L	< 1	**0.319 J**	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichlorobenzene	2017-11	ug/L										< 1	**0.204 J**
1,2-Dichlorobenzene	2018-03	ug/L	< 1	**0.39 J**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	**0.331 J**
1,2-Dichlorobenzene	2018-06	ug/L										< 1	< 1
1,2-Dichlorobenzene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,2-Dichlorobenzene	2018-09	ug/L									< 1	< 1	< 1
1,2-Dichlorobenzene	2018-11	ug/L										< 1	< 1
1,2-Dichlorobenzene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,2-Dichlorobenzene	2019-04	ug/L											**0.4 J**
1,2-Dichlorobenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2020-04	ug/L											
1,2-Dichlorobenzene	2020-08	ug/L	< 1	**0.391 J**	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2021-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichlorobenzene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2022-03	ug/L	< 1		< 1	< 1							**0.401 J**
1,2-Dichlorobenzene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2023-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichlorobenzene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloroethane	2008-08	ug/L	< 1	< 1	< 1								
1,2-Dichloroethane	2009-03	ug/L	< 0.2	< 0.2	< 0.2								
1,2-Dichloroethane	2009-07	ug/L	< 1	< 1									
1,2-Dichloroethane	2009-09	ug/L	< 1.00	< 1.00	< 0.315								
1,2-Dichloroethane	2010-03	ug/L	< 0.315	< 0.315	< 0.315								
1,2-Dichloroethane	2010-09	ug/L	< 0.315	< 0.315	< 0.315								
1,2-Dichloroethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichloroethane	2011-09	ug/L	< 0.180	< 0.180	< 0.180								
1,2-Dichloroethane	2012-03	ug/L	< 0.180	< 0.180	< 0.180								
1,2-Dichloroethane	2012-09	ug/L	< 0.180	< 0.180	< 0.180								
1,2-Dichloroethane	2013-03	ug/L	< 1	< 1	< 1.00								
1,2-Dichloroethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2-Dichloroethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2015-06	ug/L											
1,2-Dichloroethane	2015-09	ug/L	< 1	< 1	< 1								
1,2-Dichloroethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,2-Dichloroethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloroethane	2016-06	ug/L											
1,2-Dichloroethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloroethane	2017-03	ug/L	< 1	**0.185 J**	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloroethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**0.196 J**	< 1		
1,2-Dichloroethane	2017-11	ug/L										< 1	< 1
1,2-Dichloroethane	2018-03	ug/L	< 1	**0.209 J**	< 1	< 1	< 1	< 1		**0.227 J**	< 1	< 1	< 1
1,2-Dichloroethane	2018-06	ug/L										< 1	< 1
1,2-Dichloroethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,2-Dichloroethane	2018-09	ug/L									< 1	< 1	< 1
1,2-Dichloroethane	2018-11	ug/L										< 1	< 1
1,2-Dichloroethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,2-Dichloroethane	2019-04	ug/L											< 1
1,2-Dichloroethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dichloroethane	2020-04	ug/L											
1,2-Dichloroethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloroethane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichloroethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloroethane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichloroethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloroethane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichloroethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1								
1,2-Dichloropropane	2009-03	ug/L	< 0.4	< 0.4	< 0.4								
1,2-Dichloropropane	2009-07	ug/L	< 0.4	< 0.4									
1,2-Dichloropropane	2009-09	ug/L	< 1.00	< 1.00	< 0.195								
1,2-Dichloropropane	2010-03	ug/L	< 0.195	< 0.195	< 0.195								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

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Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,2-Dichloropropane	2010-09	ug/L	< 0.195	< 0.195	< 0.195	**1.04**	< 1.00	< 1.00	< 1.00	< 0.195	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	**0.960 J**	< 0.110	< 0.110	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2011-09	ug/L	< 0.110	< 0.110	< 0.110	**0.700 J**	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110
1,2-Dichloropropane	2012-03	ug/L	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110
1,2-Dichloropropane	2012-09	ug/L	< 0.110	< 1.00	< 0.110	**0.720**	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110	< 0.110
1,2-Dichloropropane	2013-03	ug/L	< 1.00	< 1.00	< 1	**0.978 J**	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
1,2-Dichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2013-11	ug/L												
1,2-Dichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2014-06	ug/L												
1,2-Dichloropropane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
1,2-Dichloropropane	2015-06	ug/L						< 1	< 1					
1,2-Dichloropropane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2015-10	ug/L			< 1	< 1							< 1	< 1
1,2-Dichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2016-06	ug/L					< 1							
1,2-Dichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2017-11	ug/L												
1,2-Dichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2018-06	ug/L												
1,2-Dichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloropropane	2018-09	ug/L							< 1	< 1				
1,2-Dichloropropane	2018-11	ug/L											< 1	
1,2-Dichloropropane	2019-03	ug/L	< 1	< 1	< 1	**0.308 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2019-04	ug/L												
1,2-Dichloropropane	2019-08	ug/L	< 1	< 1	< 1	**0.352 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2020-03	ug/L		< 1		**0.297 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2020-04	ug/L	< 1		< 1									
1,2-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloropropane	2021-03	ug/L				**0.281 J**								
1,2-Dichloropropane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloropropane	2022-03	ug/L				< 1								
1,2-Dichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,2-Dichloropropane	2023-03	ug/L				< 1								
1,2-Dichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
1,3,5-Trinitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3,5-Trinitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3,5-Trinitrobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1,3,5-Trinitrobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
1,3,5-Trinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3,5-Trinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,3,5-Trinitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,3,5-Trinitrobenzene	2011-09	ug/L												
1,3,5-Trinitrobenzene	2012-03	ug/L												
1,3,5-Trinitrobenzene	2012-09	ug/L												
1,3,5-Trinitrobenzene	2013-03	ug/L												
1,3,5-Trinitrobenzene	2013-09	ug/L												
1,3,5-Trinitrobenzene	2015-06	ug/L						< 10.5	< 11.1					
1,3,5-Trinitrobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
1,3,5-Trinitrobenzene	2015-10	ug/L			< 10.3	< 10.5								
1,3,5-Trinitrobenzene	2016-03	ug/L												
1,3,5-Trinitrobenzene	2016-06	ug/L					< 11.4							
1,3,5-Trinitrobenzene	2016-08	ug/L					< 11							
1,3,5-Trinitrobenzene	2018-11	ug/L											< 11.6	
1,3,5-Trinitrobenzene	2019-03	ug/L											< 12.2	
1,3,5-Trinitrobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
1,3-Dichlorobenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	2009-03	ug/L	< 1	**1.26**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,3-Dichlorobenzene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,3-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,3-Dichlorobenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
1,3-Dichlorobenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
1,3-Dichlorobenzene	2011-09	ug/L		< 1.00										
1,3-Dichlorobenzene	2012-03	ug/L		< 1.00										
1,3-Dichlorobenzene	2012-09	ug/L		< 1.00	< 1.00									
1,3-Dichlorobenzene	2013-03	ug/L		< 1.00										
1,3-Dichlorobenzene	2013-09	ug/L		< 1.00										
1,3-Dichlorobenzene	2014-03	ug/L		< 1.00										
1,3-Dichlorobenzene	2014-09	ug/L		< 1										
1,3-Dichlorobenzene	2015-03	ug/L		< 1										
1,3-Dichlorobenzene	2015-06	ug/L						< 1	< 1					
1,3-Dichlorobenzene	2015-09	ug/L	< 1	< 1				< 1	< 1	< 1	< 1			
1,3-Dichlorobenzene	2015-10	ug/L			< 1	< 1								
1,3-Dichlorobenzene	2016-03	ug/L		< 1										
1,3-Dichlorobenzene	2016-06	ug/L					< 1							
1,3-Dichlorobenzene	2016-08	ug/L		< 1			< 1							
1,3-Dichlorobenzene	2017-03	ug/L		< 1										
1,3-Dichlorobenzene	2017-08	ug/L		< 1										
1,3-Dichlorobenzene	2018-03	ug/L		< 1										
1,3-Dichlorobenzene	2018-08	ug/L		< 1										
1,3-Dichlorobenzene	2018-11	ug/L											< 1	
1,3-Dichlorobenzene	2019-03	ug/L		< 1									< 1	
1,3-Dichlorobenzene	2019-08	ug/L		< 1										
1,3-Dichlorobenzene	2020-03	ug/L		< 1										

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,2-Dichloropropane	2010-09	ug/L	< 0.195	< 0.195	< 0.195								
1,2-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,2-Dichloropropane	2011-09	ug/L	< 0.110	< 0.110	< 0.110								
1,2-Dichloropropane	2012-03	ug/L	< 0.110	< 0.110	< 0.110								
1,2-Dichloropropane	2012-09	ug/L	< 0.110	< 0.110	< 0.110								
1,2-Dichloropropane	2013-03	ug/L	< 1	< 1	< 1.00								
1,2-Dichloropropane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
1,2-Dichloropropane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2015-06	ug/L											
1,2-Dichloropropane	2015-09	ug/L	< 1	< 1	< 1								
1,2-Dichloropropane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,2-Dichloropropane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloropropane	2016-06	ug/L											
1,2-Dichloropropane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloropropane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloropropane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,2-Dichloropropane	2017-11	ug/L										< 1	< 1
1,2-Dichloropropane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dichloropropane	2018-06	ug/L										< 1	< 1
1,2-Dichloropropane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
1,2-Dichloropropane	2018-09	ug/L									< 1	< 1	< 1
1,2-Dichloropropane	2018-11	ug/L										< 1	< 1
1,2-Dichloropropane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,2-Dichloropropane	2019-04	ug/L											< 1
1,2-Dichloropropane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**0.314 J**	< 1	< 1	< 1
1,2-Dichloropropane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
1,2-Dichloropropane	2020-04	ug/L											
1,2-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			**0.322 J**	< 1	< 1	< 1
1,2-Dichloropropane	2021-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichloropropane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloropropane	2022-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichloropropane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,2-Dichloropropane	2023-03	ug/L	< 1		< 1	< 1							< 1
1,2-Dichloropropane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
1,3,5-Trinitrobenzene	2008-08	ug/L	< 10	< 10	< 10								
1,3,5-Trinitrobenzene	2009-03	ug/L	< 10	< 10	< 10								
1,3,5-Trinitrobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
1,3,5-Trinitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2011-03	ug/L	< 10.0	**1.72 J**	< 10.0								
1,3,5-Trinitrobenzene	2011-09	ug/L		< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2012-03	ug/L		< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2012-09	ug/L		< 10.0	< 10.0								
1,3,5-Trinitrobenzene	2013-03	ug/L		< 21.5	< 10.4								
1,3,5-Trinitrobenzene	2013-09	ug/L		< 10.9									
1,3,5-Trinitrobenzene	2015-06	ug/L											
1,3,5-Trinitrobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
1,3,5-Trinitrobenzene	2015-10	ug/L				< 10.6							
1,3,5-Trinitrobenzene	2016-03	ug/L			< 10	< 10							
1,3,5-Trinitrobenzene	2016-06	ug/L											
1,3,5-Trinitrobenzene	2016-08	ug/L			< 11.1	< 11.5							
1,3,5-Trinitrobenzene	2018-11	ug/L											
1,3,5-Trinitrobenzene	2019-03	ug/L											
1,3,5-Trinitrobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
1,3-Dichlorobenzene	2008-08	ug/L	< 1	< 1	< 1								
1,3-Dichlorobenzene	2009-03	ug/L	< 1	< 1	< 1								
1,3-Dichlorobenzene	2009-07	ug/L	< 1	< 1									
1,3-Dichlorobenzene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichlorobenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichlorobenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichlorobenzene	2011-09	ug/L			< 1.00								
1,3-Dichlorobenzene	2012-03	ug/L			< 1.00								
1,3-Dichlorobenzene	2012-09	ug/L											
1,3-Dichlorobenzene	2013-03	ug/L			< 1.00								
1,3-Dichlorobenzene	2013-09	ug/L											
1,3-Dichlorobenzene	2014-03	ug/L			< 1.00								
1,3-Dichlorobenzene	2014-09	ug/L			< 1								
1,3-Dichlorobenzene	2015-03	ug/L			< 1								
1,3-Dichlorobenzene	2015-06	ug/L											
1,3-Dichlorobenzene	2015-09	ug/L	< 1	< 1	< 1								
1,3-Dichlorobenzene	2015-10	ug/L				< 1							
1,3-Dichlorobenzene	2016-03	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2016-06	ug/L											
1,3-Dichlorobenzene	2016-08	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2017-03	ug/L			< 1								
1,3-Dichlorobenzene	2017-08	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2018-03	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2018-08	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2018-11	ug/L											
1,3-Dichlorobenzene	2019-03	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2019-08	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2020-03	ug/L			< 1	< 1							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,3-Dichlorobenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			
1,3-Dichlorobenzene	2021-08	ug/L		< 10										
1,3-Dichlorobenzene	2022-08	ug/L		< 1										
1,3-Dichlorobenzene	2023-08	ug/L		< 1										
1,3-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,3-Dichloropropane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
1,3-Dichloropropane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,3-Dichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
1,3-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
1,3-Dichloropropane	2012-09	ug/L		< 1.00										
1,3-Dichloropropane	2015-06	ug/L						< 1	< 1					
1,3-Dichloropropane	2015-09	ug/L	< 1	< 1				< 1	< 1	< 1	< 1			
1,3-Dichloropropane	2015-10	ug/L			< 1	< 1								
1,3-Dichloropropane	2016-03	ug/L												
1,3-Dichloropropane	2016-06	ug/L					< 1							
1,3-Dichloropropane	2016-08	ug/L					< 1							
1,3-Dichloropropane	2018-11	ug/L											< 1	
1,3-Dichloropropane	2019-03	ug/L											< 1	
1,3-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			
1,3-Dinitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3-Dinitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3-Dinitrobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1,3-Dinitrobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
1,3-Dinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,3-Dinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,3-Dinitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,3-Dinitrobenzene	2012-03	ug/L												
1,3-Dinitrobenzene	2013-03	ug/L												
1,3-Dinitrobenzene	2015-06	ug/L						< 10.5	< 11.1					
1,3-Dinitrobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
1,3-Dinitrobenzene	2015-10	ug/L			< 10.3	< 10.5								
1,3-Dinitrobenzene	2016-03	ug/L												
1,3-Dinitrobenzene	2016-06	ug/L					< 11.4							
1,3-Dinitrobenzene	2016-08	ug/L					< 11							
1,3-Dinitrobenzene	2018-11	ug/L											< 11.6	
1,3-Dinitrobenzene	2019-03	ug/L											< 12.2	
1,3-Dinitrobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
1,4-Dichlorobenzene	2008-08	ug/L	< 1	**1.77**	< 1	**2.53**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2009-03	ug/L	< 1	< 1	< 1	**3.71**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2009-07	ug/L	< 1	**1.05**	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
1,4-Dichlorobenzene	2009-09	ug/L	< 1.00	**1.83**	< 1.00	< 5.00		< 1	< 1	**1.01**	< 1			
1,4-Dichlorobenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	**8.21**	< 1.00	< 1.00	< 1.00	**1.26**	< 1.00	< 1.00	< 1.00	< 2.00
1,4-Dichlorobenzene	2010-09	ug/L	< 1.00	**1.11**	< 1.00	**5.82**	< 1.00	< 1.00	< 1.00	**1.10**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2011-03	ug/L	< 1.00	**1.21**	< 1.00	**4.99**	< 1.00	< 1.00	< 1.00	**1.76**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2011-09	ug/L	< 1.00	**1.23**	< 1.00	**4.92**	< 1.00	< 1.00	< 1.00	**1.55**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2012-03	ug/L	< 1.00	**1.09**	< 1.00	**3.87**	< 1.00	< 1.00	< 1.00	**1.56**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2012-09	ug/L	< 1.00	**1.01**	< 1.00	**3.82**	< 1.00	< 1.00	< 1.00	**1.08**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2013-03	ug/L	< 1.00	**0.733 J**	< 1	**5.94**	< 1	< 1	< 1	**1.66**	< 1.00	< 1	< 1	< 1
1,4-Dichlorobenzene	2013-09	ug/L	< 1.00	**1.29**	< 1.00	**5.94**	< 1.00	< 1.00	< 1.00	**1.66**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2013-11	ug/L												
1,4-Dichlorobenzene	2014-03	ug/L	< 1.00	**12.1**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.05**	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2014-06	ug/L												
1,4-Dichlorobenzene	2014-09	ug/L	< 1	**1.48**	< 1	**8.16**	< 1	< 1	< 1	**1.59**	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2015-03	ug/L	< 1.00	< 1	< 1.00	**5.23**	< 1	< 1	< 1.00	**1.22**	< 1	< 1	< 1.00	< 1.00
1,4-Dichlorobenzene	2015-06	ug/L						< 1	< 1					
1,4-Dichlorobenzene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2015-10	ug/L			< 1	< 1							< 1	< 1
1,4-Dichlorobenzene	2016-03	ug/L	< 1	< 1	< 1	**11.3**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2016-06	ug/L					< 1							
1,4-Dichlorobenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2017-03	ug/L	< 1	< 1	< 1	**12.9**	< 1	< 1	< 1	**1.47**	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2017-08	ug/L	< 1	< 1	< 1	**7.86**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2017-11	ug/L												
1,4-Dichlorobenzene	2018-03	ug/L	< 1	< 1	< 1	**7.22**	< 1	< 1	< 1	**1.13**	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2018-06	ug/L												
1,4-Dichlorobenzene	2018-08	ug/L	< 1	< 1	< 1	**6.5**	< 1	< 1			< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2018-09	ug/L							< 1	**1.13**				
1,4-Dichlorobenzene	2018-11	ug/L											< 1	
1,4-Dichlorobenzene	2019-03	ug/L	< 1	< 1	< 1	**11.8**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2019-04	ug/L												
1,4-Dichlorobenzene	2019-08	ug/L	< 1	< 1	< 1	**10.2**	< 1	< 1	< 1	**1.14**	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2020-03	ug/L		< 1		**11**	< 1	< 1	< 1	**2.31**	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	2020-04	ug/L	< 1		< 1									
1,4-Dichlorobenzene	2020-08	ug/L	< 1	< 1	< 1	**9**	< 1	< 1	< 1	**2.27**	< 1			< 1
1,4-Dichlorobenzene	2021-03	ug/L				**13.1**								
1,4-Dichlorobenzene	2021-08	ug/L	< 1	< 10	< 1	**9.6**	< 1	< 1	< 1	**1.97**	< 1			< 1
1,4-Dichlorobenzene	2022-03	ug/L				**6.7**								
1,4-Dichlorobenzene	2022-08	ug/L	< 1	< 1	< 1	**8.47**	< 1	< 1	< 1	**1.57**	< 1			< 1
1,4-Dichlorobenzene	2023-03	ug/L				**5.39**								
1,4-Dichlorobenzene	2023-08	ug/L	< 1	< 1	< 1	**7.04**	< 1	< 1	< 1	< 1	< 1			< 1
1,4-Naphthoquinone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,4-Naphthoquinone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,4-Naphthoquinone	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1,4-Naphthoquinone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
1,4-Naphthoquinone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1,4-Naphthoquinone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,3-Dichlorobenzene	2020-08	ug/L	< 1	< 1	< 1	< 1							
1,3-Dichlorobenzene	2021-08	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2022-08	ug/L			< 1	< 1							
1,3-Dichlorobenzene	2023-08	ug/L			< 1	< 1							
1,3-Dichloropropane	2008-08	ug/L	< 1	< 1	< 1								
1,3-Dichloropropane	2009-03	ug/L	< 1	< 1	< 1								
1,3-Dichloropropane	2009-07	ug/L	< 1	< 1									
1,3-Dichloropropane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichloropropane	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichloropropane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichloropropane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
1,3-Dichloropropane	2012-09	ug/L											
1,3-Dichloropropane	2015-06	ug/L											
1,3-Dichloropropane	2015-09	ug/L	< 1	< 1	< 1								
1,3-Dichloropropane	2015-10	ug/L				< 1							
1,3-Dichloropropane	2016-03	ug/L			< 1	< 1							
1,3-Dichloropropane	2016-06	ug/L											
1,3-Dichloropropane	2016-08	ug/L			< 1	< 1							
1,3-Dichloropropane	2018-11	ug/L											
1,3-Dichloropropane	2019-03	ug/L											
1,3-Dichloropropane	2020-08	ug/L	< 1	< 1	< 1	< 1							
1,3-Dinitrobenzene	2008-08	ug/L	< 10	< 10	< 10								
1,3-Dinitrobenzene	2009-03	ug/L	< 10	< 10	< 10								
1,3-Dinitrobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
1,3-Dinitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1,3-Dinitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1,3-Dinitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
1,3-Dinitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
1,3-Dinitrobenzene	2012-03	ug/L			< 10.0								
1,3-Dinitrobenzene	2013-03	ug/L			< 10.4								
1,3-Dinitrobenzene	2015-06	ug/L											
1,3-Dinitrobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
1,3-Dinitrobenzene	2015-10	ug/L				< 10.6							
1,3-Dinitrobenzene	2016-03	ug/L			< 10	< 10							
1,3-Dinitrobenzene	2016-06	ug/L											
1,3-Dinitrobenzene	2016-08	ug/L			< 11.1	< 11.5							
1,3-Dinitrobenzene	2018-11	ug/L											
1,3-Dinitrobenzene	2019-03	ug/L											
1,3-Dinitrobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
1,4-Dichlorobenzene	2008-08	ug/L	**1.15**	**3.55**	< 1								
1,4-Dichlorobenzene	2009-03	ug/L	< 1	**3**	< 1								
1,4-Dichlorobenzene	2009-07	ug/L	< 1	< 1									
1,4-Dichlorobenzene	2009-09	ug/L	< 1.00	**4.04**	< 1.00								
1,4-Dichlorobenzene	2010-03	ug/L	< 1.00	**2.70**	< 1.00								
1,4-Dichlorobenzene	2010-09	ug/L	< 1.00	**3.21**	< 1.00								
1,4-Dichlorobenzene	2011-03	ug/L	< 1.00	**2.83**	< 1.00								
1,4-Dichlorobenzene	2011-09	ug/L	< 1.00	**2.96**	< 1.00								
1,4-Dichlorobenzene	2012-03	ug/L	< 1.00	**2.33**	< 1.00								
1,4-Dichlorobenzene	2012-09	ug/L	< 1.00	**2.76**	< 1.00								
1,4-Dichlorobenzene	2013-03	ug/L	**0.491 J**	**2.48**	< 1.00								
1,4-Dichlorobenzene	2013-09	ug/L	**0.857 J**	**2.76**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2014-09	ug/L	**0.8 J**	**2.77**	< 1		< 1	< 1	< 1	< 1	< 1		
1,4-Dichlorobenzene	2015-03	ug/L	**0.889 J**	**1.68**	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2015-06	ug/L											
1,4-Dichlorobenzene	2015-09	ug/L	< 1	**1.97**	< 1								
1,4-Dichlorobenzene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
1,4-Dichlorobenzene	2016-03	ug/L	**0.803 J**	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
1,4-Dichlorobenzene	2016-06	ug/L											
1,4-Dichlorobenzene	2016-08	ug/L	< 1	**1.54**	< 1	< 1	< 1	< 1		< 1	< 1		
1,4-Dichlorobenzene	2017-03	ug/L	**0.641 J**	**1.97**	< 1	< 1	< 1	< 1		**0.429 J**	< 1		
1,4-Dichlorobenzene	2017-08	ug/L	**0.787 J**	**1.85**	< 1	< 1	< 1	< 1		< 1	< 1		
1,4-Dichlorobenzene	2017-11	ug/L										< 1	**1.07**
1,4-Dichlorobenzene	2018-03	ug/L	**0.957 J**	**2.02**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	**1.89**
1,4-Dichlorobenzene	2018-06	ug/L										< 1	**1.42**
1,4-Dichlorobenzene	2018-08	ug/L	< 1	**2.26**	< 1	< 1		< 1		< 1			
1,4-Dichlorobenzene	2018-09	ug/L									< 1	< 1	**1.72**
1,4-Dichlorobenzene	2018-11	ug/L										< 1	**1.37**
1,4-Dichlorobenzene	2019-03	ug/L	**0.775 J**	**1.68**	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
1,4-Dichlorobenzene	2019-04	ug/L											< 1
1,4-Dichlorobenzene	2019-08	ug/L	**0.52 J**	**2.24**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	**1.21**
1,4-Dichlorobenzene	2020-03	ug/L	**0.906 J**	**2.26**	< 1	< 1	< 1	< 1		**0.486 J**	< 1	< 1	**1.88**
1,4-Dichlorobenzene	2020-04	ug/L											
1,4-Dichlorobenzene	2020-08	ug/L	**0.956 J**	**2.49**	< 1	< 1	< 1			**0.438 J**	< 1	< 1	< 1
1,4-Dichlorobenzene	2021-03	ug/L	**0.864 J**		< 1	< 1							< 1
1,4-Dichlorobenzene	2021-08	ug/L	**0.49 J**	**1.08**	< 1	< 1	< 1			< 1	< 1	< 1	**1.58**
1,4-Dichlorobenzene	2022-03	ug/L	**0.503 J**		< 1	< 1							**1.83**
1,4-Dichlorobenzene	2022-08	ug/L	**0.445 J**	**1.34**	< 1	< 1	< 1			< 1	< 1	< 1	**1.2**
1,4-Dichlorobenzene	2023-03	ug/L	**0.676 J**		< 1	< 1							**1.72**
1,4-Dichlorobenzene	2023-08	ug/L	**1.19**	**1.69**	< 1	< 1	< 1			< 1	< 1	< 1	**0.856 J**
1,4-Naphthoquinone	2008-08	ug/L	< 10	< 10	< 10								
1,4-Naphthoquinone	2009-03	ug/L	< 10	< 10	< 10								
1,4-Naphthoquinone	2009-07	ug/L	< 10	< 10	< 10.0								
1,4-Naphthoquinone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1,4-Naphthoquinone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1,4-Naphthoquinone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
1,4-Naphthoquinone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1,4-Naphthoquinone	2015-06	ug/L						< 10.5	< 11.1					
1,4-Naphthoquinone	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
1,4-Naphthoquinone	2015-10	ug/L			< 10.3	< 10.5								
1,4-Naphthoquinone	2016-03	ug/L												
1,4-Naphthoquinone	2016-06	ug/L					< 11.4							
1,4-Naphthoquinone	2016-08	ug/L					< 11							
1,4-Naphthoquinone	2018-11	ug/L											< 11.6	
1,4-Naphthoquinone	2019-03	ug/L											< 12.2	
1,4-Naphthoquinone	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
1-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1-Naphthylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
1-Naphthylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
1-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
1-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
1-Naphthylamine	2015-06	ug/L						< 10.5	< 11.1					
1-Naphthylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
1-Naphthylamine	2015-10	ug/L			< 10.3	< 10.5								
1-Naphthylamine	2016-03	ug/L												
1-Naphthylamine	2016-06	ug/L					< 11.4							
1-Naphthylamine	2016-08	ug/L					< 11							
1-Naphthylamine	2018-11	ug/L											< 11.6	
1-Naphthylamine	2019-03	ug/L											< 12.2	
1-Naphthylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,2-Dichloropropane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
2,2-Dichloropropane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
2,2-Dichloropropane	2009-07	ug/L	< 4	< 4	< 4	< 4		< 4	< 4.00	< 4.00	< 4			
2,2-Dichloropropane	2009-09	ug/L	< 4.00	< 4	< 4.00	< 20.0		< 4	< 4	< 4	< 4			
2,2-Dichloropropane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
2,2-Dichloropropane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00				< 4.00				
2,2-Dichloropropane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00				< 4.00				
2,2-Dichloropropane	2012-09	ug/L		< 4.00										
2,2-Dichloropropane	2015-06	ug/L						< 4	< 4					
2,2-Dichloropropane	2015-09	ug/L	< 4	< 4				< 4	< 4	< 4	< 4			
2,2-Dichloropropane	2015-10	ug/L			< 4	< 4								
2,2-Dichloropropane	2016-03	ug/L												
2,2-Dichloropropane	2016-06	ug/L					< 4							
2,2-Dichloropropane	2016-08	ug/L					< 4							
2,2-Dichloropropane	2018-11	ug/L											< 4	
2,2-Dichloropropane	2019-03	ug/L											< 4	
2,2-Dichloropropane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			
2,2'-oxybis(1-Chloropropane)	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**10.9**	< 10	< 10	< 10	< 10
2,2'-oxybis(1-Chloropropane)	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**8.6 J**	< 10	< 10	< 10	< 10
2,2'-oxybis(1-Chloropropane)	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,2'-oxybis(1-Chloropropane)	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,2'-oxybis(1-Chloropropane)	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,2'-oxybis(1-Chloropropane)	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,2'-oxybis(1-Chloropropane)	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,2'-oxybis(1-Chloropropane)	2011-09	ug/L								< 10.0				
2,2'-oxybis(1-Chloropropane)	2012-03	ug/L								< 10.0				
2,2'-oxybis(1-Chloropropane)	2012-09	ug/L								< 10.0				
2,2'-oxybis(1-Chloropropane)	2013-03	ug/L								< 10.9				
2,2'-oxybis(1-Chloropropane)	2013-09	ug/L								< 10.3				
2,2'-oxybis(1-Chloropropane)	2014-03	ug/L								< 10.5				
2,2'-oxybis(1-Chloropropane)	2014-09	ug/L								< 10				
2,2'-oxybis(1-Chloropropane)	2015-03	ug/L								< 10.8				
2,2'-oxybis(1-Chloropropane)	2015-06	ug/L						< 10.5	< 11.1					
2,2'-oxybis(1-Chloropropane)	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,2'-oxybis(1-Chloropropane)	2015-10	ug/L			< 10.3	< 10.5								
2,2'-oxybis(1-Chloropropane)	2016-03	ug/L								< 11.1				
2,2'-oxybis(1-Chloropropane)	2016-06	ug/L					< 11.4							
2,2'-oxybis(1-Chloropropane)	2016-08	ug/L					< 11			< 11.2				
2,2'-oxybis(1-Chloropropane)	2017-03	ug/L								< 10.4				
2,2'-oxybis(1-Chloropropane)	2017-08	ug/L								< 10.5 J				
2,2'-oxybis(1-Chloropropane)	2018-03	ug/L								< 11.6				
2,2'-oxybis(1-Chloropropane)	2018-08	ug/L												
2,2'-oxybis(1-Chloropropane)	2018-09	ug/L								< 11				
2,2'-oxybis(1-Chloropropane)	2018-11	ug/L											< 11.6	
2,2'-oxybis(1-Chloropropane)	2019-03	ug/L								< 11.5			< 12.2	
2,2'-oxybis(1-Chloropropane)	2019-08	ug/L								< 50.8				
2,2'-oxybis(1-Chloropropane)	2020-03	ug/L								< 10.9				
2,2'-oxybis(1-Chloropropane)	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,2'-oxybis(1-Chloropropane)	2021-08	ug/L								< 11.6				
2,2'-oxybis(1-Chloropropane)	2022-08	ug/L								< 10				
2,2'-oxybis(1-Chloropropane)	2023-08	ug/L								< 11.1				
2,3,4,6-Tetrachlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,3,4,6-Tetrachlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,3,4,6-Tetrachlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,3,4,6-Tetrachlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,3,4,6-Tetrachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,3,4,6-Tetrachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,3,4,6-Tetrachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,3,4,6-Tetrachlorophenol	2015-06	ug/L						< 10.5	< 11.1					
2,3,4,6-Tetrachlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,3,4,6-Tetrachlorophenol	2015-10	ug/L			< 10.3	< 10.5								
2,3,4,6-Tetrachlorophenol	2016-03	ug/L												

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Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
1,4-Naphthoquinone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
1,4-Naphthoquinone	2015-06	ug/L											
1,4-Naphthoquinone	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
1,4-Naphthoquinone	2015-10	ug/L				< 10.6							
1,4-Naphthoquinone	2016-03	ug/L			< 10	< 10							
1,4-Naphthoquinone	2016-06	ug/L											
1,4-Naphthoquinone	2016-08	ug/L			< 11.1	< 11.5							
1,4-Naphthoquinone	2018-11	ug/L											
1,4-Naphthoquinone	2019-03	ug/L											
1,4-Naphthoquinone	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
1-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10								
1-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10								
1-Naphthylamine	2009-07	ug/L	< 10	< 10	< 10.0								
1-Naphthylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
1-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
1-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
1-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
1-Naphthylamine	2015-06	ug/L											
1-Naphthylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
1-Naphthylamine	2015-10	ug/L				< 10.6							
1-Naphthylamine	2016-03	ug/L			< 10	< 10							
1-Naphthylamine	2016-06	ug/L											
1-Naphthylamine	2016-08	ug/L			< 11.1	< 11.5							
1-Naphthylamine	2018-11	ug/L											
1-Naphthylamine	2019-03	ug/L											
1-Naphthylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,2-Dichloropropane	2008-08	ug/L	< 4	< 4	< 4								
2,2-Dichloropropane	2009-03	ug/L	< 4	< 4	< 4								
2,2-Dichloropropane	2009-07	ug/L	< 4	< 4									
2,2-Dichloropropane	2009-09	ug/L	< 4.00	< 4.00	< 4.00								
2,2-Dichloropropane	2010-03	ug/L	< 4.00	< 4.00	< 4.00								
2,2-Dichloropropane	2010-09	ug/L	< 4.00	< 4.00	< 4.00								
2,2-Dichloropropane	2011-03	ug/L	< 4.00	< 4.00	< 4.00								
2,2-Dichloropropane	2012-09	ug/L											
2,2-Dichloropropane	2015-06	ug/L											
2,2-Dichloropropane	2015-09	ug/L	< 4	< 4	< 4								
2,2-Dichloropropane	2015-10	ug/L				< 4							
2,2-Dichloropropane	2016-03	ug/L			< 4	< 4							
2,2-Dichloropropane	2016-06	ug/L											
2,2-Dichloropropane	2016-08	ug/L			< 4	< 4							
2,2-Dichloropropane	2018-11	ug/L											
2,2-Dichloropropane	2019-03	ug/L											
2,2-Dichloropropane	2020-08	ug/L	< 4	< 4	< 4	< 4							
2,2'-oxybis(1-Chloropropane)	2008-08	ug/L	**3.16 J**	< 10	< 10								
2,2'-oxybis(1-Chloropropane)	2009-03	ug/L	< 10	< 10	< 10								
2,2'-oxybis(1-Chloropropane)	2009-07	ug/L	< 10	< 10	< 10.0								
2,2'-oxybis(1-Chloropropane)	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,2'-oxybis(1-Chloropropane)	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,2'-oxybis(1-Chloropropane)	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,2'-oxybis(1-Chloropropane)	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,2'-oxybis(1-Chloropropane)	2011-09	ug/L	< 10.0		< 10.0								
2,2'-oxybis(1-Chloropropane)	2012-03	ug/L	< 10.0		< 10.0								
2,2'-oxybis(1-Chloropropane)	2012-09	ug/L	< 10.0		< 10.0								
2,2'-oxybis(1-Chloropropane)	2013-03	ug/L	< 10.5		< 10.4								
2,2'-oxybis(1-Chloropropane)	2013-09	ug/L	< 10.1										
2,2'-oxybis(1-Chloropropane)	2014-03	ug/L			< 10.2								
2,2'-oxybis(1-Chloropropane)	2014-09	ug/L			< 10								
2,2'-oxybis(1-Chloropropane)	2015-03	ug/L			< 10.6								
2,2'-oxybis(1-Chloropropane)	2015-06	ug/L											
2,2'-oxybis(1-Chloropropane)	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,2'-oxybis(1-Chloropropane)	2015-10	ug/L				< 10.6							
2,2'-oxybis(1-Chloropropane)	2016-03	ug/L			< 10	< 10							
2,2'-oxybis(1-Chloropropane)	2016-06	ug/L											
2,2'-oxybis(1-Chloropropane)	2016-08	ug/L			< 11.1	< 11.5							
2,2'-oxybis(1-Chloropropane)	2017-03	ug/L			< 10.2	< 11.4							
2,2'-oxybis(1-Chloropropane)	2017-08	ug/L			< 10.6	< 11.1							
2,2'-oxybis(1-Chloropropane)	2018-03	ug/L			< 11.2	< 12							
2,2'-oxybis(1-Chloropropane)	2018-08	ug/L			< 11	< 11.1							
2,2'-oxybis(1-Chloropropane)	2018-09	ug/L											
2,2'-oxybis(1-Chloropropane)	2018-11	ug/L											
2,2'-oxybis(1-Chloropropane)	2019-03	ug/L			< 11.5	< 10.9							
2,2'-oxybis(1-Chloropropane)	2019-08	ug/L			< 10.7	< 10.2							
2,2'-oxybis(1-Chloropropane)	2020-03	ug/L			< 11.1	< 11.6							
2,2'-oxybis(1-Chloropropane)	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,2'-oxybis(1-Chloropropane)	2021-08	ug/L			< 11.8	< 11							
2,2'-oxybis(1-Chloropropane)	2022-08	ug/L			< 10.2	< 10.4							
2,2'-oxybis(1-Chloropropane)	2023-08	ug/L			< 9.8	< 11.6							
2,3,4,6-Tetrachlorophenol	2008-08	ug/L	< 10	< 10	< 10								
2,3,4,6-Tetrachlorophenol	2009-03	ug/L	< 10	< 10	< 10								
2,3,4,6-Tetrachlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2,3,4,6-Tetrachlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,3,4,6-Tetrachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,3,4,6-Tetrachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,3,4,6-Tetrachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,3,4,6-Tetrachlorophenol	2015-06	ug/L											
2,3,4,6-Tetrachlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,3,4,6-Tetrachlorophenol	2015-10	ug/L				< 10.6							
2,3,4,6-Tetrachlorophenol	2016-03	ug/L			< 10	< 10							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
2,3,4,6-Tetrachlorophenol	2016-06	ug/L					< 11.4							
2,3,4,6-Tetrachlorophenol	2016-08	ug/L					< 11							
2,3,4,6-Tetrachlorophenol	2018-11	ug/L											**0.601 J**	
2,3,4,6-Tetrachlorophenol	2019-03	ug/L											< 12.2	
2,3,4,6-Tetrachlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,4,5-T	2008-08	ug/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.11	< 0.11	< 0.11	< 0.1	< 0.11		< 0.1	
2,4,5-T	2008-09	ug/L										< 0.11		< 0.1
2,4,5-T	2009-03	ug/L	< 0.22	< 0.22	< 0.2	< 0.21	< 0.22	< 0.22	< 0.2	< 0.2	< 0.2	< 0.22	< 0.21	< 0.2
2,4,5-T	2009-07	ug/L	< 0.21	< 0.21				< 0.21		< 0.21				
2,4,5-T	2009-09	ug/L	< 0.20	< 0.2				< 0.2		< 0.2				
2,4,5-T	2010-03	ug/L	< 0.51	< 0.50				< 0.52		< 0.53				
2,4,5-T	2010-09	ug/L	< 0.51	< 0.53	< 0.51	< 0.52				< 0.53				
2,4,5-T	2011-03	ug/L	< 0.51	< 0.51						< 0.50				
2,4,5-T	2015-06	ug/L						< 1.08	< 1.21					
2,4,5-T	2015-09	ug/L	< 1.18	< 1.28				< 1.21	< 1.17	< 1.27	< 1.25			
2,4,5-T	2015-10	ug/L			< 1.18	< 1.19								
2,4,5-T	2016-03	ug/L												
2,4,5-T	2016-06	ug/L					< 1.17							
2,4,5-T	2016-08	ug/L					< 1.04							
2,4,5-T	2018-11	ug/L											< 1.24	
2,4,5-T	2019-03	ug/L											< 1.15	
2,4,5-T	2019-08	ug/L	< 1.08											
2,4,5-T	2020-08	ug/L	< 0.151	< 0.169	< 0.137	< 0.14	< 0.158	< 0.135	< 0.143	< 0.15	< 0.143			
2,4,5-TP (Silvex)	2008-08	ug/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.11	< 0.11	< 0.11	< 0.1	< 0.11		< 0.1	
2,4,5-TP (Silvex)	2008-09	ug/L										< 0.11		< 0.1
2,4,5-TP (Silvex)	2009-03	ug/L	**0.27**	**0.17 J**	< 0.2	< 0.21	< 0.22	**0.17 J**	< 0.2	**0.36**	< 0.2	< 0.22	< 0.21	< 0.2
2,4,5-TP (Silvex)	2009-07	ug/L	< 0.21	< 0.21				< 0.21		< 0.21				
2,4,5-TP (Silvex)	2009-09	ug/L	< 0.20	< 0.2				< 0.2		**0.49**				
2,4,5-TP (Silvex)	2010-03	ug/L	< 0.51	< 0.50				< 0.52		< 0.53				
2,4,5-TP (Silvex)	2010-09	ug/L	< 0.51	< 0.53	< 0.51	< 0.52				< 0.53				
2,4,5-TP (Silvex)	2011-03	ug/L	< 0.51	< 0.51						< 0.50				
2,4,5-TP (Silvex)	2011-09	ug/L	< 1.1	< 1.0						< 1.0				
2,4,5-TP (Silvex)	2012-03	ug/L	< 1.0	< 1.0						< 1.0				
2,4,5-TP (Silvex)	2012-09	ug/L	< 1.0	< 1.0						< 1.0				
2,4,5-TP (Silvex)	2013-03	ug/L	< 1.07	< 1.04						< 1.03				
2,4,5-TP (Silvex)	2013-09	ug/L	< 1.12	< 1.09				< 1.05		< 1.11				
2,4,5-TP (Silvex)	2014-03	ug/L	< 1.12							**0.632 J**				
2,4,5-TP (Silvex)	2014-09	ug/L	< 1.04							< 1.05				
2,4,5-TP (Silvex)	2015-03	ug/L	< 1.12							< 1.05				
2,4,5-TP (Silvex)	2015-06	ug/L						< 1.08	< 1.21					
2,4,5-TP (Silvex)	2015-09	ug/L	< 1.18	< 1.28				< 1.21	< 1.17	< 1.27	< 1.25			
2,4,5-TP (Silvex)	2015-10	ug/L			< 1.18	< 1.19								
2,4,5-TP (Silvex)	2016-03	ug/L	< 1.11							< 11				
2,4,5-TP (Silvex)	2016-06	ug/L					< 1.17							
2,4,5-TP (Silvex)	2016-08	ug/L	< 1.19				< 1.04			< 1.17				
2,4,5-TP (Silvex)	2017-03	ug/L	< 1.11							< 1.1				
2,4,5-TP (Silvex)	2017-08	ug/L	< 1.16							< 1.19				
2,4,5-TP (Silvex)	2018-03	ug/L	< 1.27							< 1.11				
2,4,5-TP (Silvex)	2018-08	ug/L	< 1.17											
2,4,5-TP (Silvex)	2018-09	ug/L								< 1.15				
2,4,5-TP (Silvex)	2018-11	ug/L											< 1.24	
2,4,5-TP (Silvex)	2019-03	ug/L	< 1.12							< 1.28			< 1.15	
2,4,5-TP (Silvex)	2019-08	ug/L	< 1.08							< 1.17				
2,4,5-TP (Silvex)	2020-03	ug/L								< 1.11				
2,4,5-TP (Silvex)	2020-04	ug/L	< 1.19											
2,4,5-TP (Silvex)	2020-08	ug/L	< 0.151	< 0.169	< 0.137	< 0.14	< 0.158	< 0.135	< 0.143	< 0.15	< 0.143			
2,4,5-TP (Silvex)	2021-08	ug/L	< 1.2							**0.305 J**				
2,4,5-TP (Silvex)	2022-08	ug/L	< 0.5							< 1.15				
2,4,5-TP (Silvex)	2023-08	ug/L	< 1.02							< 0.994				
2,4,5-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,5-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,5-Trichlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,4,5-Trichlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,4,5-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,4,5-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4,5-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4,5-Trichlorophenol	2015-06	ug/L						< 10.5	< 11.1					
2,4,5-Trichlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,4,5-Trichlorophenol	2015-10	ug/L			< 10.3	< 10.5								
2,4,5-Trichlorophenol	2016-03	ug/L												
2,4,5-Trichlorophenol	2016-06	ug/L					< 11.4							
2,4,5-Trichlorophenol	2016-08	ug/L					< 11							
2,4,5-Trichlorophenol	2018-11	ug/L											< 11.6	
2,4,5-Trichlorophenol	2019-03	ug/L											< 12.2	
2,4,5-Trichlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,4,6-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,6-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4,6-Trichlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,4,6-Trichlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,4,6-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,4,6-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4,6-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4,6-Trichlorophenol	2015-06	ug/L						< 10.5	< 11.1					
2,4,6-Trichlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,4,6-Trichlorophenol	2015-10	ug/L			< 10.3	< 10.5								
2,4,6-Trichlorophenol	2016-03	ug/L												
2,4,6-Trichlorophenol	2016-06	ug/L					< 11.4							
2,4,6-Trichlorophenol	2016-08	ug/L					< 11							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
2,3,4,6-Tetrachlorophenol	2016-06	ug/L											
2,3,4,6-Tetrachlorophenol	2016-08	ug/L			< 11.1	< 11.5							
2,3,4,6-Tetrachlorophenol	2018-11	ug/L											
2,3,4,6-Tetrachlorophenol	2019-03	ug/L											
2,3,4,6-Tetrachlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,4,5-T	2008-08	ug/L	< 0.1	< 0.11									
2,4,5-T	2008-09	ug/L			< 0.1								
2,4,5-T	2009-03	ug/L	< 0.22	< 0.2	< 0.2								
2,4,5-T	2009-07	ug/L											
2,4,5-T	2009-09	ug/L			< 0.20								
2,4,5-T	2010-03	ug/L			< 0.50								
2,4,5-T	2010-09	ug/L	< 0.51 UJ	< 0.52	< 0.52								
2,4,5-T	2011-03	ug/L			< 0.56								
2,4,5-T	2015-06	ug/L											
2,4,5-T	2015-09	ug/L	< 1.2	< 1.11	< 1.11								
2,4,5-T	2015-10	ug/L				< 1.22							
2,4,5-T	2016-03	ug/L			< 1.08	< 1.16							
2,4,5-T	2016-06	ug/L											
2,4,5-T	2016-08	ug/L			< 1.15	< 1.28							
2,4,5-T	2018-11	ug/L											
2,4,5-T	2019-03	ug/L											
2,4,5-T	2019-08	ug/L											
2,4,5-T	2020-08	ug/L	< 0.144	< 0.148	< 0.143	< 0.152							
2,4,5-TP (Silvex)	2008-08	ug/L	< 0.1	< 0.11									
2,4,5-TP (Silvex)	2008-09	ug/L			< 0.1								
2,4,5-TP (Silvex)	2009-03	ug/L	< 0.22	< 0.2	< 0.2								
2,4,5-TP (Silvex)	2009-07	ug/L											
2,4,5-TP (Silvex)	2009-09	ug/L			< 0.20								
2,4,5-TP (Silvex)	2010-03	ug/L			< 0.50								
2,4,5-TP (Silvex)	2010-09	ug/L	< 0.51 UJ	< 0.52	< 0.52								
2,4,5-TP (Silvex)	2011-03	ug/L			< 0.56								
2,4,5-TP (Silvex)	2011-09	ug/L			< 1.0								
2,4,5-TP (Silvex)	2012-03	ug/L			< 1.0								
2,4,5-TP (Silvex)	2012-09	ug/L											
2,4,5-TP (Silvex)	2013-03	ug/L			< 1.06								
2,4,5-TP (Silvex)	2013-09	ug/L											
2,4,5-TP (Silvex)	2014-03	ug/L			< 1.06								
2,4,5-TP (Silvex)	2014-09	ug/L			< 1.05								
2,4,5-TP (Silvex)	2015-03	ug/L			< 1.11								
2,4,5-TP (Silvex)	2015-06	ug/L											
2,4,5-TP (Silvex)	2015-09	ug/L	< 1.2	< 1.11	< 1.11								
2,4,5-TP (Silvex)	2015-10	ug/L				< 1.22							
2,4,5-TP (Silvex)	2016-03	ug/L			< 1.08	< 1.16							
2,4,5-TP (Silvex)	2016-06	ug/L											
2,4,5-TP (Silvex)	2016-08	ug/L			< 1.15	< 1.28							
2,4,5-TP (Silvex)	2017-03	ug/L			< 1.02	< 1.18							
2,4,5-TP (Silvex)	2017-08	ug/L			< 1.09	< 1.11							
2,4,5-TP (Silvex)	2018-03	ug/L			< 1.13	< 1.17							
2,4,5-TP (Silvex)	2018-08	ug/L			< 1.1	< 1.12							
2,4,5-TP (Silvex)	2018-09	ug/L											
2,4,5-TP (Silvex)	2018-11	ug/L											
2,4,5-TP (Silvex)	2019-03	ug/L			< 1.28	< 1.14							
2,4,5-TP (Silvex)	2019-08	ug/L			< 1.27	< 1.2							
2,4,5-TP (Silvex)	2020-03	ug/L			< 1.2	**2.14 J**							
2,4,5-TP (Silvex)	2020-04	ug/L											
2,4,5-TP (Silvex)	2020-08	ug/L	< 0.144	< 0.148	< 0.143	< 0.152							
2,4,5-TP (Silvex)	2021-08	ug/L			< 1.18	< 1.17							
2,4,5-TP (Silvex)	2022-08	ug/L			< 1.18	< 1.09							
2,4,5-TP (Silvex)	2023-08	ug/L			< 1.04	< 1.07							
2,4,5-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10								
2,4,5-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10								
2,4,5-Trichlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2,4,5-Trichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4,5-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4,5-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4,5-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4,5-Trichlorophenol	2015-06	ug/L											
2,4,5-Trichlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,4,5-Trichlorophenol	2015-10	ug/L				< 10.6							
2,4,5-Trichlorophenol	2016-03	ug/L			< 10	< 10							
2,4,5-Trichlorophenol	2016-06	ug/L											
2,4,5-Trichlorophenol	2016-08	ug/L			< 11.1	< 11.5							
2,4,5-Trichlorophenol	2018-11	ug/L											
2,4,5-Trichlorophenol	2019-03	ug/L											
2,4,5-Trichlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,4,6-Trichlorophenol	2008-08	ug/L	< 10	< 10	< 10								
2,4,6-Trichlorophenol	2009-03	ug/L	< 10	< 10	< 10								
2,4,6-Trichlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2,4,6-Trichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4,6-Trichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4,6-Trichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4,6-Trichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4,6-Trichlorophenol	2015-06	ug/L											
2,4,6-Trichlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,4,6-Trichlorophenol	2015-10	ug/L				< 10.6							
2,4,6-Trichlorophenol	2016-03	ug/L			< 10	< 10							
2,4,6-Trichlorophenol	2016-06	ug/L											
2,4,6-Trichlorophenol	2016-08	ug/L			< 11.1	< 11.5							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
2,4,6-Trichlorophenol	2018-11	ug/L											< 11.6	
2,4,6-Trichlorophenol	2019-03	ug/L											< 12.2	
2,4,6-Trichlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,4-D	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1.1	< 1.1	< 1.1	< 1	< 1.1		< 1	
2,4-D	2008-09	ug/L										< 1.1		< 1
2,4-D	2009-03	ug/L	< 1.1	< 1.1	< 0.99	< 1.1	< 1.1	< 1.1	< 1	< 1	< 1	< 1.1	< 1.1	< 1
2,4-D	2009-07	ug/L	< 1	< 1.1				< 1		< 1.1				
2,4-D	2009-09	ug/L	< 1.0	< 1				< 1		< 1				
2,4-D	2010-03	ug/L	< 1.0	< 1.0				< 1.0		< 1.1				
2,4-D	2010-09	ug/L	< 1.0	< 1.1	< 1.0	< 1.0				< 1.1				
2,4-D	2011-03	ug/L	< 1.0	< 1.0						< 1.0				
2,4-D	2015-06	ug/L						< 1.08	< 1.21					
2,4-D	2015-09	ug/L	< 1.18	< 1.28				< 1.21	< 1.17	< 1.27	< 1.25			
2,4-D	2015-10	ug/L			< 1.18	< 1.19								
2,4-D	2016-03	ug/L												
2,4-D	2016-06	ug/L					< 1.17							
2,4-D	2016-08	ug/L					< 1.04							
2,4-D	2018-11	ug/L											< 1.24	
2,4-D	2019-03	ug/L											< 1.15	
2,4-D	2019-08	ug/L	< 1.08											
2,4-D	2020-08	ug/L	< 0.301	< 0.339	< 0.273	< 0.28	< 0.315	< 0.269	< 0.286	< 0.3	< 0.286			
2,4-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dichlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,4-Dichlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,4-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,4-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4-Dichlorophenol	2012-03	ug/L												
2,4-Dichlorophenol	2012-09	ug/L												
2,4-Dichlorophenol	2013-03	ug/L												
2,4-Dichlorophenol	2015-06	ug/L						< 10.5	< 11.1					
2,4-Dichlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,4-Dichlorophenol	2015-10	ug/L			< 10.3	< 10.5								
2,4-Dichlorophenol	2016-03	ug/L												
2,4-Dichlorophenol	2016-06	ug/L					< 11.4							
2,4-Dichlorophenol	2016-08	ug/L					< 11							
2,4-Dichlorophenol	2018-11	ug/L											< 11.6	
2,4-Dichlorophenol	2019-03	ug/L											< 12.2	
2,4-Dichlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,4-Dimethylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dimethylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dimethylphenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,4-Dimethylphenol	2009-09	ug/L	< 10.0	**0.335 J**	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,4-Dimethylphenol	2010-03	ug/L	< 10.0	**0.284 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,4-Dimethylphenol	2010-09	ug/L	< 10.0	**0.273 J**	< 10.0	< 10.0				< 10.0				
2,4-Dimethylphenol	2011-03	ug/L	< 10.0	**0.337 J**	< 10.0	< 10.0				< 10.0				
2,4-Dimethylphenol	2011-09	ug/L		**0.232 J**										
2,4-Dimethylphenol	2012-03	ug/L		**0.215 J**										
2,4-Dimethylphenol	2012-09	ug/L		**0.277 J**										
2,4-Dimethylphenol	2013-03	ug/L		< 10.2										
2,4-Dimethylphenol	2013-09	ug/L		< 11.0										
2,4-Dimethylphenol	2015-06	ug/L						< 10.5	< 11.1					
2,4-Dimethylphenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,4-Dimethylphenol	2015-10	ug/L			< 10.3	< 10.5								
2,4-Dimethylphenol	2016-03	ug/L												
2,4-Dimethylphenol	2016-06	ug/L					< 11.4							
2,4-Dimethylphenol	2016-08	ug/L					< 11							
2,4-Dimethylphenol	2018-11	ug/L											< 11.6	
2,4-Dimethylphenol	2019-03	ug/L											< 12.2	
2,4-Dimethylphenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,4-Dinitrophenol	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
2,4-Dinitrophenol	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
2,4-Dinitrophenol	2009-07	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0	< 20.0	< 20	< 20	< 20	< 20.0
2,4-Dinitrophenol	2009-09	ug/L	< 20.0	< 20	< 20.0	< 20.0	< 20.0	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0
2,4-Dinitrophenol	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
2,4-Dinitrophenol	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0				< 20.0				
2,4-Dinitrophenol	2011-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0				< 20.0				
2,4-Dinitrophenol	2015-06	ug/L						< 21.1	< 22.2					
2,4-Dinitrophenol	2015-09	ug/L	< 22.2	**12.4 J**				< 22.2	< 20.4	< 22.5	< 22.2			
2,4-Dinitrophenol	2015-10	ug/L			< 20.6	< 21.1								
2,4-Dinitrophenol	2016-03	ug/L												
2,4-Dinitrophenol	2016-06	ug/L					< 22.7							
2,4-Dinitrophenol	2016-08	ug/L					< 22							
2,4-Dinitrophenol	2018-11	ug/L											< 23.3	
2,4-Dinitrophenol	2019-03	ug/L											< 24.4	
2,4-Dinitrophenol	2020-08	ug/L	< 23.5	< 24.4	< 21.5	< 21.7	< 22.7	< 22.7	< 22.5	< 23.5	< 23.8			
2,4-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,4-Dinitrotoluene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,4-Dinitrotoluene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,4-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,4-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,4-Dinitrotoluene	2015-06	ug/L						< 10.5	< 11.1					
2,4-Dinitrotoluene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,4-Dinitrotoluene	2015-10	ug/L			< 10.3	< 10.5								
2,4-Dinitrotoluene	2016-03	ug/L												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
2,4,6-Trichlorophenol	2018-11	ug/L											
2,4,6-Trichlorophenol	2019-03	ug/L											
2,4,6-Trichlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,4-D	2008-08	ug/L	< 1	< 1.1									
2,4-D	2008-09	ug/L			< 1								
2,4-D	2009-03	ug/L	< 1.1	< 0.99	< 1								
2,4-D	2009-07	ug/L											
2,4-D	2009-09	ug/L			< 1.0								
2,4-D	2010-03	ug/L			< 1.0								
2,4-D	2010-09	ug/L	< 1.0 UJ	< 1.0	< 1.0								
2,4-D	2011-03	ug/L			< 1.1								
2,4-D	2015-06	ug/L											
2,4-D	2015-09	ug/L	< 1.2	< 1.11	< 1.11								
2,4-D	2015-10	ug/L				< 1.22							
2,4-D	2016-03	ug/L			< 1.08	< 1.16							
2,4-D	2016-06	ug/L											
2,4-D	2016-08	ug/L			< 1.15	< 1.28							
2,4-D	2018-11	ug/L											
2,4-D	2019-03	ug/L											
2,4-D	2019-08	ug/L											
2,4-D	2020-08	ug/L	< 0.288	< 0.296	< 0.286	< 0.305							
2,4-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10								
2,4-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10								
2,4-Dichlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2,4-Dichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dichlorophenol	2012-03	ug/L			< 10.0								
2,4-Dichlorophenol	2012-09	ug/L			< 10.0								
2,4-Dichlorophenol	2013-03	ug/L			< 10.4								
2,4-Dichlorophenol	2015-06	ug/L											
2,4-Dichlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,4-Dichlorophenol	2015-10	ug/L				< 10.6							
2,4-Dichlorophenol	2016-03	ug/L			< 10	< 10							
2,4-Dichlorophenol	2016-06	ug/L											
2,4-Dichlorophenol	2016-08	ug/L			< 11.1	< 11.5							
2,4-Dichlorophenol	2018-11	ug/L											
2,4-Dichlorophenol	2019-03	ug/L											
2,4-Dichlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,4-Dimethylphenol	2008-08	ug/L	< 10	< 10	< 10								
2,4-Dimethylphenol	2009-03	ug/L	< 10	< 10	< 10								
2,4-Dimethylphenol	2009-07	ug/L	< 10	< 10	< 10.0								
2,4-Dimethylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dimethylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dimethylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dimethylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dimethylphenol	2011-09	ug/L			< 10.0								
2,4-Dimethylphenol	2012-03	ug/L			< 10.0								
2,4-Dimethylphenol	2012-09	ug/L			< 10.0								
2,4-Dimethylphenol	2013-03	ug/L			< 10.4								
2,4-Dimethylphenol	2013-09	ug/L											
2,4-Dimethylphenol	2015-06	ug/L											
2,4-Dimethylphenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,4-Dimethylphenol	2015-10	ug/L				< 10.6							
2,4-Dimethylphenol	2016-03	ug/L			< 10	< 10							
2,4-Dimethylphenol	2016-06	ug/L											
2,4-Dimethylphenol	2016-08	ug/L			< 11.1	< 11.5							
2,4-Dimethylphenol	2018-11	ug/L											
2,4-Dimethylphenol	2019-03	ug/L											
2,4-Dimethylphenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,4-Dinitrophenol	2008-08	ug/L	< 20	< 20	< 20								
2,4-Dinitrophenol	2009-03	ug/L	< 20	< 20	< 20								
2,4-Dinitrophenol	2009-07	ug/L	< 20	< 20	< 20.0								
2,4-Dinitrophenol	2009-09	ug/L	< 20.0	< 20.0	< 20.0								
2,4-Dinitrophenol	2010-03	ug/L	< 20.0	< 20.0	< 20.0								
2,4-Dinitrophenol	2010-09	ug/L	< 20.0	< 20.0	< 20.0								
2,4-Dinitrophenol	2011-03	ug/L	< 20.0	< 20.0	< 20.0								
2,4-Dinitrophenol	2015-06	ug/L											
2,4-Dinitrophenol	2015-09	ug/L	< 21.7	< 21.1	< 22.5								
2,4-Dinitrophenol	2015-10	ug/L				< 21.3							
2,4-Dinitrophenol	2016-03	ug/L			< 20	< 20							
2,4-Dinitrophenol	2016-06	ug/L											
2,4-Dinitrophenol	2016-08	ug/L			< 22.2	< 23							
2,4-Dinitrophenol	2018-11	ug/L											
2,4-Dinitrophenol	2019-03	ug/L											
2,4-Dinitrophenol	2020-08	ug/L	< 23.5	< 22	< 23.5	< 23.5							
2,4-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10								
2,4-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10								
2,4-Dinitrotoluene	2009-07	ug/L	< 10	< 10	< 10.0								
2,4-Dinitrotoluene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,4-Dinitrotoluene	2015-06	ug/L											
2,4-Dinitrotoluene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,4-Dinitrotoluene	2015-10	ug/L				< 10.6							
2,4-Dinitrotoluene	2016-03	ug/L			< 10	< 10							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
2,4-Dinitrotoluene	2016-06	ug/L					< 11.4							
2,4-Dinitrotoluene	2016-08	ug/L					< 11							
2,4-Dinitrotoluene	2018-11	ug/L											< 11.6	
2,4-Dinitrotoluene	2019-03	ug/L											< 12.2	
2,4-Dinitrotoluene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,6-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dichlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,6-Dichlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,6-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,6-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,6-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,6-Dichlorophenol	2015-06	ug/L						< 10.5	< 11.1					
2,6-Dichlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,6-Dichlorophenol	2015-10	ug/L			< 10.3	< 10.5								
2,6-Dichlorophenol	2016-03	ug/L												
2,6-Dichlorophenol	2016-06	ug/L					< 11.4							
2,6-Dichlorophenol	2016-08	ug/L					< 11							
2,6-Dichlorophenol	2018-11	ug/L											< 11.6	
2,6-Dichlorophenol	2019-03	ug/L											< 12.2	
2,6-Dichlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2,6-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2,6-Dinitrotoluene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2,6-Dinitrotoluene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2,6-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2,6-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,6-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2,6-Dinitrotoluene	2015-06	ug/L						< 10.5	< 11.1					
2,6-Dinitrotoluene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2,6-Dinitrotoluene	2015-10	ug/L			< 10.3	< 10.5								
2,6-Dinitrotoluene	2016-03	ug/L												
2,6-Dinitrotoluene	2016-06	ug/L					< 11.4							
2,6-Dinitrotoluene	2016-08	ug/L					< 11							
2,6-Dinitrotoluene	2018-11	ug/L											< 11.6	
2,6-Dinitrotoluene	2019-03	ug/L											< 12.2	
2,6-Dinitrotoluene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Acetylaminofluorene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Acetylaminofluorene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Acetylaminofluorene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Acetylaminofluorene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Acetylaminofluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Acetylaminofluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Acetylaminofluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Acetylaminofluorene	2015-06	ug/L						< 10.5	< 11.1					
2-Acetylaminofluorene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2-Acetylaminofluorene	2015-10	ug/L			< 10.3	< 10.5								
2-Acetylaminofluorene	2016-03	ug/L												
2-Acetylaminofluorene	2016-06	ug/L					< 11.4							
2-Acetylaminofluorene	2016-08	ug/L					< 11							
2-Acetylaminofluorene	2018-11	ug/L											< 11.6	
2-Acetylaminofluorene	2019-03	ug/L											< 12.2	
2-Acetylaminofluorene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Butanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
2-Butanone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
2-Butanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2013-03	ug/L	< 10.0	< 10.0 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
2-Butanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0 J	**2.49 J**	**1.18 J**	**1.11 J**	< 10.0	**4.78 J**	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2013-11	ug/L												
2-Butanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2014-06	ug/L												
2-Butanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	**3.03 J**	< 10	< 10	< 10.0	< 10.0
2-Butanone	2015-06	ug/L						< 10	< 10					
2-Butanone	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
2-Butanone	2015-10	ug/L			< 10	< 10							< 10	< 10
2-Butanone	2016-03	ug/L	< 10 J	**4.17 J**	< 10	< 10	< 10	< 10	< 10	**9.64 J**	< 10	< 10	< 10	< 10
2-Butanone	2016-06	ug/L					< 10							
2-Butanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**3.85 J**	< 10	< 10	< 10	< 10
2-Butanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**5.4 J**	< 10	< 10	< 10	< 10
2-Butanone	2017-11	ug/L												
2-Butanone	2018-03	ug/L	< 10	**3.94 J**	< 10	**4.11 J**	< 10	< 10	< 10	**4.69 J**	< 10	< 10	< 10	< 10
2-Butanone	2018-06	ug/L												
2-Butanone	2018-08	ug/L	< 10	**2.2 J**	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Butanone	2018-09	ug/L							< 10	**2.39 J**				
2-Butanone	2018-11	ug/L											< 10	
2-Butanone	2019-03	ug/L	< 10	**3.37 J**	< 10	< 10	< 10	< 10	< 10	**5.7 J**	< 10	< 10	< 10	< 10
2-Butanone	2019-04	ug/L												
2-Butanone	2019-08	ug/L	< 10	**2.85 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Butanone	2020-03	ug/L		< 10		< 10	< 10	< 10	< 10	**10.5**	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
2,4-Dinitrotoluene	2016-06	ug/L											
2,4-Dinitrotoluene	2016-08	ug/L			< 11.1	< 11.5							
2,4-Dinitrotoluene	2018-11	ug/L											
2,4-Dinitrotoluene	2019-03	ug/L											
2,4-Dinitrotoluene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,6-Dichlorophenol	2008-08	ug/L	< 10	< 10	< 10								
2,6-Dichlorophenol	2009-03	ug/L	< 10	< 10	< 10								
2,6-Dichlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2,6-Dichlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dichlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dichlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dichlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dichlorophenol	2015-06	ug/L											
2,6-Dichlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,6-Dichlorophenol	2015-10	ug/L				< 10.6							
2,6-Dichlorophenol	2016-03	ug/L			< 10	< 10							
2,6-Dichlorophenol	2016-06	ug/L											
2,6-Dichlorophenol	2016-08	ug/L			< 11.1	< 11.5							
2,6-Dichlorophenol	2018-11	ug/L											
2,6-Dichlorophenol	2019-03	ug/L											
2,6-Dichlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2,6-Dinitrotoluene	2008-08	ug/L	< 10	< 10	< 10								
2,6-Dinitrotoluene	2009-03	ug/L	< 10	< 10	< 10								
2,6-Dinitrotoluene	2009-07	ug/L	< 10	< 10	< 10.0								
2,6-Dinitrotoluene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dinitrotoluene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dinitrotoluene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dinitrotoluene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2,6-Dinitrotoluene	2015-06	ug/L											
2,6-Dinitrotoluene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2,6-Dinitrotoluene	2015-10	ug/L				< 10.6							
2,6-Dinitrotoluene	2016-03	ug/L			< 10	< 10							
2,6-Dinitrotoluene	2016-06	ug/L											
2,6-Dinitrotoluene	2016-08	ug/L			< 11.1	< 11.5							
2,6-Dinitrotoluene	2018-11	ug/L											
2,6-Dinitrotoluene	2019-03	ug/L											
2,6-Dinitrotoluene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Acetylaminofluorene	2008-08	ug/L	< 10	< 10	< 10								
2-Acetylaminofluorene	2009-03	ug/L	< 10	< 10	< 10								
2-Acetylaminofluorene	2009-07	ug/L	< 10	< 10	< 10.0								
2-Acetylaminofluorene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Acetylaminofluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Acetylaminofluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Acetylaminofluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Acetylaminofluorene	2015-06	ug/L											
2-Acetylaminofluorene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Acetylaminofluorene	2015-10	ug/L				< 10.6							
2-Acetylaminofluorene	2016-03	ug/L			< 10	< 10							
2-Acetylaminofluorene	2016-06	ug/L											
2-Acetylaminofluorene	2016-08	ug/L			< 11.1	< 11.5							
2-Acetylaminofluorene	2018-11	ug/L											
2-Acetylaminofluorene	2019-03	ug/L											
2-Acetylaminofluorene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Butanone	2008-08	ug/L	< 10	< 10	< 10								
2-Butanone	2009-03	ug/L	< 10	< 10	< 10								
2-Butanone	2009-07	ug/L	< 10	< 10									
2-Butanone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Butanone	2013-03	ug/L	< 10	< 10	< 10.0								
2-Butanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
2-Butanone	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2015-06	ug/L											
2-Butanone	2015-09	ug/L	< 10	< 10	< 10								
2-Butanone	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
2-Butanone	2016-03	ug/L	**1.32 J**	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Butanone	2016-06	ug/L											
2-Butanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Butanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Butanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Butanone	2017-11	ug/L										< 10	< 10
2-Butanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
2-Butanone	2018-06	ug/L										< 10	< 10
2-Butanone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
2-Butanone	2018-09	ug/L									< 10	< 10	< 10
2-Butanone	2018-11	ug/L										< 10	< 10
2-Butanone	2019-03	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	
2-Butanone	2019-04	ug/L											< 10
2-Butanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
2-Butanone	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
2-Butanone	2020-04	ug/L	< 10		< 10									
2-Butanone	2020-08	ug/L	< 10	**3.27 J**	< 10	< 10	< 10	< 10	< 10	**5.38 J**	< 10			< 10
2-Butanone	2021-03	ug/L				< 10								
2-Butanone	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
2-Butanone	2022-03	ug/L				< 10								
2-Butanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
2-Butanone	2023-03	ug/L				< 10								
2-Butanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
2-Chloronaphthalene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloronaphthalene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chloronaphthalene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Chloronaphthalene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Chloronaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Chloronaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Chloronaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Chloronaphthalene	2015-06	ug/L						< 10.5	< 11.1					
2-Chloronaphthalene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2-Chloronaphthalene	2015-10	ug/L			< 10.3	< 10.5								
2-Chloronaphthalene	2016-03	ug/L												
2-Chloronaphthalene	2016-06	ug/L					< 11.4							
2-Chloronaphthalene	2016-08	ug/L					< 11							
2-Chloronaphthalene	2018-11	ug/L											< 11.6	
2-Chloronaphthalene	2019-03	ug/L											< 12.2	
2-Chloronaphthalene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Chlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Chlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Chlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Chlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Chlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Chlorophenol	2011-09	ug/L												
2-Chlorophenol	2012-03	ug/L												
2-Chlorophenol	2012-09	ug/L												
2-Chlorophenol	2013-03	ug/L												
2-Chlorophenol	2013-09	ug/L												
2-Chlorophenol	2015-06	ug/L						< 10.5	< 11.1					
2-Chlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2-Chlorophenol	2015-10	ug/L			< 10.3	< 10.5								
2-Chlorophenol	2016-03	ug/L												
2-Chlorophenol	2016-06	ug/L					< 11.4							
2-Chlorophenol	2016-08	ug/L					< 11							
2-Chlorophenol	2018-11	ug/L											< 11.6	
2-Chlorophenol	2019-03	ug/L											< 12.2	
2-Chlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Hexanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
2-Hexanone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
2-Hexanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
2-Hexanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2013-11	ug/L												
2-Hexanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2014-06	ug/L												
2-Hexanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
2-Hexanone	2015-06	ug/L						< 10	< 10					
2-Hexanone	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2015-10	ug/L			< 10	< 10							< 10	< 10
2-Hexanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2016-06	ug/L					< 10							
2-Hexanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2017-11	ug/L												
2-Hexanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2018-06	ug/L												
2-Hexanone	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Hexanone	2018-09	ug/L							< 10	< 10				
2-Hexanone	2018-11	ug/L											< 10	
2-Hexanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2019-04	ug/L												
2-Hexanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2020-03	ug/L		< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Hexanone	2020-04	ug/L	< 10		< 10									
2-Hexanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
2-Hexanone	2021-03	ug/L				< 10								
2-Hexanone	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
2-Hexanone	2022-03	ug/L				< 10								
2-Hexanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
2-Hexanone	2023-03	ug/L				< 10								
2-Hexanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
2-Butanone	2020-04	ug/L											
2-Butanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Butanone	2021-03	ug/L	< 10		< 10	< 10							< 10
2-Butanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Butanone	2022-03	ug/L	< 10		< 10	< 10							< 10
2-Butanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Butanone	2023-03	ug/L	< 10		< 10	< 10							< 10
2-Butanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Chloronaphthalene	2008-08	ug/L	< 10	< 10	< 10								
2-Chloronaphthalene	2009-03	ug/L	< 10	< 10	< 10								
2-Chloronaphthalene	2009-07	ug/L	< 10	< 10	< 10.0								
2-Chloronaphthalene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Chloronaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Chloronaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Chloronaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Chloronaphthalene	2015-06	ug/L											
2-Chloronaphthalene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Chloronaphthalene	2015-10	ug/L				< 10.6							
2-Chloronaphthalene	2016-03	ug/L			< 10	< 10							
2-Chloronaphthalene	2016-06	ug/L											
2-Chloronaphthalene	2016-08	ug/L			< 11.1	< 11.5							
2-Chloronaphthalene	2018-11	ug/L											
2-Chloronaphthalene	2019-03	ug/L											
2-Chloronaphthalene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Chlorophenol	2008-08	ug/L	< 10	< 10	< 10								
2-Chlorophenol	2009-03	ug/L	< 10	< 10	< 10								
2-Chlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2-Chlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Chlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Chlorophenol	2010-09	ug/L	< 10.0	**0.160 J**	< 10.0								
2-Chlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Chlorophenol	2011-09	ug/L		**0.200 J**	< 10.0								
2-Chlorophenol	2012-03	ug/L		< 10.0	< 10.0								
2-Chlorophenol	2012-09	ug/L		< 10.0	< 10.0								
2-Chlorophenol	2013-03	ug/L		< 21.5	< 10.4								
2-Chlorophenol	2013-09	ug/L		< 10.9									
2-Chlorophenol	2015-06	ug/L											
2-Chlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Chlorophenol	2015-10	ug/L				< 10.6							
2-Chlorophenol	2016-03	ug/L			< 10	< 10							
2-Chlorophenol	2016-06	ug/L											
2-Chlorophenol	2016-08	ug/L			< 11.1	< 11.5							
2-Chlorophenol	2018-11	ug/L											
2-Chlorophenol	2019-03	ug/L											
2-Chlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Hexanone	2008-08	ug/L	< 10	< 10	< 10								
2-Hexanone	2009-03	ug/L	< 10	< 10	< 10								
2-Hexanone	2009-07	ug/L	< 10	< 10									
2-Hexanone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Hexanone	2013-03	ug/L	< 10	< 10	< 10.0								
2-Hexanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
2-Hexanone	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2015-06	ug/L											
2-Hexanone	2015-09	ug/L	< 10	< 10	< 10								
2-Hexanone	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
2-Hexanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Hexanone	2016-06	ug/L											
2-Hexanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Hexanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Hexanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
2-Hexanone	2017-11	ug/L										< 10	< 10
2-Hexanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
2-Hexanone	2018-06	ug/L										< 10	< 10
2-Hexanone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
2-Hexanone	2018-09	ug/L									< 10	< 10	< 10
2-Hexanone	2018-11	ug/L										< 10	< 10
2-Hexanone	2019-03	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	
2-Hexanone	2019-04	ug/L											< 10
2-Hexanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
2-Hexanone	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
2-Hexanone	2020-04	ug/L											
2-Hexanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Hexanone	2021-03	ug/L	< 10		< 10	< 10							< 10
2-Hexanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Hexanone	2022-03	ug/L	< 10		< 10	< 10							< 10
2-Hexanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
2-Hexanone	2023-03	ug/L	< 10		< 10	< 10							< 10
2-Hexanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
2-Methylnaphthalene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Methylnaphthalene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Methylnaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Methylnaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Methylnaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Methylnaphthalene	2012-03	ug/L												
2-Methylnaphthalene	2012-09	ug/L												
2-Methylnaphthalene	2013-03	ug/L												
2-Methylnaphthalene	2015-06	ug/L						< 10.5	< 11.1					
2-Methylnaphthalene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2-Methylnaphthalene	2015-10	ug/L			< 10.3	< 10.5								
2-Methylnaphthalene	2016-03	ug/L												
2-Methylnaphthalene	2016-06	ug/L					< 11.4							
2-Methylnaphthalene	2016-08	ug/L					< 11							
2-Methylnaphthalene	2018-11	ug/L											< 11.6	
2-Methylnaphthalene	2019-03	ug/L											< 12.2	
2-Methylnaphthalene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Methylphenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Methylphenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Methylphenol	2015-06	ug/L						< 10.5	< 11.1					
2-Methylphenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2-Methylphenol	2015-10	ug/L			< 10.3	< 10.5								
2-Methylphenol	2016-03	ug/L												
2-Methylphenol	2016-06	ug/L					< 11.4							
2-Methylphenol	2016-08	ug/L					< 11							
2-Methylphenol	2018-11	ug/L											< 11.6	
2-Methylphenol	2019-03	ug/L											< 12.2	
2-Methylphenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Naphthylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Naphthylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Naphthylamine	2010-03	ug/L	< 10.0	**1.68 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Naphthylamine	2010-09	ug/L	< 10.0	**0.662 J**	< 10.0	< 10.0				< 10.0				
2-Naphthylamine	2011-03	ug/L	< 10.0	**1.32 J**	< 10.0	< 10.0				< 10.0				
2-Naphthylamine	2011-09	ug/L		**1.35 J**										
2-Naphthylamine	2012-03	ug/L		**0.800 J**										
2-Naphthylamine	2012-09	ug/L		< 10.0										
2-Naphthylamine	2013-03	ug/L		**0.342 J**										
2-Naphthylamine	2013-09	ug/L		**0.931 J**										
2-Naphthylamine	2015-06	ug/L						< 10.5	< 11.1					
2-Naphthylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
2-Naphthylamine	2015-10	ug/L			< 10.3	< 10.5								
2-Naphthylamine	2016-03	ug/L												
2-Naphthylamine	2016-06	ug/L					< 11.4							
2-Naphthylamine	2016-08	ug/L					< 11							
2-Naphthylamine	2018-11	ug/L											< 11.6	
2-Naphthylamine	2019-03	ug/L											< 12.2	
2-Naphthylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitroaniline	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
2-Nitroaniline	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Nitroaniline	2015-06	ug/L						< 10.5	< 11.1					
2-Nitroaniline	2015-09	ug/L	< 11.1	**1.42 J**				< 11.1	< 10.2	< 11.2	< 11.1			
2-Nitroaniline	2015-10	ug/L			< 10.3	< 10.5								
2-Nitroaniline	2016-03	ug/L												
2-Nitroaniline	2016-06	ug/L					< 11.4							
2-Nitroaniline	2016-08	ug/L					< 11							
2-Nitroaniline	2018-11	ug/L											< 11.6	
2-Nitroaniline	2019-03	ug/L											< 12.2	
2-Nitroaniline	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
2-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Nitrophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	**0.267 J**	< 10	< 10	< 10	< 10.0
2-Nitrophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
2-Nitrophenol	2010-03	ug/L	< 10.0	**0.374 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
2-Nitrophenol	2011-09	ug/L		< 10.0						< 10.0				
2-Nitrophenol	2012-03	ug/L		< 10.0						< 10.0				
2-Nitrophenol	2012-09	ug/L		< 10.0						< 10.0				
2-Nitrophenol	2013-03	ug/L		**0.574 J**						< 10.9				
2-Nitrophenol	2013-09	ug/L		**1.85 J**						< 10.3				
2-Nitrophenol	2015-06	ug/L						< 10.5	< 11.1					
2-Nitrophenol	2015-09	ug/L	< 11.1	**2.67 J**				< 11.1	< 10.2	< 11.2	< 11.1			
2-Nitrophenol	2015-10	ug/L			< 10.3	< 10.5								
2-Nitrophenol	2016-03	ug/L												

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
2-Methylnaphthalene	2008-08	ug/L	< 10	< 10	< 10								
2-Methylnaphthalene	2009-03	ug/L	< 10	< 10	< 10								
2-Methylnaphthalene	2009-07	ug/L	< 10	< 10	< 10.0								
2-Methylnaphthalene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylnaphthalene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylnaphthalene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylnaphthalene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylnaphthalene	2012-03	ug/L			< 10.0								
2-Methylnaphthalene	2012-09	ug/L			< 10.0								
2-Methylnaphthalene	2013-03	ug/L			< 10.4								
2-Methylnaphthalene	2015-06	ug/L											
2-Methylnaphthalene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Methylnaphthalene	2015-10	ug/L				< 10.6							
2-Methylnaphthalene	2016-03	ug/L			< 10	< 10							
2-Methylnaphthalene	2016-06	ug/L											
2-Methylnaphthalene	2016-08	ug/L			< 11.1	< 11.5							
2-Methylnaphthalene	2018-11	ug/L											
2-Methylnaphthalene	2019-03	ug/L											
2-Methylnaphthalene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Methylphenol	2008-08	ug/L	< 10	< 10	< 10								
2-Methylphenol	2009-03	ug/L	< 10	< 10	< 10								
2-Methylphenol	2009-07	ug/L	< 10	< 10	< 10.0								
2-Methylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Methylphenol	2015-06	ug/L											
2-Methylphenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Methylphenol	2015-10	ug/L				< 10.6							
2-Methylphenol	2016-03	ug/L			< 10	< 10							
2-Methylphenol	2016-06	ug/L											
2-Methylphenol	2016-08	ug/L			< 11.1	< 11.5							
2-Methylphenol	2018-11	ug/L											
2-Methylphenol	2019-03	ug/L											
2-Methylphenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Naphthylamine	2008-08	ug/L	< 10	< 10	< 10								
2-Naphthylamine	2009-03	ug/L	< 10	< 10	< 10								
2-Naphthylamine	2009-07	ug/L	< 10	< 10	< 10.0								
2-Naphthylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Naphthylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Naphthylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Naphthylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Naphthylamine	2011-09	ug/L			< 10.0								
2-Naphthylamine	2012-03	ug/L			< 10.0								
2-Naphthylamine	2012-09	ug/L			< 10.0								
2-Naphthylamine	2013-03	ug/L			< 10.4								
2-Naphthylamine	2013-09	ug/L											
2-Naphthylamine	2015-06	ug/L											
2-Naphthylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Naphthylamine	2015-10	ug/L				< 10.6							
2-Naphthylamine	2016-03	ug/L			< 10	< 10							
2-Naphthylamine	2016-06	ug/L											
2-Naphthylamine	2016-08	ug/L			< 11.1	< 11.5							
2-Naphthylamine	2018-11	ug/L											
2-Naphthylamine	2019-03	ug/L											
2-Naphthylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10								
2-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10								
2-Nitroaniline	2009-07	ug/L	< 10	< 10	< 10.0								
2-Nitroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitroaniline	2015-06	ug/L											
2-Nitroaniline	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Nitroaniline	2015-10	ug/L				< 10.6							
2-Nitroaniline	2016-03	ug/L			< 10	< 10							
2-Nitroaniline	2016-06	ug/L											
2-Nitroaniline	2016-08	ug/L			< 11.1	< 11.5							
2-Nitroaniline	2018-11	ug/L											
2-Nitroaniline	2019-03	ug/L											
2-Nitroaniline	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
2-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10								
2-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10								
2-Nitrophenol	2009-07	ug/L	< 10	< 10	< 10.0								
2-Nitrophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
2-Nitrophenol	2011-09	ug/L			< 10.0								
2-Nitrophenol	2012-03	ug/L			< 10.0								
2-Nitrophenol	2012-09	ug/L			< 10.0								
2-Nitrophenol	2013-03	ug/L			< 10.4								
2-Nitrophenol	2013-09	ug/L											
2-Nitrophenol	2015-06	ug/L											
2-Nitrophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
2-Nitrophenol	2015-10	ug/L				< 10.6							
2-Nitrophenol	2016-03	ug/L			< 10	< 10							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
2-Nitrophenol	2016-06	ug/L					< 11.4							
2-Nitrophenol	2016-08	ug/L					< 11							
2-Nitrophenol	2018-11	ug/L											< 11.6	
2-Nitrophenol	2019-03	ug/L											< 12.2	
2-Nitrophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
3,3-Dichlorobenzidine	2008-08	ug/L	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85
3,3-Dichlorobenzidine	2009-03	ug/L	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85	< 85
3,3-Dichlorobenzidine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
3,3-Dichlorobenzidine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
3,3-Dichlorobenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
3,3-Dichlorobenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3,3-Dichlorobenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3,3-Dichlorobenzidine	2015-06	ug/L						< 52.6	< 55.6					
3,3-Dichlorobenzidine	2015-09	ug/L	< 55.6	< 56.2				< 55.6	< 51	< 56.2	< 55.6			
3,3-Dichlorobenzidine	2015-10	ug/L			< 51.5	< 52.6								
3,3-Dichlorobenzidine	2016-03	ug/L												
3,3-Dichlorobenzidine	2016-06	ug/L					< 56.8							
3,3-Dichlorobenzidine	2016-08	ug/L					< 54.9							
3,3-Dichlorobenzidine	2018-11	ug/L											< 11.6	
3,3-Dichlorobenzidine	2019-03	ug/L											< 12.2	
3,3-Dichlorobenzidine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
3,3-Dimethylbenzidine	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
3,3-Dimethylbenzidine	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
3,3-Dimethylbenzidine	2009-07	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0	< 20.0	< 20	< 20	< 20	< 20.0
3,3-Dimethylbenzidine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
3,3-Dimethylbenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
3,3-Dimethylbenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3,3-Dimethylbenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3,3-Dimethylbenzidine	2015-06	ug/L						< 10.5	< 11.1					
3,3-Dimethylbenzidine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
3,3-Dimethylbenzidine	2015-10	ug/L			< 10.3	< 10.5								
3,3-Dimethylbenzidine	2016-03	ug/L												
3,3-Dimethylbenzidine	2016-06	ug/L					< 11.4							
3,3-Dimethylbenzidine	2016-08	ug/L					< 11							
3,3-Dimethylbenzidine	2018-11	ug/L											< 11.6	
3,3-Dimethylbenzidine	2019-03	ug/L											< 12.2	
3,3-Dimethylbenzidine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
3-Methylcholanthrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3-Methylcholanthrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3-Methylcholanthrene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
3-Methylcholanthrene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
3-Methylcholanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
3-Methylcholanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3-Methylcholanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3-Methylcholanthrene	2015-06	ug/L						< 10.5	< 11.1					
3-Methylcholanthrene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
3-Methylcholanthrene	2015-10	ug/L			< 10.3	< 10.5								
3-Methylcholanthrene	2016-03	ug/L												
3-Methylcholanthrene	2016-06	ug/L					< 11.4							
3-Methylcholanthrene	2016-08	ug/L					< 11							
3-Methylcholanthrene	2018-11	ug/L											< 11.6	
3-Methylcholanthrene	2019-03	ug/L											< 12.2	
3-Methylcholanthrene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
3-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
3-Nitroaniline	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
3-Nitroaniline	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
3-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**0.391 J**	< 10.0	< 10.0	< 10.0	< 10.0
3-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
3-Nitroaniline	2011-03	ug/L	< 10.0	**0.960 J**	< 10.0	< 10.0				< 10.0				
3-Nitroaniline	2011-09	ug/L		< 10.0						< 10.0				
3-Nitroaniline	2012-03	ug/L		< 10.0						< 10.0				
3-Nitroaniline	2012-09	ug/L		< 10.0						< 10.0				
3-Nitroaniline	2013-03	ug/L		< 10.2						< 10.9				
3-Nitroaniline	2013-09	ug/L		< 11.0						< 10.3				
3-Nitroaniline	2015-06	ug/L						< 10.5	< 11.1					
3-Nitroaniline	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
3-Nitroaniline	2015-10	ug/L			< 10.3	< 10.5								
3-Nitroaniline	2016-03	ug/L												
3-Nitroaniline	2016-06	ug/L					< 11.4							
3-Nitroaniline	2016-08	ug/L					< 11							
3-Nitroaniline	2018-11	ug/L											< 11.6	
3-Nitroaniline	2019-03	ug/L											< 12.2	
3-Nitroaniline	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4,4'-DDD	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
4,4'-DDD	2008-09	ug/L										< 0.016		< 0.016
4,4'-DDD	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
4,4'-DDD	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
4,4'-DDD	2015-06	ug/L						< 0.0348	< 0.032					
4,4'-DDD	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
4,4'-DDD	2015-10	ug/L			< 0.0372	< 0.0364								
4,4'-DDD	2016-03	ug/L												
4,4'-DDD	2016-06	ug/L					< 0.0364							
4,4'-DDD	2016-08	ug/L					< 0.0337							
4,4'-DDD	2018-11	ug/L											< 0.036	
4,4'-DDD	2019-03	ug/L											< 0.0372	
4,4'-DDD	2020-08	ug/L	< 0.0376	**0.00385 J**	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
4,4'-DDE	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
2-Nitrophenol	2016-06	ug/L											
2-Nitrophenol	2016-08	ug/L			< 11.1	< 11.5							
2-Nitrophenol	2018-11	ug/L											
2-Nitrophenol	2019-03	ug/L											
2-Nitrophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
3,3-Dichlorobenzidine	2008-08	ug/L	< 85	< 85	< 85								
3,3-Dichlorobenzidine	2009-03	ug/L	< 85	< 85	< 85								
3,3-Dichlorobenzidine	2009-07	ug/L	< 10	< 10	< 10.0								
3,3-Dichlorobenzidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dichlorobenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dichlorobenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dichlorobenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dichlorobenzidine	2015-06	ug/L											
3,3-Dichlorobenzidine	2015-09	ug/L	< 54.3	< 52.6	< 56.2								
3,3-Dichlorobenzidine	2015-10	ug/L				< 53.2							
3,3-Dichlorobenzidine	2016-03	ug/L			< 50	< 50							
3,3-Dichlorobenzidine	2016-06	ug/L											
3,3-Dichlorobenzidine	2016-08	ug/L			< 55.6	< 57.5							
3,3-Dichlorobenzidine	2018-11	ug/L											
3,3-Dichlorobenzidine	2019-03	ug/L											
3,3-Dichlorobenzidine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
3,3-Dimethylbenzidine	2008-08	ug/L	< 20	< 20	< 20								
3,3-Dimethylbenzidine	2009-03	ug/L	< 20	< 20	< 20								
3,3-Dimethylbenzidine	2009-07	ug/L	< 20	< 20	< 20.0								
3,3-Dimethylbenzidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dimethylbenzidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dimethylbenzidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dimethylbenzidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
3,3-Dimethylbenzidine	2015-06	ug/L											
3,3-Dimethylbenzidine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
3,3-Dimethylbenzidine	2015-10	ug/L				< 10.6							
3,3-Dimethylbenzidine	2016-03	ug/L			< 10	< 10							
3,3-Dimethylbenzidine	2016-06	ug/L											
3,3-Dimethylbenzidine	2016-08	ug/L			< 11.1	< 11.5							
3,3-Dimethylbenzidine	2018-11	ug/L											
3,3-Dimethylbenzidine	2019-03	ug/L											
3,3-Dimethylbenzidine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
3-Methylcholanthrene	2008-08	ug/L	< 10	< 10	< 10								
3-Methylcholanthrene	2009-03	ug/L	< 10	< 10	< 10								
3-Methylcholanthrene	2009-07	ug/L	< 10	< 10	< 10.0								
3-Methylcholanthrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
3-Methylcholanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
3-Methylcholanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
3-Methylcholanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
3-Methylcholanthrene	2015-06	ug/L											
3-Methylcholanthrene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
3-Methylcholanthrene	2015-10	ug/L				< 10.6							
3-Methylcholanthrene	2016-03	ug/L			< 10	< 10							
3-Methylcholanthrene	2016-06	ug/L											
3-Methylcholanthrene	2016-08	ug/L			< 11.1	< 11.5							
3-Methylcholanthrene	2018-11	ug/L											
3-Methylcholanthrene	2019-03	ug/L											
3-Methylcholanthrene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
3-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10								
3-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10								
3-Nitroaniline	2009-07	ug/L	< 10	< 10	< 10.0								
3-Nitroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
3-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
3-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
3-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
3-Nitroaniline	2011-09	ug/L			< 10.0								
3-Nitroaniline	2012-03	ug/L			< 10.0								
3-Nitroaniline	2012-09	ug/L			< 10.0								
3-Nitroaniline	2013-03	ug/L			< 10.4								
3-Nitroaniline	2013-09	ug/L											
3-Nitroaniline	2015-06	ug/L											
3-Nitroaniline	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
3-Nitroaniline	2015-10	ug/L				< 10.6							
3-Nitroaniline	2016-03	ug/L			< 10	< 10							
3-Nitroaniline	2016-06	ug/L											
3-Nitroaniline	2016-08	ug/L			< 11.1	< 11.5							
3-Nitroaniline	2018-11	ug/L											
3-Nitroaniline	2019-03	ug/L											
3-Nitroaniline	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4,4'-DDD	2008-08	ug/L	< 0.047	< 0.053									
4,4'-DDD	2008-09	ug/L			< 0.016								
4,4'-DDD	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
4,4'-DDD	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
4,4'-DDD	2015-06	ug/L											
4,4'-DDD	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
4,4'-DDD	2015-10	ug/L				**0.00206 J**							
4,4'-DDD	2016-03	ug/L			< 0.034	< 0.0356							
4,4'-DDD	2016-06	ug/L											
4,4'-DDD	2016-08	ug/L			< 0.0356	< 0.0327							
4,4'-DDD	2018-11	ug/L											
4,4'-DDD	2019-03	ug/L											
4,4'-DDD	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
4,4'-DDE	2008-08	ug/L	< 0.047	< 0.053									

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
4,4'-DDE	2008-09	ug/L										< 0.016		< 0.016
4,4'-DDE	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
4,4'-DDE	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
4,4'-DDE	2015-06	ug/L						< 0.0348	< 0.032					
4,4'-DDE	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
4,4'-DDE	2015-10	ug/L			< 0.0372	< 0.0364								
4,4'-DDE	2016-03	ug/L												
4,4'-DDE	2016-06	ug/L					< 0.0364							
4,4'-DDE	2016-08	ug/L					< 0.0337							
4,4'-DDE	2018-11	ug/L											< 0.036	
4,4'-DDE	2019-03	ug/L											< 0.0372	
4,4'-DDE	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
4,4'-DDT	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
4,4'-DDT	2008-09	ug/L										< 0.016		< 0.016
4,4'-DDT	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
4,4'-DDT	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
4,4'-DDT	2013-03	ug/L												
4,4'-DDT	2014-03	ug/L												
4,4'-DDT	2014-09	ug/L												
4,4'-DDT	2015-03	ug/L												
4,4'-DDT	2015-06	ug/L						< 0.0348	< 0.032					
4,4'-DDT	2015-09	ug/L	**0.00782 J**	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
4,4'-DDT	2015-10	ug/L			< 0.0372	< 0.0364								
4,4'-DDT	2016-03	ug/L												
4,4'-DDT	2016-06	ug/L					< 0.0364							
4,4'-DDT	2016-08	ug/L					< 0.0337							
4,4'-DDT	2017-03	ug/L												
4,4'-DDT	2017-08	ug/L												
4,4'-DDT	2018-11	ug/L											< 0.036	
4,4'-DDT	2019-03	ug/L											< 0.0372	
4,4'-DDT	2020-08	ug/L	**0.0104 J**	< 0.039	< 0.0376	**0.00473 J**	< 0.0376	**0.00561 J**	< 0.039	< 0.0376	< 0.039			
4,6-Dinitro-2-methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4,6-Dinitro-2-methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4,6-Dinitro-2-methylphenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4,6-Dinitro-2-methylphenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4,6-Dinitro-2-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4,6-Dinitro-2-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4,6-Dinitro-2-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4,6-Dinitro-2-methylphenol	2015-06	ug/L						< 10.5	< 11.1					
4,6-Dinitro-2-methylphenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4,6-Dinitro-2-methylphenol	2015-10	ug/L			< 10.3	< 10.5								
4,6-Dinitro-2-methylphenol	2016-03	ug/L												
4,6-Dinitro-2-methylphenol	2016-06	ug/L					< 11.4							
4,6-Dinitro-2-methylphenol	2016-08	ug/L					< 11							
4,6-Dinitro-2-methylphenol	2018-11	ug/L											< 11.6	
4,6-Dinitro-2-methylphenol	2019-03	ug/L											< 12.2	
4,6-Dinitro-2-methylphenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Aminobiphenyl	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
4-Aminobiphenyl	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
4-Aminobiphenyl	2009-07	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0	< 20.0	< 20	< 20	< 20	< 20.0
4-Aminobiphenyl	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Aminobiphenyl	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Aminobiphenyl	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Aminobiphenyl	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Aminobiphenyl	2015-06	ug/L						< 10.5	< 11.1					
4-Aminobiphenyl	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4-Aminobiphenyl	2015-10	ug/L			< 10.3	< 10.5								
4-Aminobiphenyl	2016-03	ug/L												
4-Aminobiphenyl	2016-06	ug/L					< 11.4							
4-Aminobiphenyl	2016-08	ug/L					< 11							
4-Aminobiphenyl	2018-11	ug/L											< 11.6	
4-Aminobiphenyl	2019-03	ug/L											< 12.2	
4-Aminobiphenyl	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Bromophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Bromophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Bromophenyl Phenyl Ether	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Bromophenyl Phenyl Ether	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Bromophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Bromophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Bromophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Bromophenyl Phenyl Ether	2015-06	ug/L						< 10.5	< 11.1					
4-Bromophenyl Phenyl Ether	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4-Bromophenyl Phenyl Ether	2015-10	ug/L			< 10.3	< 10.5								
4-Bromophenyl Phenyl Ether	2016-03	ug/L												
4-Bromophenyl Phenyl Ether	2016-06	ug/L					< 11.4							
4-Bromophenyl Phenyl Ether	2016-08	ug/L					< 11							
4-Bromophenyl Phenyl Ether	2018-11	ug/L											< 11.6	
4-Bromophenyl Phenyl Ether	2019-03	ug/L											< 12.2	
4-Bromophenyl Phenyl Ether	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Chloro-3-methylphenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloro-3-methylphenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloro-3-methylphenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Chloro-3-methylphenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Chloro-3-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Chloro-3-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Chloro-3-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Chloro-3-methylphenol	2015-06	ug/L						< 10.5	< 11.1					
4-Chloro-3-methylphenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
4,4'-DDE	2008-09	ug/L			< 0.016								
4,4'-DDE	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
4,4'-DDE	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
4,4'-DDE	2015-06	ug/L											
4,4'-DDE	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
4,4'-DDE	2015-10	ug/L				< 0.0364							
4,4'-DDE	2016-03	ug/L			< 0.034	< 0.0356 J							
4,4'-DDE	2016-06	ug/L											
4,4'-DDE	2016-08	ug/L			< 0.0356	< 0.0327							
4,4'-DDE	2018-11	ug/L											
4,4'-DDE	2019-03	ug/L											
4,4'-DDE	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
4,4'-DDT	2008-08	ug/L	< 0.047	< 0.053									
4,4'-DDT	2008-09	ug/L			< 0.016								
4,4'-DDT	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
4,4'-DDT	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
4,4'-DDT	2013-03	ug/L			< 0.0344								
4,4'-DDT	2014-03	ug/L			< 0.0330								
4,4'-DDT	2014-09	ug/L			< 0.032								
4,4'-DDT	2015-03	ug/L			< 0.0337								
4,4'-DDT	2015-06	ug/L											
4,4'-DDT	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
4,4'-DDT	2015-10	ug/L				< 0.0364							
4,4'-DDT	2016-03	ug/L			< 0.034	< 0.0356							
4,4'-DDT	2016-06	ug/L											
4,4'-DDT	2016-08	ug/L			< 0.0356	< 0.0327							
4,4'-DDT	2017-03	ug/L			< 0.0337	< 0.0356							
4,4'-DDT	2017-08	ug/L			< 0.0337	< 0.0344							
4,4'-DDT	2018-11	ug/L											
4,4'-DDT	2019-03	ug/L											
4,4'-DDT	2020-08	ug/L	< 0.0376	**0.00479 J**	< 0.039	< 0.0376							
4,6-Dinitro-2-methylphenol	2008-08	ug/L	< 10	< 10	< 10								
4,6-Dinitro-2-methylphenol	2009-03	ug/L	< 10	< 10	< 10								
4,6-Dinitro-2-methylphenol	2009-07	ug/L	< 10	< 10	< 10.0								
4,6-Dinitro-2-methylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4,6-Dinitro-2-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4,6-Dinitro-2-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4,6-Dinitro-2-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4,6-Dinitro-2-methylphenol	2015-06	ug/L											
4,6-Dinitro-2-methylphenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4,6-Dinitro-2-methylphenol	2015-10	ug/L				< 10.6							
4,6-Dinitro-2-methylphenol	2016-03	ug/L			< 10	< 10							
4,6-Dinitro-2-methylphenol	2016-06	ug/L											
4,6-Dinitro-2-methylphenol	2016-08	ug/L			< 11.1	< 11.5							
4,6-Dinitro-2-methylphenol	2018-11	ug/L											
4,6-Dinitro-2-methylphenol	2019-03	ug/L											
4,6-Dinitro-2-methylphenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Aminobiphenyl	2008-08	ug/L	< 20	< 20	< 20								
4-Aminobiphenyl	2009-03	ug/L	< 20	< 20	< 20								
4-Aminobiphenyl	2009-07	ug/L	< 20	< 20	< 20.0								
4-Aminobiphenyl	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Aminobiphenyl	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Aminobiphenyl	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Aminobiphenyl	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Aminobiphenyl	2015-06	ug/L											
4-Aminobiphenyl	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4-Aminobiphenyl	2015-10	ug/L				< 10.6							
4-Aminobiphenyl	2016-03	ug/L			< 10	< 10							
4-Aminobiphenyl	2016-06	ug/L											
4-Aminobiphenyl	2016-08	ug/L			< 11.1	< 11.5							
4-Aminobiphenyl	2018-11	ug/L											
4-Aminobiphenyl	2019-03	ug/L											
4-Aminobiphenyl	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Bromophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10								
4-Bromophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10								
4-Bromophenyl Phenyl Ether	2009-07	ug/L	< 10	< 10	< 10.0								
4-Bromophenyl Phenyl Ether	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Bromophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Bromophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Bromophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Bromophenyl Phenyl Ether	2015-06	ug/L											
4-Bromophenyl Phenyl Ether	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4-Bromophenyl Phenyl Ether	2015-10	ug/L				< 10.6							
4-Bromophenyl Phenyl Ether	2016-03	ug/L			< 10	< 10							
4-Bromophenyl Phenyl Ether	2016-06	ug/L											
4-Bromophenyl Phenyl Ether	2016-08	ug/L			< 11.1	< 11.5							
4-Bromophenyl Phenyl Ether	2018-11	ug/L											
4-Bromophenyl Phenyl Ether	2019-03	ug/L											
4-Bromophenyl Phenyl Ether	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Chloro-3-methylphenol	2008-08	ug/L	< 10	< 10	< 10								
4-Chloro-3-methylphenol	2009-03	ug/L	< 10	< 10	< 10								
4-Chloro-3-methylphenol	2009-07	ug/L	< 10	< 10	< 10.0								
4-Chloro-3-methylphenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloro-3-methylphenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloro-3-methylphenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloro-3-methylphenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloro-3-methylphenol	2015-06	ug/L											
4-Chloro-3-methylphenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
4-Chloro-3-methylphenol	2015-10	ug/L			< 10.3	< 10.5								
4-Chloro-3-methylphenol	2016-03	ug/L												
4-Chloro-3-methylphenol	2016-06	ug/L					< 11.4							
4-Chloro-3-methylphenol	2016-08	ug/L					< 11							
4-Chloro-3-methylphenol	2018-11	ug/L											< 11.6	
4-Chloro-3-methylphenol	2019-03	ug/L											< 12.2	
4-Chloro-3-methylphenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Chloroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chloroaniline	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Chloroaniline	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Chloroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Chloroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Chloroaniline	2011-03	ug/L	< 10.0	**0.172 J**	< 10.0	< 10.0				< 10.0				
4-Chloroaniline	2011-09	ug/L		< 10.0										
4-Chloroaniline	2012-03	ug/L		**0.142 J**										
4-Chloroaniline	2012-09	ug/L		< 10.0										
4-Chloroaniline	2013-03	ug/L		< 10.2										
4-Chloroaniline	2013-09	ug/L		< 11.0										
4-Chloroaniline	2015-06	ug/L						< 10.5	< 11.1					
4-Chloroaniline	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4-Chloroaniline	2015-10	ug/L			< 10.3	< 10.5								
4-Chloroaniline	2016-03	ug/L												
4-Chloroaniline	2016-06	ug/L					< 11.4							
4-Chloroaniline	2016-08	ug/L					< 11							
4-Chloroaniline	2018-11	ug/L											< 11.6	
4-Chloroaniline	2019-03	ug/L											< 12.2	
4-Chloroaniline	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Chlorophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chlorophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chlorophenyl Phenyl Ether	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Chlorophenyl Phenyl Ether	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Chlorophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Chlorophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Chlorophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Chlorophenyl Phenyl Ether	2015-06	ug/L						< 10.5	< 11.1					
4-Chlorophenyl Phenyl Ether	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4-Chlorophenyl Phenyl Ether	2015-10	ug/L			< 10.3	< 10.5								
4-Chlorophenyl Phenyl Ether	2016-03	ug/L												
4-Chlorophenyl Phenyl Ether	2016-06	ug/L					< 11.4							
4-Chlorophenyl Phenyl Ether	2016-08	ug/L					< 11							
4-Chlorophenyl Phenyl Ether	2018-11	ug/L											< 11.6	
4-Chlorophenyl Phenyl Ether	2019-03	ug/L											< 12.2	
4-Chlorophenyl Phenyl Ether	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Methyl-2-pentanone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
4-Methyl-2-pentanone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
4-Methyl-2-pentanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
4-Methyl-2-pentanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2013-11	ug/L												
4-Methyl-2-pentanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2014-06	ug/L												
4-Methyl-2-pentanone	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
4-Methyl-2-pentanone	2015-06	ug/L						< 10	< 10					
4-Methyl-2-pentanone	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2015-10	ug/L			< 10	< 10							< 10	< 10
4-Methyl-2-pentanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2016-06	ug/L					< 10							
4-Methyl-2-pentanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2017-11	ug/L												
4-Methyl-2-pentanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2018-06	ug/L												
4-Methyl-2-pentanone	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2018-09	ug/L							< 10	< 10				
4-Methyl-2-pentanone	2018-11	ug/L											< 10	
4-Methyl-2-pentanone	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2019-04	ug/L												
4-Methyl-2-pentanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-03	ug/L		< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-04	ug/L	< 10		< 10									
4-Methyl-2-pentanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
4-Methyl-2-pentanone	2021-03	ug/L				< 10								
4-Methyl-2-pentanone	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
4-Methyl-2-pentanone	2022-03	ug/L				< 10								
4-Methyl-2-pentanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
4-Methyl-2-pentanone	2023-03	ug/L				< 10								
4-Methyl-2-pentanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
4-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
4-Chloro-3-methylphenol	2015-10	ug/L				< 10.6							
4-Chloro-3-methylphenol	2016-03	ug/L			< 10	< 10							
4-Chloro-3-methylphenol	2016-06	ug/L											
4-Chloro-3-methylphenol	2016-08	ug/L			< 11.1	< 11.5							
4-Chloro-3-methylphenol	2018-11	ug/L											
4-Chloro-3-methylphenol	2019-03	ug/L											
4-Chloro-3-methylphenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Chloroaniline	2008-08	ug/L	< 10	< 10	< 10								
4-Chloroaniline	2009-03	ug/L	< 10	< 10	< 10								
4-Chloroaniline	2009-07	ug/L	< 10	< 10	< 10.0								
4-Chloroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Chloroaniline	2011-09	ug/L			< 10.0								
4-Chloroaniline	2012-03	ug/L			< 10.0								
4-Chloroaniline	2012-09	ug/L			< 10.0								
4-Chloroaniline	2013-03	ug/L			< 10.4								
4-Chloroaniline	2013-09	ug/L											
4-Chloroaniline	2015-06	ug/L											
4-Chloroaniline	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4-Chloroaniline	2015-10	ug/L				< 10.6							
4-Chloroaniline	2016-03	ug/L			< 10	< 10							
4-Chloroaniline	2016-06	ug/L											
4-Chloroaniline	2016-08	ug/L			< 11.1	< 11.5							
4-Chloroaniline	2018-11	ug/L											
4-Chloroaniline	2019-03	ug/L											
4-Chloroaniline	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Chlorophenyl Phenyl Ether	2008-08	ug/L	< 10	< 10	< 10								
4-Chlorophenyl Phenyl Ether	2009-03	ug/L	< 10	< 10	< 10								
4-Chlorophenyl Phenyl Ether	2009-07	ug/L	< 10	< 10	< 10.0								
4-Chlorophenyl Phenyl Ether	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Chlorophenyl Phenyl Ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Chlorophenyl Phenyl Ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Chlorophenyl Phenyl Ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Chlorophenyl Phenyl Ether	2015-06	ug/L											
4-Chlorophenyl Phenyl Ether	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4-Chlorophenyl Phenyl Ether	2015-10	ug/L				< 10.6							
4-Chlorophenyl Phenyl Ether	2016-03	ug/L			< 10	< 10							
4-Chlorophenyl Phenyl Ether	2016-06	ug/L											
4-Chlorophenyl Phenyl Ether	2016-08	ug/L			< 11.1	< 11.5							
4-Chlorophenyl Phenyl Ether	2018-11	ug/L											
4-Chlorophenyl Phenyl Ether	2019-03	ug/L											
4-Chlorophenyl Phenyl Ether	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Methyl-2-pentanone	2008-08	ug/L	< 10	< 10	< 10								
4-Methyl-2-pentanone	2009-03	ug/L	< 10	< 10	< 10								
4-Methyl-2-pentanone	2009-07	ug/L	< 10	< 10									
4-Methyl-2-pentanone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2013-03	ug/L	< 10	< 10	< 10.0								
4-Methyl-2-pentanone	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
4-Methyl-2-pentanone	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2015-06	ug/L											
4-Methyl-2-pentanone	2015-09	ug/L	< 10	< 10	< 10								
4-Methyl-2-pentanone	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
4-Methyl-2-pentanone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
4-Methyl-2-pentanone	2016-06	ug/L											
4-Methyl-2-pentanone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
4-Methyl-2-pentanone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
4-Methyl-2-pentanone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
4-Methyl-2-pentanone	2017-11	ug/L										< 10	< 10
4-Methyl-2-pentanone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2018-06	ug/L										< 10	< 10
4-Methyl-2-pentanone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
4-Methyl-2-pentanone	2018-09	ug/L									< 10	< 10	< 10
4-Methyl-2-pentanone	2018-11	ug/L										< 10	< 10
4-Methyl-2-pentanone	2019-03	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	
4-Methyl-2-pentanone	2019-04	ug/L											< 10
4-Methyl-2-pentanone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2020-04	ug/L											
4-Methyl-2-pentanone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2021-03	ug/L	< 10		< 10	< 10							< 10
4-Methyl-2-pentanone	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2022-03	ug/L	< 10		< 10	< 10							< 10
4-Methyl-2-pentanone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	2023-03	ug/L	< 10		< 10	< 10							< 10
4-Methyl-2-pentanone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
4-Nitroaniline	2008-08	ug/L	< 10	< 10	< 10								

Table 14
Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
4-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitroaniline	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Nitroaniline	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Nitroaniline	2015-06	ug/L						< 10.5	< 11.1					
4-Nitroaniline	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4-Nitroaniline	2015-10	ug/L			< 10.3	< 10.5								
4-Nitroaniline	2016-03	ug/L												
4-Nitroaniline	2016-06	ug/L					< 11.4							
4-Nitroaniline	2016-08	ug/L					< 11							
4-Nitroaniline	2018-11	ug/L											< 11.6	
4-Nitroaniline	2019-03	ug/L											< 12.2	
4-Nitroaniline	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
4-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Nitrophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
4-Nitrophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
4-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
4-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				**0.159 J**				
4-Nitrophenol	2011-09	ug/L								< 10.0				
4-Nitrophenol	2012-03	ug/L								< 10.0				
4-Nitrophenol	2012-09	ug/L								< 10.0				
4-Nitrophenol	2013-03	ug/L								< 10.9				
4-Nitrophenol	2013-09	ug/L								< 10.3				
4-Nitrophenol	2015-06	ug/L						< 10.5	< 11.1					
4-Nitrophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
4-Nitrophenol	2015-10	ug/L			< 10.3	< 10.5								
4-Nitrophenol	2016-03	ug/L												
4-Nitrophenol	2016-06	ug/L					< 11.4							
4-Nitrophenol	2016-08	ug/L					< 11							
4-Nitrophenol	2018-11	ug/L											< 11.6	
4-Nitrophenol	2019-03	ug/L											< 12.2	
4-Nitrophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
5-Nitro-o-toluidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
5-Nitro-o-toluidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
5-Nitro-o-toluidine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
5-Nitro-o-toluidine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
5-Nitro-o-toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
5-Nitro-o-toluidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
5-Nitro-o-toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
5-Nitro-o-toluidine	2015-06	ug/L						< 10.5	< 11.1					
5-Nitro-o-toluidine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
5-Nitro-o-toluidine	2015-10	ug/L			< 10.3	< 10.5								
5-Nitro-o-toluidine	2016-03	ug/L												
5-Nitro-o-toluidine	2016-06	ug/L					< 11.4							
5-Nitro-o-toluidine	2016-08	ug/L					< 11							
5-Nitro-o-toluidine	2018-11	ug/L											< 11.6	
5-Nitro-o-toluidine	2019-03	ug/L											< 12.2	
5-Nitro-o-toluidine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
7,12-Dimethylbenz(a)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
7,12-Dimethylbenz(a)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
7,12-Dimethylbenz(a)anthracene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
7,12-Dimethylbenz(a)anthracene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
7,12-Dimethylbenz(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
7,12-Dimethylbenz(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
7,12-Dimethylbenz(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
7,12-Dimethylbenz(a)anthracene	2015-06	ug/L						< 10.5	< 11.1					
7,12-Dimethylbenz(a)anthracene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
7,12-Dimethylbenz(a)anthracene	2015-10	ug/L			< 10.3	< 10.5								
7,12-Dimethylbenz(a)anthracene	2016-03	ug/L												
7,12-Dimethylbenz(a)anthracene	2016-06	ug/L					< 11.4							
7,12-Dimethylbenz(a)anthracene	2016-08	ug/L					< 11							
7,12-Dimethylbenz(a)anthracene	2018-11	ug/L											< 11.6	
7,12-Dimethylbenz(a)anthracene	2019-03	ug/L											< 12.2	
7,12-Dimethylbenz(a)anthracene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Acenaphthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Acenaphthene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Acenaphthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acenaphthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acenaphthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acenaphthene	2015-06	ug/L						< 10.5	< 11.1					
Acenaphthene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Acenaphthene	2015-10	ug/L			< 10.3	< 10.5								
Acenaphthene	2016-03	ug/L												
Acenaphthene	2016-06	ug/L					< 11.4							
Acenaphthene	2016-08	ug/L					< 11							
Acenaphthene	2018-11	ug/L											< 11.6	
Acenaphthene	2019-03	ug/L											< 12.2	
Acenaphthene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Acenaphthylene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acenaphthylene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Acenaphthylene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
4-Nitroaniline	2009-03	ug/L	< 10	< 10	< 10								
4-Nitroaniline	2009-07	ug/L	< 10	< 10	< 10.0								
4-Nitroaniline	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitroaniline	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitroaniline	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitroaniline	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitroaniline	2015-06	ug/L											
4-Nitroaniline	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4-Nitroaniline	2015-10	ug/L				< 10.6							
4-Nitroaniline	2016-03	ug/L			< 10	< 10							
4-Nitroaniline	2016-06	ug/L											
4-Nitroaniline	2016-08	ug/L			< 11.1	< 11.5							
4-Nitroaniline	2018-11	ug/L											
4-Nitroaniline	2019-03	ug/L											
4-Nitroaniline	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
4-Nitrophenol	2008-08	ug/L	< 10	< 10	< 10								
4-Nitrophenol	2009-03	ug/L	< 10	< 10	< 10								
4-Nitrophenol	2009-07	ug/L	< 10	< 10	< 10.0								
4-Nitrophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitrophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitrophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitrophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
4-Nitrophenol	2011-09	ug/L			< 10.0								
4-Nitrophenol	2012-03	ug/L			< 10.0								
4-Nitrophenol	2012-09	ug/L			< 10.0								
4-Nitrophenol	2013-03	ug/L			< 10.4								
4-Nitrophenol	2013-09	ug/L											
4-Nitrophenol	2015-06	ug/L											
4-Nitrophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
4-Nitrophenol	2015-10	ug/L				< 10.6							
4-Nitrophenol	2016-03	ug/L			< 10	< 10							
4-Nitrophenol	2016-06	ug/L											
4-Nitrophenol	2016-08	ug/L			< 11.1	< 11.5							
4-Nitrophenol	2018-11	ug/L											
4-Nitrophenol	2019-03	ug/L											
4-Nitrophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
5-Nitro-o-toluidine	2008-08	ug/L	< 10	< 10	< 10								
5-Nitro-o-toluidine	2009-03	ug/L	< 10	< 10	< 10								
5-Nitro-o-toluidine	2009-07	ug/L	< 10	< 10	< 10.0								
5-Nitro-o-toluidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
5-Nitro-o-toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
5-Nitro-o-toluidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
5-Nitro-o-toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
5-Nitro-o-toluidine	2015-06	ug/L											
5-Nitro-o-toluidine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
5-Nitro-o-toluidine	2015-10	ug/L				< 10.6							
5-Nitro-o-toluidine	2016-03	ug/L			< 10	< 10							
5-Nitro-o-toluidine	2016-06	ug/L											
5-Nitro-o-toluidine	2016-08	ug/L			< 11.1	< 11.5							
5-Nitro-o-toluidine	2018-11	ug/L											
5-Nitro-o-toluidine	2019-03	ug/L											
5-Nitro-o-toluidine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
7,12-Dimethylbenz(a)anthracene	2008-08	ug/L	< 10	< 10	< 10								
7,12-Dimethylbenz(a)anthracene	2009-03	ug/L	< 10	< 10	< 10								
7,12-Dimethylbenz(a)anthracene	2009-07	ug/L	< 10	< 10	< 10.0								
7,12-Dimethylbenz(a)anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
7,12-Dimethylbenz(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
7,12-Dimethylbenz(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
7,12-Dimethylbenz(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
7,12-Dimethylbenz(a)anthracene	2015-06	ug/L											
7,12-Dimethylbenz(a)anthracene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
7,12-Dimethylbenz(a)anthracene	2015-10	ug/L				< 10.6							
7,12-Dimethylbenz(a)anthracene	2016-03	ug/L			< 10	< 10							
7,12-Dimethylbenz(a)anthracene	2016-06	ug/L											
7,12-Dimethylbenz(a)anthracene	2016-08	ug/L			< 11.1	< 11.5							
7,12-Dimethylbenz(a)anthracene	2018-11	ug/L											
7,12-Dimethylbenz(a)anthracene	2019-03	ug/L											
7,12-Dimethylbenz(a)anthracene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Acenaphthene	2008-08	ug/L	< 10	< 10	< 10								
Acenaphthene	2009-03	ug/L	< 10	< 10	< 10								
Acenaphthene	2009-07	ug/L	< 10	< 10	< 10.0								
Acenaphthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthene	2015-06	ug/L											
Acenaphthene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Acenaphthene	2015-10	ug/L				< 10.6							
Acenaphthene	2016-03	ug/L			< 10	< 10							
Acenaphthene	2016-06	ug/L											
Acenaphthene	2016-08	ug/L			< 11.1	< 11.5							
Acenaphthene	2018-11	ug/L											
Acenaphthene	2019-03	ug/L											
Acenaphthene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Acenaphthylene	2008-08	ug/L	< 10	< 10	< 10								
Acenaphthylene	2009-03	ug/L	< 10	< 10	< 10								
Acenaphthylene	2009-07	ug/L	< 10	< 10	< 10.0								
Acenaphthylene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Acenaphthylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acenaphthylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acenaphthylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acenaphthylene	2015-06	ug/L						< 10.5	< 11.1					
Acenaphthylene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Acenaphthylene	2015-10	ug/L			< 10.3	< 10.5								
Acenaphthylene	2016-03	ug/L												
Acenaphthylene	2016-06	ug/L					< 11.4							
Acenaphthylene	2016-08	ug/L					< 11							
Acenaphthylene	2018-11	ug/L											< 11.6	
Acenaphthylene	2019-03	ug/L											< 12.2	
Acenaphthylene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Acetone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
Acetone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
Acetone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2013-03	ug/L	< 10.0	**2.21 J**	< 10	**3.07 J**	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
Acetone	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2013-11	ug/L												
Acetone	2014-03	ug/L	< 10.0 J	**37.1**	**3.23 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0 J	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2014-06	ug/L												
Acetone	2014-09	ug/L	< 10	< 10	< 10	< 10 J	< 10	< 10 J	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2015-03	ug/L	< 10.0	< 10 J	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0 J	< 10	< 10	< 10.0	< 10.0
Acetone	2015-06	ug/L						< 10	< 10					
Acetone	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
Acetone	2015-10	ug/L			< 10	**5.99 J**							< 10	< 10
Acetone	2016-03	ug/L	< 10	**4.76 J**	< 10 J	< 10	< 10	< 10 J	< 10	< 10 J	< 10	< 10	< 10	< 10
Acetone	2016-06	ug/L					< 10							
Acetone	2016-08	ug/L	< 10	< 10	< 10	**3.57 J**	< 10	< 10	< 10	**3.44 J**	< 10	< 10	< 10	< 10
Acetone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**4.29 J**	< 10	< 10	< 10	< 10
Acetone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2017-11	ug/L												
Acetone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2018-06	ug/L												
Acetone	2018-08	ug/L	< 10	**4.8 J**	< 10	**3.31 J**	< 10	< 10			< 10	< 10	< 10	< 10
Acetone	2018-09	ug/L							< 10	**3.41 J**				
Acetone	2018-11	ug/L											< 10	
Acetone	2019-03	ug/L	< 10	**3.31 J**	< 10	**5.17 J**	< 10	**4.91 J**	**5.09 J**	**9.99 J**	< 10	< 10	< 10	< 10
Acetone	2019-04	ug/L												
Acetone	2019-08	ug/L	< 10	**4.05 J**	< 10	< 10	< 10	< 10	< 10	**4 J**	< 10	< 10	< 10	< 10
Acetone	2020-03	ug/L		**4.76 J**		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	2020-04	ug/L	< 10		< 10									
Acetone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Acetone	2021-03	ug/L				< 10								
Acetone	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Acetone	2022-03	ug/L				< 10								
Acetone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Acetone	2023-03	ug/L				< 10								
Acetone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Acetonitrile	2008-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10	
Acetonitrile	2009-03	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetonitrile	2010-09	mg/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acetonitrile	2015-06	mg/L						< 10	< 10					
Acetonitrile	2015-09	mg/L	< 10	< 10				< 10	< 10	< 10	< 10			
Acetonitrile	2015-10	mg/L			< 10	< 10								
Acetonitrile	2016-03	mg/L												
Acetonitrile	2016-06	mg/L					< 10							
Acetonitrile	2016-08	mg/L					< 10							
Acetonitrile	2018-11	mg/L											< 10	
Acetonitrile	2019-03	mg/L											< 10	
Acetonitrile	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			
Acetophenone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetophenone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetophenone	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Acetophenone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Acetophenone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetophenone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acetophenone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acetophenone	2015-06	ug/L						< 10.5	< 11.1					
Acetophenone	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Acetophenone	2015-10	ug/L			< 10.3	< 10.5								
Acetophenone	2016-03	ug/L												
Acetophenone	2016-06	ug/L					< 11.4							
Acetophenone	2016-08	ug/L					< 11							
Acetophenone	2018-11	ug/L											< 11.6	
Acetophenone	2019-03	ug/L											< 12.2	
Acetophenone	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Acrolein	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrolein	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrolein	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
Acrolein	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
Acrolein	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Acenaphthylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Acenaphthylene	2015-06	ug/L											
Acenaphthylene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Acenaphthylene	2015-10	ug/L				< 10.6							
Acenaphthylene	2016-03	ug/L			< 10	< 10							
Acenaphthylene	2016-06	ug/L											
Acenaphthylene	2016-08	ug/L			< 11.1	< 11.5							
Acenaphthylene	2018-11	ug/L											
Acenaphthylene	2019-03	ug/L											
Acenaphthylene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Acetone	2008-08	ug/L	< 10	< 10	< 10								
Acetone	2009-03	ug/L	< 10	< 10	< 10								
Acetone	2009-07	ug/L	< 10	< 10									
Acetone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
Acetone	2013-03	ug/L	< 10	< 10	< 10.0								
Acetone	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2014-03	ug/L	< 10.0	**2.08 J**	< 10.0		< 10.0	< 10.0	< 10.0 J	< 10.0	< 10.0		
Acetone	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2014-09	ug/L	**2.08 J**	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
Acetone	2015-03	ug/L	< 10.0	< 10.0 J	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2015-06	ug/L											
Acetone	2015-09	ug/L	< 10	< 10	< 10								
Acetone	2015-10	ug/L				< 10	< 10	< 10		< 10	**3 J**		
Acetone	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Acetone	2016-06	ug/L											
Acetone	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		**3.35 J**	< 10		
Acetone	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Acetone	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Acetone	2017-11	ug/L										< 10	< 10
Acetone	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Acetone	2018-06	ug/L										< 10	< 10
Acetone	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
Acetone	2018-09	ug/L									< 10	< 10	< 10
Acetone	2018-11	ug/L										< 10	< 10
Acetone	2019-03	ug/L	**4.16 J**	**3.32 J**	< 10	< 10		< 10	< 10	< 10	**3.33 J**	< 10	
Acetone	2019-04	ug/L											< 10
Acetone	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Acetone	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Acetone	2020-04	ug/L											
Acetone	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Acetone	2021-03	ug/L	< 10		< 10	< 10							< 10
Acetone	2021-08	ug/L	**3.43 J**	**4.01 J**	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Acetone	2022-03	ug/L	< 10		< 10	< 10							< 10
Acetone	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Acetone	2023-03	ug/L	< 10		< 10	< 10							< 10
Acetone	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Acetonitrile	2008-08	mg/L	< 10	< 10									
Acetonitrile	2009-03	mg/L	< 10	< 10	< 10								
Acetonitrile	2010-09	mg/L	< 10.0	< 10.0	< 10.0								
Acetonitrile	2015-06	mg/L											
Acetonitrile	2015-09	mg/L	< 10	< 10	< 10								
Acetonitrile	2015-10	mg/L				< 10							
Acetonitrile	2016-03	mg/L			< 10	< 10							
Acetonitrile	2016-06	mg/L											
Acetonitrile	2016-08	mg/L			< 10	**3.64 J**							
Acetonitrile	2018-11	mg/L											
Acetonitrile	2019-03	mg/L											
Acetonitrile	2020-08	mg/L	< 10	< 10	< 10	< 10							
Acetophenone	2008-08	ug/L	< 10	< 10	< 10								
Acetophenone	2009-03	ug/L	< 10	< 10	< 10								
Acetophenone	2009-07	ug/L	< 10	< 10	< 10.0								
Acetophenone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Acetophenone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Acetophenone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Acetophenone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Acetophenone	2015-06	ug/L											
Acetophenone	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Acetophenone	2015-10	ug/L				< 10.6							
Acetophenone	2016-03	ug/L			< 10	< 10							
Acetophenone	2016-06	ug/L											
Acetophenone	2016-08	ug/L			< 11.1	< 11.5							
Acetophenone	2018-11	ug/L											
Acetophenone	2019-03	ug/L											
Acetophenone	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Acrolein	2008-08	ug/L	< 10	< 10	< 10								
Acrolein	2009-03	ug/L	< 10	< 10	< 10								
Acrolein	2009-07	ug/L	< 10	< 10									
Acrolein	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Acrolein	2010-03	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Acrolein	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acrolein	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Acrolein	2012-09	ug/L		< 10.0										
Acrolein	2015-06	ug/L						< 10	< 10					
Acrolein	2015-09	ug/L	< 10	< 10				< 10	< 10	< 10	< 10			
Acrolein	2015-10	ug/L			< 10	< 10								
Acrolein	2016-03	ug/L												
Acrolein	2016-06	ug/L					< 10							
Acrolein	2016-08	ug/L					< 10							
Acrolein	2018-11	ug/L											< 10	
Acrolein	2019-03	ug/L											< 10	
Acrolein	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			
Acrylonitrile	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
Acrylonitrile	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
Acrylonitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
Acrylonitrile	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2013-11	ug/L												
Acrylonitrile	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acrylonitrile	2014-06	ug/L												
Acrylonitrile	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
Acrylonitrile	2015-06	ug/L						< 10	< 10					
Acrylonitrile	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
Acrylonitrile	2015-10	ug/L			< 10	< 10							< 10	< 10
Acrylonitrile	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2016-06	ug/L					< 10							
Acrylonitrile	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	2017-03	ug/L	< 10	< 10	< 5	< 5	< 5	< 5	< 10	< 10	< 10	< 5	< 5	< 5
Acrylonitrile	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2017-11	ug/L												
Acrylonitrile	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2018-06	ug/L												
Acrylonitrile	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Acrylonitrile	2018-09	ug/L							< 5	< 5				
Acrylonitrile	2018-11	ug/L											< 5	
Acrylonitrile	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2019-04	ug/L												
Acrylonitrile	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Acrylonitrile	2020-04	ug/L	< 5		< 5									
Acrylonitrile	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Acrylonitrile	2021-03	ug/L				< 5								
Acrylonitrile	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Acrylonitrile	2022-03	ug/L				< 5								
Acrylonitrile	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Acrylonitrile	2023-03	ug/L				< 5								
Acrylonitrile	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Aldrin	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Aldrin	2008-09	ug/L										< 0.016		< 0.016
Aldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Aldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Aldrin	2015-06	ug/L						< 0.0348	< 0.032					
Aldrin	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Aldrin	2015-10	ug/L			< 0.0372	< 0.0364								
Aldrin	2016-03	ug/L												
Aldrin	2016-06	ug/L					< 0.0364							
Aldrin	2016-08	ug/L					< 0.0337							
Aldrin	2018-11	ug/L											< 0.036	
Aldrin	2019-03	ug/L											< 0.0372	
Aldrin	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Allyl Chloride	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Allyl Chloride	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Allyl Chloride	2009-07	ug/L	< 2	< 2	< 2	< 2		< 2	< 2.00	< 2.00	< 2			
Allyl Chloride	2009-09	ug/L	< 2.00	< 2	< 2.00	< 10.0		< 2	< 2	< 2	< 2			
Allyl Chloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Allyl Chloride	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00				< 2.00				
Allyl Chloride	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00				< 4.00				
Allyl Chloride	2012-09	ug/L		< 4.00										
Allyl Chloride	2015-06	ug/L						< 2	< 2					
Allyl Chloride	2015-09	ug/L	< 2	< 2				< 2	< 2	< 2	< 2			
Allyl Chloride	2015-10	ug/L			< 2	< 2								
Allyl Chloride	2016-03	ug/L												
Allyl Chloride	2016-06	ug/L					< 2							
Allyl Chloride	2016-08	ug/L					< 2							
Allyl Chloride	2018-11	ug/L											< 2	
Allyl Chloride	2019-03	ug/L											< 2	
Allyl Chloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			
alpha-BHC	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
alpha-BHC	2008-09	ug/L										< 0.016		< 0.016
alpha-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Acrolein	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Acrolein	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Acrolein	2012-09	ug/L											
Acrolein	2015-06	ug/L											
Acrolein	2015-09	ug/L	< 10	< 10	< 10								
Acrolein	2015-10	ug/L				< 10							
Acrolein	2016-03	ug/L			< 10	< 10							
Acrolein	2016-06	ug/L											
Acrolein	2016-08	ug/L			< 10	< 10							
Acrolein	2018-11	ug/L											
Acrolein	2019-03	ug/L											
Acrolein	2020-08	ug/L	< 10	< 10	< 10	< 10							
Acrylonitrile	2008-08	ug/L	< 10	< 10	< 10								
Acrylonitrile	2009-03	ug/L	< 10	< 10	< 10								
Acrylonitrile	2009-07	ug/L	< 10	< 10									
Acrylonitrile	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2013-03	ug/L	< 10	< 10	< 10.0								
Acrylonitrile	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
Acrylonitrile	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acrylonitrile	2015-06	ug/L											
Acrylonitrile	2015-09	ug/L	< 10	< 10	< 10								
Acrylonitrile	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
Acrylonitrile	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Acrylonitrile	2016-06	ug/L											
Acrylonitrile	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Acrylonitrile	2017-03	ug/L	< 10	< 10	< 10	< 5	< 5	< 5		< 10	< 5		
Acrylonitrile	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Acrylonitrile	2017-11	ug/L										< 5	< 5
Acrylonitrile	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Acrylonitrile	2018-06	ug/L										< 5	< 5
Acrylonitrile	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
Acrylonitrile	2018-09	ug/L									< 5	< 5	< 5
Acrylonitrile	2018-11	ug/L										< 5	< 5
Acrylonitrile	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
Acrylonitrile	2019-04	ug/L											< 5
Acrylonitrile	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Acrylonitrile	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Acrylonitrile	2020-04	ug/L											
Acrylonitrile	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Acrylonitrile	2021-03	ug/L	< 5		< 5	< 5							< 5
Acrylonitrile	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Acrylonitrile	2022-03	ug/L	< 5		< 5	< 5							< 5
Acrylonitrile	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Acrylonitrile	2023-03	ug/L	< 5		< 5	< 5							< 5
Acrylonitrile	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Aldrin	2008-08	ug/L	< 0.047	< 0.053									
Aldrin	2008-09	ug/L			< 0.016								
Aldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Aldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Aldrin	2015-06	ug/L											
Aldrin	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Aldrin	2015-10	ug/L				< 0.0364							
Aldrin	2016-03	ug/L			< 0.034	< 0.0356							
Aldrin	2016-06	ug/L											
Aldrin	2016-08	ug/L			< 0.0356	< 0.0327							
Aldrin	2018-11	ug/L											
Aldrin	2019-03	ug/L											
Aldrin	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Allyl Chloride	2008-08	ug/L	< 2	< 2	< 2								
Allyl Chloride	2009-03	ug/L	< 2	< 2	< 2								
Allyl Chloride	2009-07	ug/L	< 2	< 2									
Allyl Chloride	2009-09	ug/L	< 2.00	< 2.00	< 2.00								
Allyl Chloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Allyl Chloride	2010-09	ug/L	< 2.00	< 2.00	< 2.00								
Allyl Chloride	2011-03	ug/L	< 4.00	< 4.00	< 4.00								
Allyl Chloride	2012-09	ug/L											
Allyl Chloride	2015-06	ug/L											
Allyl Chloride	2015-09	ug/L	< 2	< 2	< 2								
Allyl Chloride	2015-10	ug/L				< 2							
Allyl Chloride	2016-03	ug/L			< 2	< 2							
Allyl Chloride	2016-06	ug/L											
Allyl Chloride	2016-08	ug/L			< 2	< 2							
Allyl Chloride	2018-11	ug/L											
Allyl Chloride	2019-03	ug/L											
Allyl Chloride	2020-08	ug/L	< 2	< 2	< 2	< 2							
alpha-BHC	2008-08	ug/L	< 0.047	< 0.053									
alpha-BHC	2008-09	ug/L			< 0.016								
alpha-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
alpha-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
alpha-BHC	2012-03	ug/L												
alpha-BHC	2013-03	ug/L												
alpha-BHC	2014-03	ug/L												
alpha-BHC	2014-09	ug/L												
alpha-BHC	2015-03	ug/L												
alpha-BHC	2015-06	ug/L						< 0.0348	< 0.032					
alpha-BHC	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
alpha-BHC	2015-10	ug/L			< 0.0372	**0.00307 J**								
alpha-BHC	2016-03	ug/L												
alpha-BHC	2016-06	ug/L					< 0.0364							
alpha-BHC	2016-08	ug/L					< 0.0337							
alpha-BHC	2017-03	ug/L												
alpha-BHC	2017-08	ug/L												
alpha-BHC	2018-11	ug/L											< 0.036	
alpha-BHC	2019-03	ug/L											< 0.0372	
alpha-BHC	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Anthracene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Anthracene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Anthracene	2015-06	ug/L						< 10.5	< 11.1					
Anthracene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Anthracene	2015-10	ug/L			< 10.3	< 10.5								
Anthracene	2016-03	ug/L												
Anthracene	2016-06	ug/L					< 11.4							
Anthracene	2016-08	ug/L					< 11							
Anthracene	2018-11	ug/L											< 11.6	
Anthracene	2019-03	ug/L											< 12.2	
Anthracene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Antimony	2008-08	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Antimony	2009-03	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Antimony	2010-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2010-09	mg/L	**0.00663**	**0.00757**	**0.00669**	**0.0115**	**0.00687**	**0.0153**	**0.0114**	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2011-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2011-09	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2012-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2012-09	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2013-03	mg/L	< 0.00600	< 0.00600	**0.00106 J**	< 0.006	< 0.006	< 0.006	< 0.006	**0.00675**	**0.00677**	< 0.006	< 0.006 J	**0.00381 J**
Antimony	2013-09	mg/L	**0.00695**	**0.00348 J**	**0.00478 J**	**0.0126**	**0.00744**	**0.0105**	**0.00867**	< 0.00600	< 0.00600	< 0.00600	< 0.00600	**0.00245 J**
Antimony	2013-11	mg/L												
Antimony	2014-03	mg/L	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600
Antimony	2014-06	mg/L												
Antimony	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2015-03	mg/L	< 0.00100	**0.000459 J**	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100	< 0.001	**0.000539 J**	< 0.00100	< 0.00100
Antimony	2015-06	mg/L						< 0.001	< 0.001					
Antimony	2015-09	mg/L	< 0.001	**0.000282 J**			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00103**		
Antimony	2015-10	mg/L			< 0.001	< 0.001							**0.000256 J**	**0.000259 J**
Antimony	2016-03	mg/L	< 0.001	**0.000467 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2016-06	mg/L					< 0.001							
Antimony	2016-08	mg/L	< 0.001	**0.000279 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000346 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2017-08	mg/L	< 0.001	**0.00023 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2017-11	mg/L												
Antimony	2018-03	mg/L	< 0.001	**0.000405 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000436 J**	< 0.001	< 0.001
Antimony	2018-06	mg/L												
Antimony	2018-08	mg/L	< 0.001	**0.00044 J**	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2018-09	mg/L							< 0.001	< 0.001				
Antimony	2018-11	mg/L											< 0.001	
Antimony	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2019-04	mg/L												
Antimony	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-03	mg/L		< 0.001		< 0.001	< 0.004	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-04	mg/L	< 0.001		< 0.001									
Antimony	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Antimony	2021-03	mg/L				< 0.002								
Antimony	2021-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002
Antimony	2022-03	mg/L				< 0.002								
Antimony	2022-08	mg/L	< 0.002	**0.00077 J**	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002
Antimony	2023-03	mg/L				< 0.002								
Antimony	2023-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002
Arsenic	2008-08	mg/L	< 0.001	**0.0369**	< 0.001	**0.0308**	< 0.001	< 0.001	**0.0196**	**0.0282**	**0.0026**	< 0.001	< 0.001	< 0.001
Arsenic	2009-03	mg/L	**0.0012**	**0.0239**	< 0.001	**0.0224**	< 0.001	**0.0011**	**0.0126**	**0.0258**	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic	2009-07	mg/L	**0.001**	**0.029**	< 0.001	**0.019**		**0.0023**	**0.0126**	**0.029**	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic	2009-09	mg/L	< 0.00100	**0.0392**		**0.0190**		**0.00155**	**0.0089**	**0.0334**	< 0.001	< 0.001		
Arsenic	2010-03	mg/L	< 0.00100	**0.0190**	< 0.00100	**0.0155**	**0.00795**	**0.0102**	**0.00856**	**0.0250**	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Arsenic	2010-09	mg/L	< 0.00200	**0.0428**	< 0.00300	**0.0216**	< 0.00100	< 0.00100	< 0.00200	**0.0442**	**0.0816**	< 0.00100	< 0.00100	< 0.00200
Arsenic	2011-03	mg/L	< 0.00800	**0.0466**	< 0.0100	**0.0237**	< 0.0000400	< 0.0000400	< 0.00200	**0.0433**	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Arsenic	2011-09	mg/L	< 0.00100	**0.0382**	< 0.00400	**0.0296**	< 0.00400	< 0.00400	< 0.00200	**0.0316**	< 0.00200	< 0.00100	< 0.00100	< 0.00200
Arsenic	2012-03	mg/L	**0.00156**	**0.0372**	< 0.00100	**0.0327**	**0.00180**	**0.00180**	**0.00344**	**0.0415**	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Arsenic	2012-09	mg/L	< 0.00100	**0.0326**	< 0.00100	**0.0201**	< 0.00100	< 0.00100	**0.00227**	**0.0339**	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Arsenic	2013-03	mg/L	< 0.00100	**0.0712**	< 0.001	**0.139**	< 0.001	< 0.001	**0.000957 J**	**0.141**	< 0.00100	< 0.001	< 0.001	< 0.001
Arsenic	2013-09	mg/L	< 0.00100	**0.0340**	< 0.00100	**0.0199**	**0.000650 J**	< 0.00200	< 0.00200	**0.0395**	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Arsenic	2013-11	mg/L												
Arsenic	2014-03	mg/L	< 0.00100	**0.0415**	< 0.00100	**0.0153**	< 0.00200	< 0.00100	< 0.00100	**0.0421**	< 0.00100	< 0.00100	< 0.00100	< 0.00100

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
alpha-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
alpha-BHC	2012-03	ug/L			< 0.0320								
alpha-BHC	2013-03	ug/L			< 0.0344								
alpha-BHC	2014-03	ug/L			< 0.0330								
alpha-BHC	2014-09	ug/L			< 0.032								
alpha-BHC	2015-03	ug/L			< 0.0337								
alpha-BHC	2015-06	ug/L											
alpha-BHC	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
alpha-BHC	2015-10	ug/L				< 0.0364							
alpha-BHC	2016-03	ug/L			< 0.034	< 0.0356							
alpha-BHC	2016-06	ug/L											
alpha-BHC	2016-08	ug/L			< 0.0356	< 0.0327							
alpha-BHC	2017-03	ug/L			< 0.0337	< 0.0356							
alpha-BHC	2017-08	ug/L			< 0.0337	< 0.0344							
alpha-BHC	2018-11	ug/L											
alpha-BHC	2019-03	ug/L											
alpha-BHC	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Anthracene	2008-08	ug/L	< 10	< 10	< 10								
Anthracene	2009-03	ug/L	< 10	< 10	< 10								
Anthracene	2009-07	ug/L	< 10	< 10	< 10.0								
Anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Anthracene	2015-06	ug/L											
Anthracene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Anthracene	2015-10	ug/L				< 10.6							
Anthracene	2016-03	ug/L			< 10	< 10							
Anthracene	2016-06	ug/L											
Anthracene	2016-08	ug/L			< 11.1	< 11.5							
Anthracene	2018-11	ug/L											
Anthracene	2019-03	ug/L											
Anthracene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Antimony	2008-08	mg/L	< 0.003	< 0.003	< 0.003								
Antimony	2009-03	mg/L	< 0.004	< 0.004	< 0.004								
Antimony	2010-03	mg/L	< 0.00600	< 0.00600	< 0.00600								
Antimony	2010-09	mg/L	< 0.00600	**0.00671**	**0.0101**								
Antimony	2011-03	mg/L	< 0.00600	< 0.00600	< 0.00600								
Antimony	2011-09	mg/L	< 0.00600	< 0.00600	< 0.00600								
Antimony	2012-03	mg/L	< 0.00600	< 0.00600	< 0.00600								
Antimony	2012-09	mg/L	< 0.00600	< 0.00600	< 0.00600								
Antimony	2013-03	mg/L	< 0.006	< 0.006	< 0.00600								
Antimony	2013-09	mg/L	**0.00128 J**	**0.00664**	< 0.00600	~~< 0.00600~~	< 0.00600	**0.00421 J**	< 0.00600	< 0.00600	**0.00462 J**		
Antimony	2013-11	mg/L				**~~0.00388 J~~**	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600		
Antimony	2014-03	mg/L	< 0.00600	< 0.00600	< 0.00600	~~< 0.00600~~	< 0.00600	< 0.00600	< 0.00600	< 0.00600	< 0.00600		
Antimony	2014-06	mg/L				~~< 0.00600~~	< 0.00600	< 0.00600	< 0.00600	**0.00350 J**	< 0.00600		
Antimony	2014-09	mg/L	< 0.001	< 0.001	< 0.001	~~< 0.001~~	**0.000769 J**	**0.000167 J**	< 0.001	< 0.001	< 0.001		
Antimony	2015-03	mg/L	**0.000241 J**	< 0.00100	< 0.001	~~< 0.00100~~	**0.000383 J**	< 0.00100	**0.000229 J**	< 0.00100	< 0.00100		
Antimony	2015-06	mg/L											
Antimony	2015-09	mg/L	< 0.001	< 0.001	< 0.001								
Antimony	2015-10	mg/L				< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Antimony	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000328 J**		< 0.001	< 0.001		
Antimony	2016-06	mg/L											
Antimony	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000239 J**		< 0.001	< 0.001		
Antimony	2017-03	mg/L	< 0.001	< 0.001	< 0.001	**0.000185 J**	**0.000243 J**	**0.000231 J**		< 0.001	**0.000307 J**		
Antimony	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000416 J**		< 0.001	< 0.001		
Antimony	2017-11	mg/L										< 0.001	< 0.001
Antimony	2018-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.000589 J**	**0.000373 J**		< 0.001	< 0.001	**0.00022 J**	**0.000205 J**
Antimony	2018-06	mg/L										< 0.001	< 0.001
Antimony	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001		< 0.001			
Antimony	2018-09	mg/L									< 0.001	< 0.001	< 0.001
Antimony	2018-11	mg/L										< 0.001	< 0.001
Antimony	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Antimony	2019-04	mg/L											< 0.001
Antimony	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2020-04	mg/L											
Antimony	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Antimony	2021-03	mg/L	< 0.002		< 0.002	< 0.002							< 0.002
Antimony	2021-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			**0.00314**	< 0.002	< 0.002	< 0.002
Antimony	2022-03	mg/L	< 0.002		< 0.002	< 0.002							< 0.002
Antimony	2022-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	< 0.002	< 0.002
Antimony	2023-03	mg/L	< 0.002		< 0.002	< 0.002							< 0.002
Antimony	2023-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002			< 0.002	< 0.002	< 0.002	< 0.002
Arsenic	2008-08	mg/L	**0.0249**	**0.0372**	**0.0016**								
Arsenic	2009-03	mg/L	**0.0233**	**0.0441**	**0.0016**								
Arsenic	2009-07	mg/L	**0.0248**	**0.0413**	**0.0017**								
Arsenic	2009-09	mg/L	**0.0230**	**0.0358**	**0.00225**								
Arsenic	2010-03	mg/L	**0.0262**	**0.0443**	**0.00132**								
Arsenic	2010-09	mg/L	**0.0272**	**0.0382**	< 0.00100								
Arsenic	2011-03	mg/L	**0.0341**	**0.0696**	< 0.00100								
Arsenic	2011-09	mg/L	**0.0283**	**0.0592**	< 0.00100								
Arsenic	2012-03	mg/L	**0.0292**	**0.0633**	**0.00130**								
Arsenic	2012-09	mg/L	**0.0261**	**0.0710**	< 0.00100								
Arsenic	2013-03	mg/L	**0.027**	**0.134**	**0.000786 J**								
Arsenic	2013-09	mg/L	**0.0324**	**0.0701**	**0.00106**	~~**0.00131**~~	**0.000733 J**	**0.00106**	**0.0162**	**0.000959 J**	< 0.00100		
Arsenic	2013-11	mg/L				~~< 0.00100~~	< 0.00100	**0.00110**	**0.00180**	< 0.00100	< 0.00100		
Arsenic	2014-03	mg/L	**0.0297**	**0.0750**	**0.000607 J**	~~**0.000322 J**~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Arsenic	2014-06	mg/L												
Arsenic	2014-09	mg/L	< 0.002	**0.0329**	< 0.002	**0.0234**	< 0.002	< 0.002	**0.00128 J**	**0.0401**	**0.00103 J**	< 0.002	< 0.002	< 0.002
Arsenic	2015-03	mg/L	< 0.00200	**0.0394**	< 0.00200	**0.0164**	< 0.002	< 0.002	**0.00237**	**0.0558**	**0.00279**	< 0.002	< 0.00200	< 0.00200
Arsenic	2015-06	mg/L						**0.00191 J**	**0.0019 J**					
Arsenic	2015-09	mg/L	< 0.002	**0.0417**			< 0.002	**0.00107 J**	**0.00159 J**	**0.0473**	**0.00136 J**	< 0.002		
Arsenic	2015-10	mg/L			< 0.002	**0.0286**							< 0.002	< 0.002
Arsenic	2016-03	mg/L	**0.000811 J**	**0.039**	< 0.002	**0.0248**	< 0.002	**0.0019 J**	**0.00168 J**	**0.0574**	**0.00273**	< 0.002	< 0.002	< 0.002
Arsenic	2016-06	mg/L					**0.000673 J**							
Arsenic	2016-08	mg/L	< 0.002	**0.04**	< 0.002	**0.0346**	< 0.002	< 0.002	**0.00152 J**	**0.0471**	**0.00139 J**	< 0.002	< 0.002	< 0.002
Arsenic	2017-03	mg/L	< 0.002	**0.0307**	< 0.002	**0.0244**	< 0.002	< 0.002	**0.00154 J**	**0.0501**	**0.00124 J**	< 0.002	< 0.002	**0.000582 J**
Arsenic	2017-08	mg/L	< 0.002	**0.0319**	< 0.002	**0.0264**	< 0.002	< 0.002	**0.000795 J**	**0.0414**	**0.00178 J**	< 0.002	< 0.002	< 0.002
Arsenic	2017-11	mg/L												
Arsenic	2018-03	mg/L	**0.000784 J**	**0.0412**	< 0.002	**0.0291**	**0.000598 J**	**0.000775 J**	**0.00157 J**	**0.0669**	**0.00117 J**	**0.000608 J**	< 0.002	**0.000636 J**
Arsenic	2018-06	mg/L												
Arsenic	2018-08	mg/L	< 0.002	**0.0397**	< 0.002	**0.0105**	**0.000649 J**	**0.000597 J**			**0.00186 J**	< 0.002	< 0.002	**0.000644 J**
Arsenic	2018-09	mg/L							**0.00155 J**	**0.0464**				
Arsenic	2018-11	mg/L											< 0.002	
Arsenic	2019-03	mg/L	< 0.002	**0.0543**	< 0.002	**0.115**	< 0.002	< 0.002	**0.00123 J**	**0.0655**	**0.00133 J**	< 0.002	< 0.002	< 0.002
Arsenic	2019-04	mg/L												
Arsenic	2019-08	mg/L	< 0.002	**0.0413**	< 0.002	**0.0633**	**0.000752 J**	< 0.002	< 0.002	**0.0436**	**0.00307**	< 0.002	< 0.002	< 0.002
Arsenic	2020-03	mg/L		**0.0367**		**0.0317**	< 0.008	**0.00178 J**	< 0.008	**0.0585**	**0.00198 J**	< 0.002	< 0.002	< 0.002
Arsenic	2020-04	mg/L	< 0.002		< 0.002									
Arsenic	2020-08	mg/L	< 0.002	**0.0332**	< 0.002	**0.0197**	< 0.002	**0.00108 J**	**0.00095 J**	**0.0525**	**0.00162 J**			< 0.002
Arsenic	2021-03	mg/L				**0.0281**								
Arsenic	2021-08	mg/L	< 0.002	**0.0413**	< 0.002	**0.0273**	< 0.002	< 0.002	< 0.002	**0.0517**	**0.00133 J**			< 0.002
Arsenic	2022-03	mg/L				**0.0129**								
Arsenic	2022-08	mg/L	< 0.002	**0.037**	< 0.002	**0.0108**	< 0.002	**0.000916 J**	< 0.002	**0.0523**	**0.00114 J**			< 0.002
Arsenic	2023-03	mg/L				**0.00844**								
Arsenic	2023-08	mg/L	**0.000696 J**	**0.0335**	**0.00071 J**	**0.0142**	**0.000546 J**	**0.00207**	**0.000621 J**	**0.0566**	**0.00141 J**			< 0.002
Barium	2008-08	mg/L	**0.13**	**0.47**	< 0.1	**0.11**	< 0.1	< 0.1	**0.16**	**0.62**	**0.22**	< 0.1	< 0.1	**0.11**
Barium	2009-03	mg/L	**0.14**	**0.41**	< 0.05	**0.10**	< 0.05	< 0.05	< 0.05	**0.64**	**0.17**	< 0.05	< 0.05	< 0.05
Barium	2009-07	mg/L	< 0.1	**0.42**	< 0.1	< 0.1		< 0.1	< 0.1	**0.66**	**0.19**	< 0.1	< 0.1	< 0.1
Barium	2009-09	mg/L	**0.0687**	**0.474**		**0.0880**		**0.0188**	**0.036**	**0.612**	**0.16**	**0.0412**		
Barium	2010-03	mg/L	**0.0670**	**0.464**	**0.0499**	**0.127**	**0.0268**	**0.0204**	**0.0368**	**0.522**	**0.185**	**0.0473**	**0.0438**	**0.0789**
Barium	2010-09	mg/L	**0.0625**	**0.390**	**0.0432**	**0.107**	**0.0257**	**0.0191**	**0.0330**	**0.649**	**0.192**	**0.0459**	**0.0429**	**0.0783**
Barium	2011-03	mg/L	**0.0719**	**0.496**	**0.0392**	**0.0934**	**0.0243**	**0.0199**	**0.0302**	**0.671**	**0.207**	**0.0484**	**0.0470**	**0.0754**
Barium	2011-09	mg/L	**0.0778**	**0.396**	**0.0430**	**0.121**	**0.0221**	**0.0180**	**0.0297**	**0.720**	**0.199**	**0.0478**	**0.0467**	**0.0784**
Barium	2012-03	mg/L	**0.102**	**0.436**	**0.0471**	**0.125**	**0.0287**	**0.0211**	**0.0355**	**0.648**	**0.164**	**0.0519**	**0.0466**	**0.0848**
Barium	2012-09	mg/L	**0.115**	**0.529**	**0.0523**	**0.140**	**0.0283**	**0.0219**	**0.0365**	**0.814**	**0.139**	**0.0539**	**0.0519**	**0.0905**
Barium	2013-03	mg/L	**0.100**	**0.756**	**0.0516**	**0.221**	**0.0241**	**0.0158**	**0.0331**	**0.602**	**0.0902**	**0.0493**	**0.052**	**0.101**
Barium	2013-09	mg/L	**0.105**	**0.390**	**0.0430**	**0.244**	**0.00851 J**	< 0.0100	**0.0161**	**0.668**	**0.164**	**0.0491**	**0.0471**	**0.0992**
Barium	2013-11	mg/L												
Barium	2014-03	mg/L	**0.102**	**0.587**	**0.0426**	**0.171**	**0.0210**	**0.0163**	**0.0296**	**0.700**	**0.129**	**0.0483**	**0.0463**	**0.0806**
Barium	2014-06	mg/L												
Barium	2014-09	mg/L	**0.0978**	**0.419**	**0.0502**	**0.475**	**0.0274**	**0.0223**	**0.0307**	**0.651**	**0.177**	**0.0491**	**0.0493**	**0.0957**
Barium	2015-03	mg/L	**0.11**	**0.761**	**0.0498**	**0.581**	**0.0357**	**0.0281**	**0.0324**	**0.635**	**0.299**	**0.061**	**0.0674**	**0.0857**
Barium	2015-06	mg/L						**0.0256**	**0.0345**					
Barium	2015-09	mg/L	**0.125**	**0.526**			**0.0353**	**0.023**	**0.0307**	**0.568**	**0.279**	**0.0579**		
Barium	2015-10	mg/L			**0.0732**	**0.624**							**0.0563**	**0.0989**
Barium	2016-03	mg/L	**0.126**	**0.713**	**0.064**	**0.715**	**0.0312**	**0.027**	**0.0293**	**0.58**	**0.215**	**0.0483**	**0.0722**	**0.0994**
Barium	2016-06	mg/L					**0.0353**							
Barium	2016-08	mg/L	**0.128**	**0.501**	**0.0613**	**0.791**	**0.0278**	**0.0204**	**0.0324**	**0.59**	**0.207**	**0.0523**	**0.0664**	**0.0873**
Barium	2017-03	mg/L	**0.114**	**0.59**	**0.0709**	**1.11**	**0.0297**	**0.0241**	**0.0295**	**0.565**	**0.248**	**0.0641**	**0.0767**	**0.0924**
Barium	2017-08	mg/L	**0.121**	**0.486**	**0.0543**	**1**	**0.0312**	**0.0228**	**0.0286**	**0.645**	**0.228**	**0.0519**	**0.0678**	**0.0735**
Barium	2017-11	mg/L												
Barium	2018-03	mg/L	**0.129**	**0.935**	**0.0513**	**0.751**	**0.0359**	**0.0262**	**0.0297**	**0.701**	**0.183**	**0.0567**	**0.0701**	**0.0776**
Barium	2018-06	mg/L												
Barium	2018-08	mg/L	**0.117**	**0.539**	**0.0664**	**0.666**	**0.0371**	**0.0247**			**0.236**	**0.0598**	**0.0821**	**0.0901**
Barium	2018-09	mg/L							**0.0378**	**0.636**				
Barium	2018-11	mg/L											**0.0619**	
Barium	2019-03	mg/L	**0.131**	**0.534**	**0.0568**	**1.08**	**0.0316**	**0.0236**	**0.0341**	**0.515**	**0.199**	**0.0584**	**0.0592**	**0.104**
Barium	2019-04	mg/L												
Barium	2019-08	mg/L	**0.134**	**0.449**	**0.0615**	**1.3**	**0.0345**	**0.0233**	**0.0271**	**0.718**	**0.213**	**0.054**	**0.0595**	**0.0755**
Barium	2020-03	mg/L		**0.707**		**1.13**	**0.0338**	**0.025**	**0.0315**	**0.655**	**0.236**	**0.0518**	**0.0594**	**0.0845**
Barium	2020-04	mg/L	**0.116**		**0.0551**									
Barium	2020-08	mg/L	**0.123**	**0.427**	**0.0544**	**1.05**	**0.036**	**0.0233**	**0.0294**	**0.735**	**0.245**			**0.0724**
Barium	2021-03	mg/L				**0.962**								
Barium	2021-08	mg/L	**0.145**	**0.7**	**0.0539**	**1.06**	**0.0388**	**0.0225**	**0.0338**	**0.778**	**0.221**			**0.0838**
Barium	2022-03	mg/L				**0.603**								
Barium	2022-08	mg/L	**0.175**	**0.414**	**0.0563**	**0.403**	**0.0467**	**0.0236**	**0.0348**	**0.647**	**0.25**			**0.105**
Barium	2023-03	mg/L				**0.283**								
Barium	2023-08	mg/L	**0.178**	**0.518**	**0.0445**	**0.373**	**0.04**	**0.0248**	**0.0351**	**0.653**	**0.221**			**0.0999**
Benzene	2008-08	ug/L	< 0.5	**0.88**	< 0.5	**3.39**	< 0.5	< 0.5	< 0.5	**1.1**	**0.57**	< 0.5	< 0.5	< 0.5
Benzene	2009-03	ug/L	< 0.5	**1.14**	< 0.5	**3.08**	< 0.5	< 0.5	< 0.5	**0.75**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2009-07	ug/L	< 0.5	**1.33**	< 0.5	**1.89**		< 0.5	< 0.500	**1.18**	< 0.5			
Benzene	2009-09	ug/L	< 0.500	**1.23**	< 0.500	**2.60**		< 0.5	< 0.5	**1.14**	< 0.5			
Benzene	2010-03	ug/L	< 0.500	**1.16**	< 0.500	**3.32**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2010-09	ug/L	< 0.500	**0.880**	< 0.500	**2.89**	< 0.500	< 0.500	< 0.500	**0.880**	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2011-03	ug/L	< 0.500	**1.41**	< 0.500	**2.66**	< 0.500	< 0.500	< 0.500	**0.990**	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2011-09	ug/L	< 0.500	**1.33**	< 0.500	**2.78**	< 0.500	< 0.500	< 0.500	**0.630**	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2012-03	ug/L	< 0.500	**1.91**	< 0.500	**2.20**	< 0.500	< 0.500	< 0.500	**0.550**	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2012-09	ug/L	< 0.500	**2.51**	< 0.500	**2.16**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2013-03	ug/L	< 0.500	**1.25**	< 0.5	**2.97**	< 0.5	< 0.5	< 0.5	**0.659**	< 0.500	< 0.5	< 0.5	< 0.5
Benzene	2013-09	ug/L	< 0.500	**1.32**	< 0.500	**2.83**	< 0.500	< 0.500	< 0.500	**0.584**	**0.223 J**	< 0.500	< 0.500	< 0.500
Benzene	2013-11	ug/L												
Benzene	2014-03	ug/L	< 0.500	**3.32**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.305 J**	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2014-06	ug/L												
Benzene	2014-09	ug/L	< 0.5	**1.28**	< 0.5	**3.6**	< 0.5	< 0.5	< 0.5	**0.417 J**	< 0.5	< 0.5	< 0.5	< 0.5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Arsenic	2014-06	mg/L				~~< 0.00100~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Arsenic	2014-09	mg/L	**0.0271**	**0.0585**	**0.00172 J**	**~~0.00113 J~~**	< 0.002	**0.00254**	< 0.002	< 0.002	< 0.002		
Arsenic	2015-03	mg/L	**0.0442**	**0.0683**	**0.00121 J**	~~< 0.00200~~	< 0.00200	**0.00268**	< 0.00200	< 0.00200	**0.000945 J**		
Arsenic	2015-06	mg/L											
Arsenic	2015-09	mg/L	**0.0422**	**0.0659**	< 0.002								
Arsenic	2015-10	mg/L				< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		
Arsenic	2016-03	mg/L	**0.0425**	**0.0586**	**0.00121 J**	< 0.002	< 0.002	**0.00114 J**	**0.000726 J**	**0.000796 J**	< 0.002		
Arsenic	2016-06	mg/L											
Arsenic	2016-08	mg/L	**0.0379**	**0.0531**	**0.000854 J**	< 0.002	< 0.002	**0.000935 J**	**0.00115 J**	< 0.002	< 0.002		
Arsenic	2017-03	mg/L	**0.038**	**0.0519**	**0.00112 J**	< 0.002	< 0.002	**0.000715 J**	**0.000733 J**	**0.000548 J**	< 0.002		
Arsenic	2017-08	mg/L	**0.0428**	**0.0656**	**0.000843 J**	< 0.002	< 0.002	**0.00115 J**	**0.000789 J**	< 0.002	< 0.002		
Arsenic	2017-11	mg/L										**0.00306**	**0.00987**
Arsenic	2018-03	mg/L	**0.0469**	**0.0694**	**0.00124 J**	**0.000546 J**	**0.00073 J**	**0.00123 J**	**0.00157 J**	**0.000654 J**	< 0.002	**0.0014 J**	**0.0138**
Arsenic	2018-06	mg/L										**0.00133 J**	**0.0152**
Arsenic	2018-08	mg/L	**0.0413**	**0.0703**	**0.00128 J**	< 0.002		**0.00121 J**	**0.000872 J**	< 0.002			
Arsenic	2018-09	mg/L									< 0.002	**0.00101 J**	**0.0166**
Arsenic	2018-11	mg/L										**0.000953 J**	**0.0201**
Arsenic	2019-03	mg/L	**0.0461**	**0.0534**	**0.0012 J**	< 0.002		**0.0011 J**	< 0.002	**0.000833 J**	< 0.002	**0.000852 J**	
Arsenic	2019-04	mg/L											**0.0253**
Arsenic	2019-08	mg/L	**0.0454**	**0.0619**	**0.00133 J**	**0.000789 J**	< 0.002	**0.000816 J**	**0.00212**	**0.00621**	< 0.002	< 0.002	**0.0197**
Arsenic	2020-03	mg/L	**0.0474**	**0.0714**	**0.00101 J**	< 0.002	< 0.002	< 0.002	< 0.002	**0.00111 J**	< 0.002	< 0.002	**0.0276**
Arsenic	2020-04	mg/L											
Arsenic	2020-08	mg/L	**0.0477**	**0.0719**	**0.00102 J**	< 0.002	< 0.002		< 0.002	**0.00758**	< 0.002	< 0.002	**0.0243**
Arsenic	2021-03	mg/L	**0.0514**		**0.001 J**	< 0.002							**0.0224**
Arsenic	2021-08	mg/L	**0.0351**	**0.0663**	**0.00094 J**	< 0.002	< 0.002		< 0.002	**0.00322**	< 0.002	< 0.002	**0.0189**
Arsenic	2022-03	mg/L	**0.0326**		**0.000956 J**	< 0.002							**0.0168**
Arsenic	2022-08	mg/L	**0.037**	**0.0745**	**0.000912 J**	< 0.002	< 0.002		< 0.002	< 0.002	< 0.002	< 0.002	**0.0219 J+**
Arsenic	2023-03	mg/L	**0.0399**		**0.00122 J**	< 0.002							**0.0202**
Arsenic	2023-08	mg/L	**0.0496**	**0.072**	**0.00112 J**	**0.000547 J**	< 0.002		**0.00061 J**	**0.000868 J**	< 0.002	< 0.002	**0.0192**
Barium	2008-08	mg/L	**0.43**	**0.7**	~~< 0.1~~								
Barium	2009-03	mg/L	**0.35**	**0.64**	~~< 0.05~~								
Barium	2009-07	mg/L	**0.39**	**0.65**	~~< 0.1~~								
Barium	2009-09	mg/L	**0.307**	**0.572**	**0.0436**								
Barium	2010-03	mg/L	**0.354**	**0.649**	**0.0447**								
Barium	2010-09	mg/L	**0.344**	**0.601**	**0.0418**								
Barium	2011-03	mg/L	**0.399**	**0.488**	**0.0444**								
Barium	2011-09	mg/L	**0.417**	**0.625**	**0.0441**								
Barium	2012-03	mg/L	**0.422**	**0.644**	**0.0454**								
Barium	2012-09	mg/L	**0.442**	**0.676**	**0.0492**								
Barium	2013-03	mg/L	**0.387**	**0.599**	**0.0402**								
Barium	2013-09	mg/L	**0.406**	**0.559**	**0.0416**	~~**0.136**~~	**0.0982**	**0.146**	**0.301**	**0.107**	**0.360**		
Barium	2013-11	mg/L				~~**0.165**~~	**0.0966**	**0.165**	**0.313**	**0.0943**	**0.327**		
Barium	2014-03	mg/L	**0.397**	**0.609**	**0.0405**	~~**0.113**~~	**0.105**	**0.159**	**0.311**	**0.0894**	**0.291**		
Barium	2014-06	mg/L				~~**0.117**~~	**0.114**	**0.165**	**0.310**	**0.0936**	**0.299**		
Barium	2014-09	mg/L	**0.428**	**0.914**	**0.0451**	~~**0.117**~~	**0.117**	**0.167**	**0.293**	**0.102**	**0.318**		
Barium	2015-03	mg/L	**0.543**	**0.65**	**0.0487**	~~**0.0559**~~	**0.102**	**0.158**	**0.322**	**0.13**	**0.28**		
Barium	2015-06	mg/L											
Barium	2015-09	mg/L	**0.649**	**0.678**	**0.047**								
Barium	2015-10	mg/L				**0.105**	**0.0991**	**0.142**		**0.159**	**0.279**		
Barium	2016-03	mg/L	**0.556**	**0.614**	**0.0437**	**0.0682**	**0.0983**	**0.145**		**0.158**	**0.245**		
Barium	2016-06	mg/L											
Barium	2016-08	mg/L	**0.513**	**0.593**	**0.042**	**0.0955**	**0.092**	**0.15**		**0.148**	**0.256**		
Barium	2017-03	mg/L	**0.462**	**0.564**	**0.0505**	**0.107**	**0.127**	**0.194**		**0.161**	**0.307**		
Barium	2017-08	mg/L	**0.604**	**0.643**	**0.0415**	**0.0986**	**0.094**	**0.167**		**0.136**	**0.376**		
Barium	2017-11	mg/L										**0.13**	**0.623**
Barium	2018-03	mg/L	**0.569**	**0.672**	**0.047**	**0.113**	**0.104**	**0.169**		**0.139**	**0.312**	**0.17**	**0.623**
Barium	2018-06	mg/L										**0.218**	**0.759**
Barium	2018-08	mg/L	**0.558**	**0.651**	**0.0413**	**0.0938**		**0.193**		**0.127 J**			
Barium	2018-09	mg/L									**0.346**	**0.217**	**0.683**
Barium	2018-11	mg/L										**0.195**	**0.703**
Barium	2019-03	mg/L	**0.641**	**0.575**	~~**0.0515**~~	**0.115**		**0.157**	**0.288**	**0.14**	**0.281**	**0.212**	
Barium	2019-04	mg/L											**0.639**
Barium	2019-08	mg/L	**0.636**	**0.626**	**0.0438**	**0.104**	**0.098**	**0.179**		**0.0881**	**0.425**	**0.204**	**0.696**
Barium	2020-03	mg/L	**0.568**	**0.652**	**0.048**	**0.127**	**0.123**	**0.17**		**0.146**	**0.355**	**0.207**	**0.69**
Barium	2020-04	mg/L											
Barium	2020-08	mg/L	**0.618**	**0.633**	**0.0437**	**0.115**	**0.0959**			**0.0972**	**0.314**	**0.182**	**0.692**
Barium	2021-03	mg/L	**0.63**		**0.0461**	**0.138**							**0.705**
Barium	2021-08	mg/L	**0.479**	**0.661**	**0.0487**	**0.129**	**0.115**			**0.136**	**0.722**	**0.185**	**0.696**
Barium	2022-03	mg/L	**0.451**		**0.0473**	**0.125**							**0.705**
Barium	2022-08	mg/L	**0.529**	**0.623**	**0.0447**	**0.121**	**0.124**			**0.137**	**0.433**	**0.219**	**0.772**
Barium	2023-03	mg/L	**0.449**		**0.0415**	**0.114**							**0.633**
Barium	2023-08	mg/L	**0.819**	**0.735**	**0.0476**	**0.117**	**0.108**			**0.143**	**0.302**	**0.183**	**0.747**
Benzene	2008-08	ug/L	< 0.5	**3.26**	< 0.5								
Benzene	2009-03	ug/L	< 0.5	**2.5**	< 0.5								
Benzene	2009-07	ug/L	< 0.5	**0.98**									
Benzene	2009-09	ug/L	< 0.500	**2.70**	< 0.500								
Benzene	2010-03	ug/L	< 0.500	**1.57**	< 0.500								
Benzene	2010-09	ug/L	< 0.500	**2.45**	< 0.500								
Benzene	2011-03	ug/L	< 0.500	**1.32**	< 0.500								
Benzene	2011-09	ug/L	< 0.500	**1.31**	< 0.500								
Benzene	2012-03	ug/L	< 0.500	**0.650**	< 0.500								
Benzene	2012-09	ug/L	< 0.500	**0.630**	< 0.500								
Benzene	2013-03	ug/L	**0.161 J**	**0.412 J**	< 0.500								
Benzene	2013-09	ug/L	**0.360 J**	**0.744**	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2013-11	ug/L					< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2014-03	ug/L	< 0.500	**0.458 J**	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2014-06	ug/L					< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2014-09	ug/L	**0.292 J**	**0.607**	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Benzene	2015-03	ug/L	< 0.500	**3.51**	< 0.500	**2.24**	< 0.5	< 0.5	< 0.500	**0.312 J**	< 0.5	< 0.5	< 0.500	< 0.500
Benzene	2015-06	ug/L						< 0.5	< 0.5					
Benzene	2015-09	ug/L	< 0.5	**1.32**			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Benzene	2015-10	ug/L			< 0.5	**2.63**							< 0.5	< 0.5
Benzene	2016-03	ug/L	< 0.5	**2.86**	< 0.5	**5.06**	< 0.5	< 0.5	< 0.5	**0.764**	**0.127 J**	< 0.5	< 0.5	< 0.5
Benzene	2016-06	ug/L					< 0.5							
Benzene	2016-08	ug/L	< 0.5	**2.42**	< 0.5	**5.21**	< 0.5	< 0.5	< 0.5	**0.446 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2017-03	ug/L	< 0.5	**0.599**	< 0.5	**4.6**	**0.142 J**	< 0.5	< 0.5	**0.475 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2017-08	ug/L	< 0.5	**2.4**	< 0.5	**3.47**	< 0.5	< 0.5	< 0.5	**0.263 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2017-11	ug/L												
Benzene	2018-03	ug/L	< 0.5	**1.46**	< 0.5	**2.47**	< 0.5	< 0.5	< 0.5	**0.134 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2018-06	ug/L												
Benzene	2018-08	ug/L	< 0.5	**3**	< 0.5	**2.56**	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2018-09	ug/L							< 0.5	< 0.5				
Benzene	2018-11	ug/L											< 0.5	
Benzene	2019-03	ug/L	< 0.5	**0.458 J**	< 0.5	**3.63**	< 0.5	< 0.5	< 0.5	**0.228 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2019-04	ug/L												
Benzene	2019-08	ug/L	< 0.5	**2.47**	< 0.5	**4.06**	< 0.5	< 0.5	< 0.5	**0.483 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2020-03	ug/L		**2**		**3.55**	< 0.5	< 0.5	< 0.5	**0.268 J**	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2020-04	ug/L	< 0.5		< 0.5									
Benzene	2020-08	ug/L	< 0.5	**2.56**	< 0.5	**2.41**	< 0.5	< 0.5	< 0.5	**0.322 J**	< 0.5			< 0.5
Benzene	2021-03	ug/L				**4.41**								
Benzene	2021-08	ug/L	< 0.5	**4.94 J**	< 0.5	**2.58**	< 0.5	< 0.5	< 0.5	< 0.5	**0.258 J**			< 0.5
Benzene	2022-03	ug/L				**1.19**								
Benzene	2022-08	ug/L	< 0.5	**2.32**	< 0.5	**1.63**	< 0.5	< 0.5	**0.245 J**	< 0.5	< 0.5			< 0.5
Benzene	2023-03	ug/L				**0.665**								
Benzene	2023-08	ug/L	< 0.5	**3.05**	< 0.5	**0.943**	< 0.5	< 0.5	< 0.5	**0.267 J**	< 0.5			< 0.5
Benzo(a)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)anthracene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Benzo(a)anthracene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Benzo(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzo(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(a)anthracene	2015-06	ug/L						< 10.5	< 11.1					
Benzo(a)anthracene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Benzo(a)anthracene	2015-10	ug/L			< 10.3	< 10.5								
Benzo(a)anthracene	2016-03	ug/L												
Benzo(a)anthracene	2016-06	ug/L					< 11.4							
Benzo(a)anthracene	2016-08	ug/L					< 11							
Benzo(a)anthracene	2018-11	ug/L											< 11.6	
Benzo(a)anthracene	2019-03	ug/L											< 12.2	
Benzo(a)anthracene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Benzo(a)pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(a)pyrene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Benzo(a)pyrene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Benzo(a)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzo(a)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(a)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(a)pyrene	2015-06	ug/L						< 10.5	< 11.1					
Benzo(a)pyrene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Benzo(a)pyrene	2015-10	ug/L			< 10.3	< 10.5								
Benzo(a)pyrene	2016-03	ug/L												
Benzo(a)pyrene	2016-06	ug/L					< 11.4							
Benzo(a)pyrene	2016-08	ug/L					< 11							
Benzo(a)pyrene	2018-11	ug/L											< 11.6	
Benzo(a)pyrene	2019-03	ug/L											< 12.2	
Benzo(a)pyrene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Benzo(b)fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(b)fluoranthene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Benzo(b)fluoranthene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Benzo(b)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzo(b)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(b)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(b)fluoranthene	2015-06	ug/L						< 10.5	< 11.1					
Benzo(b)fluoranthene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Benzo(b)fluoranthene	2015-10	ug/L			< 10.3	< 10.5								
Benzo(b)fluoranthene	2016-03	ug/L												
Benzo(b)fluoranthene	2016-06	ug/L					< 11.4							
Benzo(b)fluoranthene	2016-08	ug/L					< 11							
Benzo(b)fluoranthene	2018-11	ug/L											< 11.6	
Benzo(b)fluoranthene	2019-03	ug/L											< 12.2	
Benzo(b)fluoranthene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Benzo(ghi)perylene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(ghi)perylene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(ghi)perylene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Benzo(ghi)perylene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Benzo(ghi)perylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzo(ghi)perylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(ghi)perylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(ghi)perylene	2012-03	ug/L												
Benzo(ghi)perylene	2012-09	ug/L												
Benzo(ghi)perylene	2013-03	ug/L												
Benzo(ghi)perylene	2015-06	ug/L						< 10.5	< 11.1					
Benzo(ghi)perylene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Benzo(ghi)perylene	2015-10	ug/L			< 10.3	< 10.5								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Benzene	2015-03	ug/L	**0.396 J**	**0.216 J**	< 0.5		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		
Benzene	2015-06	ug/L											
Benzene	2015-09	ug/L	**0.368 J**	**0.371 J**	< 0.5								
Benzene	2015-10	ug/L				< 0.5	< 0.5	< 0.5		< 0.5	< 0.5		
Benzene	2016-03	ug/L	**0.372 J**	**0.211 J**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5		
Benzene	2016-06	ug/L											
Benzene	2016-08	ug/L	**0.363 J**	**0.285 J**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5		
Benzene	2017-03	ug/L	**0.245 J**	**0.358 J**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5		
Benzene	2017-08	ug/L	**0.457 J**	**0.616**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5		
Benzene	2017-11	ug/L										< 0.5	**0.285 J**
Benzene	2018-03	ug/L	**0.387 J**	**0.36 J**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	**0.257 J**
Benzene	2018-06	ug/L										< 0.5	< 0.5
Benzene	2018-08	ug/L	**0.286 J**	**0.494 J**	< 0.5	< 0.5		< 0.5		< 0.5			
Benzene	2018-09	ug/L									< 0.5	< 0.5	< 0.5
Benzene	2018-11	ug/L										< 0.5	< 0.5
Benzene	2019-03	ug/L	**0.422 J**	**0.264 J**	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Benzene	2019-04	ug/L											< 0.5
Benzene	2019-08	ug/L	**0.631**	**1.33**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2020-03	ug/L	**0.316 J**	**0.569**	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2020-04	ug/L											
Benzene	2020-08	ug/L	**0.356 J**	**0.879**	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2021-03	ug/L	**0.324 J**		< 0.5	< 0.5							< 0.5
Benzene	2021-08	ug/L	< 0.5	**0.326 J**	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2022-03	ug/L	< 0.5		< 0.5	< 0.5							< 0.5
Benzene	2022-08	ug/L	**0.225 J**	**0.506**	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Benzene	2023-03	ug/L	< 0.5		< 0.5	< 0.5							< 0.5
Benzene	2023-08	ug/L	**0.56**	< 0.5	< 0.5	< 0.5	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)anthracene	2008-08	ug/L	< 10	< 10	< 10								
Benzo(a)anthracene	2009-03	ug/L	< 10	< 10	< 10								
Benzo(a)anthracene	2009-07	ug/L	< 10	< 10	< 10.0								
Benzo(a)anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)anthracene	2015-06	ug/L											
Benzo(a)anthracene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Benzo(a)anthracene	2015-10	ug/L				< 10.6							
Benzo(a)anthracene	2016-03	ug/L			< 10	< 10							
Benzo(a)anthracene	2016-06	ug/L											
Benzo(a)anthracene	2016-08	ug/L			< 11.1	< 11.5							
Benzo(a)anthracene	2018-11	ug/L											
Benzo(a)anthracene	2019-03	ug/L											
Benzo(a)anthracene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Benzo(a)pyrene	2008-08	ug/L	< 10	< 10	< 10								
Benzo(a)pyrene	2009-03	ug/L	< 10	< 10	< 10								
Benzo(a)pyrene	2009-07	ug/L	< 10	< 10	< 10.0								
Benzo(a)pyrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(a)pyrene	2015-06	ug/L											
Benzo(a)pyrene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Benzo(a)pyrene	2015-10	ug/L				< 10.6							
Benzo(a)pyrene	2016-03	ug/L			< 10	< 10							
Benzo(a)pyrene	2016-06	ug/L											
Benzo(a)pyrene	2016-08	ug/L			< 11.1	< 11.5							
Benzo(a)pyrene	2018-11	ug/L											
Benzo(a)pyrene	2019-03	ug/L											
Benzo(a)pyrene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Benzo(b)fluoranthene	2008-08	ug/L	< 10	< 10	< 10								
Benzo(b)fluoranthene	2009-03	ug/L	< 10	< 10	< 10								
Benzo(b)fluoranthene	2009-07	ug/L	< 10	< 10	< 10.0								
Benzo(b)fluoranthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(b)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(b)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(b)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(b)fluoranthene	2015-06	ug/L											
Benzo(b)fluoranthene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Benzo(b)fluoranthene	2015-10	ug/L				< 10.6							
Benzo(b)fluoranthene	2016-03	ug/L			< 10	< 10							
Benzo(b)fluoranthene	2016-06	ug/L											
Benzo(b)fluoranthene	2016-08	ug/L			< 11.1	< 11.5							
Benzo(b)fluoranthene	2018-11	ug/L											
Benzo(b)fluoranthene	2019-03	ug/L											
Benzo(b)fluoranthene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Benzo(ghi)perylene	2008-08	ug/L	< 10	< 10	< 10								
Benzo(ghi)perylene	2009-03	ug/L	< 10	< 10	< 10								
Benzo(ghi)perylene	2009-07	ug/L	< 10	< 10	< 10.0								
Benzo(ghi)perylene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(ghi)perylene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(ghi)perylene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(ghi)perylene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(ghi)perylene	2012-03	ug/L			< 10.0								
Benzo(ghi)perylene	2012-09	ug/L			< 10.0								
Benzo(ghi)perylene	2013-03	ug/L			< 10.4								
Benzo(ghi)perylene	2015-06	ug/L											
Benzo(ghi)perylene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Benzo(ghi)perylene	2015-10	ug/L				< 10.6							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Benzo(ghi)perylene	2016-03	ug/L												
Benzo(ghi)perylene	2016-06	ug/L					< 11.4							
Benzo(ghi)perylene	2016-08	ug/L					< 11							
Benzo(ghi)perylene	2018-11	ug/L											< 11.6	
Benzo(ghi)perylene	2019-03	ug/L											< 12.2	
Benzo(ghi)perylene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Benzo(k)fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzo(k)fluoranthene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Benzo(k)fluoranthene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Benzo(k)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Benzo(k)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(k)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzo(k)fluoranthene	2015-06	ug/L						< 10.5	< 11.1					
Benzo(k)fluoranthene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Benzo(k)fluoranthene	2015-10	ug/L			< 10.3	< 10.5								
Benzo(k)fluoranthene	2016-03	ug/L												
Benzo(k)fluoranthene	2016-06	ug/L					< 11.4							
Benzo(k)fluoranthene	2016-08	ug/L					< 11							
Benzo(k)fluoranthene	2018-11	ug/L											< 11.6	
Benzo(k)fluoranthene	2019-03	ug/L											< 12.2	
Benzo(k)fluoranthene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Benzyl Alcohol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzyl Alcohol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**1.45 J**	< 10	< 10
Benzyl Alcohol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Benzyl Alcohol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Benzyl Alcohol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**0.184 J**	< 10.0	< 10.0
Benzyl Alcohol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzyl Alcohol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Benzyl Alcohol	2012-03	ug/L										< 10.0		
Benzyl Alcohol	2012-09	ug/L										< 10.0		
Benzyl Alcohol	2013-03	ug/L										< 10.5		
Benzyl Alcohol	2013-09	ug/L										< 11.1		
Benzyl Alcohol	2015-06	ug/L						< 10.5	< 11.1					
Benzyl Alcohol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Benzyl Alcohol	2015-10	ug/L			< 10.3	< 10.5								
Benzyl Alcohol	2016-03	ug/L												
Benzyl Alcohol	2016-06	ug/L					< 11.4							
Benzyl Alcohol	2016-08	ug/L					< 11							
Benzyl Alcohol	2018-11	ug/L											< 11.6	
Benzyl Alcohol	2019-03	ug/L											< 12.2	
Benzyl Alcohol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Beryllium	2008-08	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Beryllium	2009-03	mg/L	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Beryllium	2009-07	mg/L	< 0.004	< 0.004	< 0.004	< 0.004		< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Beryllium	2009-09	mg/L	< 0.00100	< 0.001		< 0.00100		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2010-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2010-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2011-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2011-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2012-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2012-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2013-03	mg/L	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00100	< 0.001	< 0.001	< 0.001
Beryllium	2013-09	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2013-11	mg/L												
Beryllium	2014-03	mg/L	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Beryllium	2014-06	mg/L												
Beryllium	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2015-03	mg/L	< 0.00100	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100
Beryllium	2015-06	mg/L						< 0.001	< 0.001					
Beryllium	2015-09	mg/L	< 0.001	< 0.001			< 0.001	**0.000044 J**	< 0.001	**0.000052 J**	< 0.001	< 0.001		
Beryllium	2015-10	mg/L			< 0.001	**0.00005 J**							< 0.001	< 0.001
Beryllium	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2016-06	mg/L					< 0.001							
Beryllium	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2017-11	mg/L												
Beryllium	2018-03	mg/L	< 0.001	< 0.001	**0.000157 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2018-06	mg/L												
Beryllium	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2018-09	mg/L							< 0.001	< 0.001				
Beryllium	2018-11	mg/L											< 0.001	
Beryllium	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2019-04	mg/L												
Beryllium	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-03	mg/L		< 0.001		< 0.001	< 0.004	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-04	mg/L	< 0.001		< 0.001									
Beryllium	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Beryllium	2021-03	mg/L				< 0.001								
Beryllium	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Beryllium	2022-03	mg/L				< 0.001								
Beryllium	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Beryllium	2023-03	mg/L				< 0.001								
Beryllium	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
beta-BHC	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
beta-BHC	2008-09	ug/L										< 0.016		< 0.016
beta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Benzo(ghi)perylene	2016-03	ug/L			< 10	< 10							
Benzo(ghi)perylene	2016-06	ug/L											
Benzo(ghi)perylene	2016-08	ug/L			< 11.1	< 11.5							
Benzo(ghi)perylene	2018-11	ug/L											
Benzo(ghi)perylene	2019-03	ug/L											
Benzo(ghi)perylene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Benzo(k)fluoranthene	2008-08	ug/L	< 10	< 10	< 10								
Benzo(k)fluoranthene	2009-03	ug/L	< 10	< 10	< 10								
Benzo(k)fluoranthene	2009-07	ug/L	< 10	< 10	< 10.0								
Benzo(k)fluoranthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(k)fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(k)fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(k)fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzo(k)fluoranthene	2015-06	ug/L											
Benzo(k)fluoranthene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Benzo(k)fluoranthene	2015-10	ug/L				< 10.6							
Benzo(k)fluoranthene	2016-03	ug/L			< 10	< 10							
Benzo(k)fluoranthene	2016-06	ug/L											
Benzo(k)fluoranthene	2016-08	ug/L			< 11.1	< 11.5							
Benzo(k)fluoranthene	2018-11	ug/L											
Benzo(k)fluoranthene	2019-03	ug/L											
Benzo(k)fluoranthene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Benzyl Alcohol	2008-08	ug/L	< 10	< 10	< 10								
Benzyl Alcohol	2009-03	ug/L	< 10	< 10	< 10								
Benzyl Alcohol	2009-07	ug/L	< 10	< 10	< 10.0								
Benzyl Alcohol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Benzyl Alcohol	2012-03	ug/L			< 10.0								
Benzyl Alcohol	2012-09	ug/L			< 10.0								
Benzyl Alcohol	2013-03	ug/L			< 10.4								
Benzyl Alcohol	2013-09	ug/L											
Benzyl Alcohol	2015-06	ug/L											
Benzyl Alcohol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Benzyl Alcohol	2015-10	ug/L				< 10.6							
Benzyl Alcohol	2016-03	ug/L			< 10	< 10							
Benzyl Alcohol	2016-06	ug/L											
Benzyl Alcohol	2016-08	ug/L			< 11.1	< 11.5							
Benzyl Alcohol	2018-11	ug/L											
Benzyl Alcohol	2019-03	ug/L											
Benzyl Alcohol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Beryllium	2008-08	mg/L	< 0.004	< 0.004	~~< 0.004~~								
Beryllium	2009-03	mg/L	< 0.004	< 0.004	~~< 0.004~~								
Beryllium	2009-07	mg/L	< 0.004	< 0.004	~~< 0.004~~								
Beryllium	2009-09	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2010-03	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2010-09	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2011-03	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2011-09	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2012-03	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2012-09	mg/L	< 0.00100	< 0.00100	< 0.00100								
Beryllium	2013-03	mg/L	< 0.001	< 0.001	< 0.00100								
Beryllium	2013-09	mg/L	< 0.00100	< 0.00100	< 0.00100	~~**0.000364 J**~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2013-11	mg/L				~~**0.00141**~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2014-03	mg/L	< 0.00100	< 0.00100	< 0.00100	~~< 0.00100~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2014-06	mg/L				~~< 0.00100~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2014-09	mg/L	< 0.001	< 0.001	< 0.001	~~**0.000071 J**~~	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Beryllium	2015-03	mg/L	< 0.00100	< 0.00100	< 0.001	~~**0.0000470 J**~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100		
Beryllium	2015-06	mg/L											
Beryllium	2015-09	mg/L	< 0.001	< 0.001	< 0.001								
Beryllium	2015-10	mg/L				< 0.001	< 0.001	**0.000047 J**		< 0.001	< 0.001		
Beryllium	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Beryllium	2016-06	mg/L											
Beryllium	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Beryllium	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Beryllium	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Beryllium	2017-11	mg/L										< 0.001	< 0.001
Beryllium	2018-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2018-06	mg/L										< 0.001	< 0.001
Beryllium	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001		< 0.001			
Beryllium	2018-09	mg/L									< 0.001	< 0.001	< 0.001
Beryllium	2018-11	mg/L										< 0.001	< 0.001
Beryllium	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Beryllium	2019-04	mg/L											< 0.001
Beryllium	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2020-04	mg/L											
Beryllium	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2021-03	mg/L	< 0.001		< 0.001	< 0.001							< 0.001
Beryllium	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			**0.00112**	< 0.001	< 0.001	< 0.001
Beryllium	2022-03	mg/L	< 0.001		< 0.001	< 0.001							< 0.001
Beryllium	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	2023-03	mg/L	< 0.001		< 0.001	< 0.001							< 0.001
Beryllium	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
beta-BHC	2008-08	ug/L	< 0.047	< 0.053									
beta-BHC	2008-09	ug/L			< 0.016								
beta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
beta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
beta-BHC	2012-03	ug/L												
beta-BHC	2013-03	ug/L												
beta-BHC	2014-03	ug/L												
beta-BHC	2014-09	ug/L												
beta-BHC	2015-03	ug/L												
beta-BHC	2015-06	ug/L						< 0.0348	**0.00666 J**					
beta-BHC	2015-09	ug/L	< 0.0356	**0.0243 J**				< 0.036	< 0.0327	**0.0081 J**	< 0.0352			
beta-BHC	2015-10	ug/L			< 0.0372	< 0.0364								
beta-BHC	2016-03	ug/L												
beta-BHC	2016-06	ug/L					< 0.0364							
beta-BHC	2016-08	ug/L					< 0.0337							
beta-BHC	2017-03	ug/L												
beta-BHC	2017-08	ug/L												
beta-BHC	2018-11	ug/L											< 0.036	
beta-BHC	2019-03	ug/L											< 0.0372	
beta-BHC	2020-08	ug/L	**0.00588 J**	**0.00825 J**	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	**0.0166 J**	< 0.039			
bis(2-Chloroethoxy)methane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
bis(2-Chloroethoxy)methane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
bis(2-Chloroethoxy)methane	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
bis(2-Chloroethoxy)methane	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
bis(2-Chloroethoxy)methane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
bis(2-Chloroethoxy)methane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Chloroethoxy)methane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Chloroethoxy)methane	2015-06	ug/L						< 10.5	< 11.1					
bis(2-Chloroethoxy)methane	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
bis(2-Chloroethoxy)methane	2015-10	ug/L			< 10.3	< 10.5								
bis(2-Chloroethoxy)methane	2016-03	ug/L												
bis(2-Chloroethoxy)methane	2016-06	ug/L					< 11.4							
bis(2-Chloroethoxy)methane	2016-08	ug/L					< 11							
bis(2-Chloroethoxy)methane	2018-11	ug/L											< 11.6	
bis(2-Chloroethoxy)methane	2019-03	ug/L											< 12.2	
bis(2-Chloroethoxy)methane	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
bis(2-Chloroethyl)ether	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
bis(2-Chloroethyl)ether	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
bis(2-Chloroethyl)ether	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
bis(2-Chloroethyl)ether	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
bis(2-Chloroethyl)ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
bis(2-Chloroethyl)ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Chloroethyl)ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Chloroethyl)ether	2012-03	ug/L												
bis(2-Chloroethyl)ether	2012-09	ug/L												
bis(2-Chloroethyl)ether	2013-03	ug/L												
bis(2-Chloroethyl)ether	2015-06	ug/L						< 10.5	< 11.1					
bis(2-Chloroethyl)ether	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
bis(2-Chloroethyl)ether	2015-10	ug/L			< 10.3	< 10.5								
bis(2-Chloroethyl)ether	2016-03	ug/L												
bis(2-Chloroethyl)ether	2016-06	ug/L					< 11.4							
bis(2-Chloroethyl)ether	2016-08	ug/L					< 11							
bis(2-Chloroethyl)ether	2018-11	ug/L											< 11.6	
bis(2-Chloroethyl)ether	2019-03	ug/L											< 12.2	
bis(2-Chloroethyl)ether	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
bis(2-Ethylhexyl)phthalate	2008-08	ug/L	**4.49 J**	**1.93 J**	**3.03 J**	< 10	**5.72 J**	**3.97 J**	**7.35 J**	< 10	**5.26 J**	**11.2**	**13**	**4.25 J**
bis(2-Ethylhexyl)phthalate	2009-03	ug/L	**7.6 J**	**23.5**	**9.91 J**	**4.45 J**	**7.17 J**	**23.6**	**10**	**3.93 J**	**9.43 J**	**15.1**	**10.7**	**15**
bis(2-Ethylhexyl)phthalate	2009-07	ug/L	**5.87 J**	**4.17 J**	**6.13 J**	< 10	**11.1**	**5.5 J**	**7.34 J**	**5.56 J**	**7.63 J**	**9.64 J**	< 10	**3.07 J**
bis(2-Ethylhexyl)phthalate	2009-09	ug/L	**10.9**	**4.03 J**	**12.4**	**0.449 J**	**19.7**	**8.99 J**	**23.6**	**33**	**25.8**	**1.12 J**	**15.9**	**10.6**
bis(2-Ethylhexyl)phthalate	2010-03	ug/L	**0.500 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
bis(2-Ethylhexyl)phthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Ethylhexyl)phthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Ethylhexyl)phthalate	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
bis(2-Ethylhexyl)phthalate	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
bis(2-Ethylhexyl)phthalate	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	**2.92 J**	< 10.0	< 10.0	**1.03 J**	**7.20 J**
bis(2-Ethylhexyl)phthalate	2013-03	ug/L	< 10.2 J	< 10.2 J	< 10.6 J	< 10.8 J			< 10.9 J	< 10.9 J	< 10.2 J	< 10.5 J	< 10.2 J	< 11.1 J
bis(2-Ethylhexyl)phthalate	2013-09	ug/L	**0.744 J**	**0.496 J**	< 10.8	< 10.9	< 10.2	< 10.2	< 10.2	< 10.3 J	< 10.9	< 11.1 J	< 10.4	< 10.6
bis(2-Ethylhexyl)phthalate	2014-03	ug/L	< 10.9	< 10.2	< 10.6		< 10.6	< 10.6	< 10.2	< 10.5	< 10.4		< 10.8	< 10.4
bis(2-Ethylhexyl)phthalate	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10.5	< 10	< 10	< 10		< 10	< 10.2
bis(2-Ethylhexyl)phthalate	2015-03	ug/L	**0.477 J**	< 10.9 J	< 10.4					< 10.8	< 10.1 J			
bis(2-Ethylhexyl)phthalate	2015-06	ug/L						< 10.5 J	< 11.1 J					
bis(2-Ethylhexyl)phthalate	2015-09	ug/L	< 11.1 J	< 11.2 J				< 11.1 J	< 10.2 J	< 11.2 J	< 11.1 J			
bis(2-Ethylhexyl)phthalate	2015-10	ug/L			< 10.3 J	< 10.5 J								
bis(2-Ethylhexyl)phthalate	2016-03	ug/L	< 11.1 J	< 11.2 J	< 11 J			< 10 J	< 10.6 J	< 11.1 J	< 10 J			
bis(2-Ethylhexyl)phthalate	2016-06	ug/L					< 11.4							
bis(2-Ethylhexyl)phthalate	2016-08	ug/L	< 11	< 11	< 11		< 11	< 10.8	< 10.9	< 11.2	< 11.5			
bis(2-Ethylhexyl)phthalate	2017-03	ug/L	< 10.4	< 10.5	< 10.9		< 10.8	< 11	< 10.4	< 10.4	< 10.5			
bis(2-Ethylhexyl)phthalate	2017-08	ug/L	< 11.1	< 11.1	< 10.8 J		< 10.9	< 10.9	< 11.1 J	< 10.5	< 11.1			
bis(2-Ethylhexyl)phthalate	2018-03	ug/L	< 10.4	< 11.9	< 10.9		< 10.9	< 11.1	< 11.1	< 11.6	< 11.1			
bis(2-Ethylhexyl)phthalate	2018-08	ug/L	< 11.1	< 10.9	< 11.4		< 11.4	< 11			< 11.1			
bis(2-Ethylhexyl)phthalate	2018-09	ug/L							< 10.9	< 11				
bis(2-Ethylhexyl)phthalate	2018-11	ug/L											< 11.6	
bis(2-Ethylhexyl)phthalate	2019-03	ug/L	< 11	< 11.5	< 11		< 11	< 11.1	< 11	< 11.5	< 11.5		< 12.2	
bis(2-Ethylhexyl)phthalate	2019-08	ug/L	< 10.9	< 10.6	< 10.6		< 10.8	< 10.8	< 10.7	< 50.8	**2.47 J**		< 10.5	
bis(2-Ethylhexyl)phthalate	2020-03	ug/L		< 11.2			< 11.1	< 10.8	< 10.9	< 10.9	< 10.8		< 11.2	
bis(2-Ethylhexyl)phthalate	2020-04	ug/L	< 10.6		< 10.5									
bis(2-Ethylhexyl)phthalate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
bis(2-Ethylhexyl)phthalate	2021-03	ug/L												
bis(2-Ethylhexyl)phthalate	2021-08	ug/L	< 11.5	< 11.1	< 11.6		< 11.1	< 11.6	< 11	< 11.6	< 11.2			
bis(2-Ethylhexyl)phthalate	2022-03	ug/L												
bis(2-Ethylhexyl)phthalate	2022-08	ug/L	< 10	< 10.4	< 10		< 10	< 10	< 10	< 10	< 10.4			

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
beta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
beta-BHC	2012-03	ug/L			< 0.0320								
beta-BHC	2013-03	ug/L			< 0.0344								
beta-BHC	2014-03	ug/L			< 0.0330								
beta-BHC	2014-09	ug/L			< 0.032								
beta-BHC	2015-03	ug/L			< 0.0337								
beta-BHC	2015-06	ug/L											
beta-BHC	2015-09	ug/L	**0.00867 J**	**0.0127 J**	< 0.0352								
beta-BHC	2015-10	ug/L				< 0.0364							
beta-BHC	2016-03	ug/L			< 0.034	< 0.0356							
beta-BHC	2016-06	ug/L											
beta-BHC	2016-08	ug/L			< 0.0356	< 0.0327							
beta-BHC	2017-03	ug/L			< 0.0337	< 0.0356							
beta-BHC	2017-08	ug/L			< 0.0337	< 0.0344							
beta-BHC	2018-11	ug/L											
beta-BHC	2019-03	ug/L											
beta-BHC	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
bis(2-Chloroethoxy)methane	2008-08	ug/L	< 10	< 10	< 10								
bis(2-Chloroethoxy)methane	2009-03	ug/L	< 10	< 10	< 10								
bis(2-Chloroethoxy)methane	2009-07	ug/L	< 10	< 10	< 10.0								
bis(2-Chloroethoxy)methane	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethoxy)methane	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethoxy)methane	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethoxy)methane	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethoxy)methane	2015-06	ug/L											
bis(2-Chloroethoxy)methane	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
bis(2-Chloroethoxy)methane	2015-10	ug/L				< 10.6							
bis(2-Chloroethoxy)methane	2016-03	ug/L			< 10	< 10							
bis(2-Chloroethoxy)methane	2016-06	ug/L											
bis(2-Chloroethoxy)methane	2016-08	ug/L			< 11.1	< 11.5							
bis(2-Chloroethoxy)methane	2018-11	ug/L											
bis(2-Chloroethoxy)methane	2019-03	ug/L											
bis(2-Chloroethoxy)methane	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
bis(2-Chloroethyl)ether	2008-08	ug/L	< 10	< 10	< 10								
bis(2-Chloroethyl)ether	2009-03	ug/L	< 10	< 10	< 10								
bis(2-Chloroethyl)ether	2009-07	ug/L	< 10	< 10	< 10.0								
bis(2-Chloroethyl)ether	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethyl)ether	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethyl)ether	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethyl)ether	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Chloroethyl)ether	2012-03	ug/L			< 10.0								
bis(2-Chloroethyl)ether	2012-09	ug/L			< 10.0								
bis(2-Chloroethyl)ether	2013-03	ug/L			< 10.4								
bis(2-Chloroethyl)ether	2015-06	ug/L											
bis(2-Chloroethyl)ether	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
bis(2-Chloroethyl)ether	2015-10	ug/L				< 10.6							
bis(2-Chloroethyl)ether	2016-03	ug/L			< 10	< 10							
bis(2-Chloroethyl)ether	2016-06	ug/L											
bis(2-Chloroethyl)ether	2016-08	ug/L			< 11.1	< 11.5							
bis(2-Chloroethyl)ether	2018-11	ug/L											
bis(2-Chloroethyl)ether	2019-03	ug/L											
bis(2-Chloroethyl)ether	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
bis(2-Ethylhexyl)phthalate	2008-08	ug/L	**4.44 J**	**3.61 J**	**25.4**								
bis(2-Ethylhexyl)phthalate	2009-03	ug/L	**2.78 J**	**38.5**	**9.28 J**								
bis(2-Ethylhexyl)phthalate	2009-07	ug/L	**8.31 J**	< 10	**0.423 J**								
bis(2-Ethylhexyl)phthalate	2009-09	ug/L	**11.4**	**14.0**	**13.5**								
bis(2-Ethylhexyl)phthalate	2010-03	ug/L	**0.390 J**	< 10.0	< 10.0								
bis(2-Ethylhexyl)phthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Ethylhexyl)phthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Ethylhexyl)phthalate	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Ethylhexyl)phthalate	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
bis(2-Ethylhexyl)phthalate	2012-09	ug/L	< 10.0	**0.761 J**	< 10.0								
bis(2-Ethylhexyl)phthalate	2013-03	ug/L	< 10.5 J	< 21.5	< 10.4 J								
bis(2-Ethylhexyl)phthalate	2013-09	ug/L	**0.457 J**	**0.470 J**	< 10.2								
bis(2-Ethylhexyl)phthalate	2014-03	ug/L	< 10.3	< 10.3	< 10.2								
bis(2-Ethylhexyl)phthalate	2014-09	ug/L	< 10.4	< 10	< 10								
bis(2-Ethylhexyl)phthalate	2015-03	ug/L	< 11.0	**0.681 J**	< 10.6 J								
bis(2-Ethylhexyl)phthalate	2015-06	ug/L											
bis(2-Ethylhexyl)phthalate	2015-09	ug/L	**12.1**	< 10.5 J	< 11.2 J								
bis(2-Ethylhexyl)phthalate	2015-10	ug/L				< 10.6 J							
bis(2-Ethylhexyl)phthalate	2016-03	ug/L	< 10 J	< 11 J	< 10 J	< 10 J							
bis(2-Ethylhexyl)phthalate	2016-06	ug/L											
bis(2-Ethylhexyl)phthalate	2016-08	ug/L	< 11.1	< 10.6	< 11.1	< 11.5							
bis(2-Ethylhexyl)phthalate	2017-03	ug/L	< 10.5	< 10.5	< 10.2	< 11.4							
bis(2-Ethylhexyl)phthalate	2017-08	ug/L	< 10.9 J	< 11.1	< 10.6	< 11.1							
bis(2-Ethylhexyl)phthalate	2018-03	ug/L	< 11.1	< 11	< 11.2	< 12							
bis(2-Ethylhexyl)phthalate	2018-08	ug/L	< 11.1	< 11.1	< 11	< 11.1							
bis(2-Ethylhexyl)phthalate	2018-09	ug/L											
bis(2-Ethylhexyl)phthalate	2018-11	ug/L											
bis(2-Ethylhexyl)phthalate	2019-03	ug/L	< 111	< 11.4	< 11.5	< 10.9							
bis(2-Ethylhexyl)phthalate	2019-08	ug/L	< 10.5	< 10.5	< 10.7	< 10.2							
bis(2-Ethylhexyl)phthalate	2020-03	ug/L	< 10.5	< 10.8	< 11.1	< 11.6							
bis(2-Ethylhexyl)phthalate	2020-04	ug/L											
bis(2-Ethylhexyl)phthalate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
bis(2-Ethylhexyl)phthalate	2021-03	ug/L	< 11.8		< 11.8	< 11.8							
bis(2-Ethylhexyl)phthalate	2021-08	ug/L	< 10.6	< 12.5	< 11.8	< 11							
bis(2-Ethylhexyl)phthalate	2022-03	ug/L	< 10		< 12.5	< 11.9							
bis(2-Ethylhexyl)phthalate	2022-08	ug/L	< 10.6	< 10.4	< 10.2	< 10.4							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
bis(2-Ethylhexyl)phthalate	2023-03	ug/L												
bis(2-Ethylhexyl)phthalate	2023-08	ug/L	< 10.9	< 10.9	< 9.43		< 11.4	< 11.1	< 10	< 11.1	< 11.6			
Bromochloromethane	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
Bromochloromethane	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
Bromochloromethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00				< 5.00				
Bromochloromethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2013-03	ug/L	< 5.00	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5	< 5	< 5
Bromochloromethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2013-11	ug/L												
Bromochloromethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2014-06	ug/L												
Bromochloromethane	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2015-03	ug/L	< 5.00	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00
Bromochloromethane	2015-06	ug/L						< 5	< 5					
Bromochloromethane	2015-09	ug/L	< 5	< 5			< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2015-10	ug/L			< 5	< 5							< 5	< 5
Bromochloromethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2016-06	ug/L					< 5							
Bromochloromethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2017-11	ug/L												
Bromochloromethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2018-06	ug/L												
Bromochloromethane	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromochloromethane	2018-09	ug/L							< 5	< 5				
Bromochloromethane	2018-11	ug/L											< 5	
Bromochloromethane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2019-04	ug/L												
Bromochloromethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	2020-04	ug/L	< 5		< 5									
Bromochloromethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromochloromethane	2021-03	ug/L				< 5								
Bromochloromethane	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromochloromethane	2022-03	ug/L				< 5								
Bromochloromethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromochloromethane	2023-03	ug/L				< 5								
Bromochloromethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromodichloromethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Bromodichloromethane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Bromodichloromethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Bromodichloromethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2013-11	ug/L												
Bromodichloromethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2014-06	ug/L												
Bromodichloromethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
Bromodichloromethane	2015-06	ug/L						< 1	< 1					
Bromodichloromethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2015-10	ug/L			< 1	< 1							< 1	< 1
Bromodichloromethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2016-06	ug/L					< 1							
Bromodichloromethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2017-11	ug/L												
Bromodichloromethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2018-06	ug/L												
Bromodichloromethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Bromodichloromethane	2018-09	ug/L							< 1	< 1				
Bromodichloromethane	2018-11	ug/L											< 1	
Bromodichloromethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2019-04	ug/L												
Bromodichloromethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	2020-04	ug/L	< 1		< 1									
Bromodichloromethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Bromodichloromethane	2021-03	ug/L				< 1								
Bromodichloromethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Bromodichloromethane	2022-03	ug/L				< 1								
Bromodichloromethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Bromodichloromethane	2023-03	ug/L				< 1								
Bromodichloromethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
bis(2-Ethylhexyl)phthalate	2023-03	ug/L	< 11.1		< 10.6	< 10.6							
bis(2-Ethylhexyl)phthalate	2023-08	ug/L	< 10.9	< 10	< 9.8	< 11.6							
Bromochloromethane	2008-08	ug/L	< 5	< 5	< 5								
Bromochloromethane	2009-03	ug/L	< 5	< 5	< 5								
Bromochloromethane	2009-07	ug/L	< 5	< 5									
Bromochloromethane	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2010-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2013-03	ug/L	< 5	< 5	< 5.00								
Bromochloromethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2013-11	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2014-06	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2014-09	ug/L	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	2015-03	ug/L	< 5.00	< 5.00	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2015-06	ug/L											
Bromochloromethane	2015-09	ug/L	< 5	< 5	< 5								
Bromochloromethane	2015-10	ug/L				< 5	< 5	< 5		< 5	< 5		
Bromochloromethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromochloromethane	2016-06	ug/L											
Bromochloromethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromochloromethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromochloromethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromochloromethane	2017-11	ug/L										< 5	< 5
Bromochloromethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Bromochloromethane	2018-06	ug/L										< 5	< 5
Bromochloromethane	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
Bromochloromethane	2018-09	ug/L									< 5	< 5	< 5
Bromochloromethane	2018-11	ug/L										< 5	< 5
Bromochloromethane	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
Bromochloromethane	2019-04	ug/L											< 5
Bromochloromethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Bromochloromethane	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Bromochloromethane	2020-04	ug/L											
Bromochloromethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromochloromethane	2021-03	ug/L	< 5		< 5	< 5							< 5
Bromochloromethane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromochloromethane	2022-03	ug/L	< 5		< 5	< 5							< 5
Bromochloromethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromochloromethane	2023-03	ug/L	< 5		< 5	< 5							< 5
Bromochloromethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromodichloromethane	2008-08	ug/L	< 1	< 1	< 1								
Bromodichloromethane	2009-03	ug/L	< 1	< 1	< 1								
Bromodichloromethane	2009-07	ug/L	< 1	< 1									
Bromodichloromethane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2013-03	ug/L	< 1	< 1	< 1.00								
Bromodichloromethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Bromodichloromethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2015-06	ug/L											
Bromodichloromethane	2015-09	ug/L	< 1	< 1	< 1								
Bromodichloromethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Bromodichloromethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Bromodichloromethane	2016-06	ug/L											
Bromodichloromethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Bromodichloromethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Bromodichloromethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Bromodichloromethane	2017-11	ug/L										< 1	< 1
Bromodichloromethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Bromodichloromethane	2018-06	ug/L										< 1	< 1
Bromodichloromethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Bromodichloromethane	2018-09	ug/L									< 1	< 1	< 1
Bromodichloromethane	2018-11	ug/L										< 1	< 1
Bromodichloromethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Bromodichloromethane	2019-04	ug/L											< 1
Bromodichloromethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Bromodichloromethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Bromodichloromethane	2020-04	ug/L											
Bromodichloromethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Bromodichloromethane	2021-03	ug/L	< 1		< 1	< 1							< 1
Bromodichloromethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Bromodichloromethane	2022-03	ug/L	< 1		< 1	< 1							< 1
Bromodichloromethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Bromodichloromethane	2023-03	ug/L	< 1		< 1	< 1							< 1
Bromodichloromethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Bromoform	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
Bromoform	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
Bromoform	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2013-03	ug/L	< 5.00	< 5.00	< 5	< 5	< 5	< 5	< 5 J	< 5	< 5.00	< 5	< 5	< 5
Bromoform	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2013-11	ug/L												
Bromoform	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2014-06	ug/L												
Bromoform	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2015-03	ug/L	< 5.00	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00
Bromoform	2015-06	ug/L						< 5	< 5					
Bromoform	2015-09	ug/L	< 5	< 5			< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	2015-10	ug/L			< 5	< 5							< 5	< 5
Bromoform	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2016-06	ug/L					< 5							
Bromoform	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2017-11	ug/L												
Bromoform	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2018-06	ug/L												
Bromoform	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromoform	2018-09	ug/L							< 5	< 5				
Bromoform	2018-11	ug/L											< 5	
Bromoform	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2019-04	ug/L												
Bromoform	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	2020-04	ug/L	< 5		< 5									
Bromoform	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromoform	2021-03	ug/L				< 5								
Bromoform	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromoform	2022-03	ug/L				< 5								
Bromoform	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromoform	2023-03	ug/L				< 5								
Bromoform	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Bromomethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2009-07	ug/L	< 4	< 4	< 4	< 4		< 4	< 4.00	< 4.00	< 4			
Bromomethane	2009-09	ug/L	< 4.00	< 4	< 4.00	< 20.0		< 4	< 4	< 4	< 4			
Bromomethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2011-09	ug/L	< 10.0	< 4.00	< 4.00	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 4.00	< 10.0	< 10.0	< 4.00
Bromomethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2013-03	ug/L	< 4.00	< 4.00	< 4	< 4	< 4	< 4	< 4	< 4	< 4.00	< 4	< 4	< 4
Bromomethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	**3.97 J**	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2013-11	ug/L												
Bromomethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2014-06	ug/L												
Bromomethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2015-03	ug/L	< 4.00	< 4	< 4.00	< 4.00	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4.00	< 4.00
Bromomethane	2015-06	ug/L						< 4	< 4					
Bromomethane	2015-09	ug/L	< 4	< 4			< 4	< 4	< 4	< 4	< 4	< 4		
Bromomethane	2015-10	ug/L			< 4	< 4							< 4	< 4
Bromomethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4 J	< 4	< 4	**0.253 J**	**0.301 J**
Bromomethane	2016-06	ug/L					< 4							
Bromomethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2017-11	ug/L												
Bromomethane	2018-03	ug/L	< 4	< 4	**0.248 J**	< 4	< 4	**0.249 J**	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2018-06	ug/L												
Bromomethane	2018-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Bromomethane	2018-09	ug/L							< 4	< 4				
Bromomethane	2018-11	ug/L											< 4	
Bromomethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	**2.04 J**	< 4	< 4	< 4	< 4	< 4
Bromomethane	2019-04	ug/L												
Bromomethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2020-03	ug/L		< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Bromomethane	2020-04	ug/L	< 4		< 4									
Bromomethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Bromomethane	2021-03	ug/L				< 4								
Bromomethane	2021-08	ug/L	< 4	< 40	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Bromomethane	2022-03	ug/L				< 4								
Bromomethane	2022-08	ug/L	< 4	< 4	< 4	**3.23 J**	< 4	< 4	< 4	< 4	< 4			< 4
Bromomethane	2023-03	ug/L				< 4								
Bromomethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Butylbenzylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Butylbenzylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Bromoform	2008-08	ug/L	< 5	< 5	< 5								
Bromoform	2009-03	ug/L	< 5	< 5	< 5								
Bromoform	2009-07	ug/L	< 5	< 5									
Bromoform	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2010-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2011-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2012-03	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2012-09	ug/L	< 5.00	< 5.00	< 5.00								
Bromoform	2013-03	ug/L	< 5	< 5	< 5.00								
Bromoform	2013-09	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2013-11	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2014-03	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2014-06	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2014-09	ug/L	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
Bromoform	2015-03	ug/L	< 5.00	< 5.00	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2015-06	ug/L											
Bromoform	2015-09	ug/L	< 5	< 5	< 5								
Bromoform	2015-10	ug/L				< 5	< 5	< 5		< 5	< 5		
Bromoform	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromoform	2016-06	ug/L											
Bromoform	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromoform	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromoform	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Bromoform	2017-11	ug/L										< 5	< 5
Bromoform	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Bromoform	2018-06	ug/L										< 5	< 5
Bromoform	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
Bromoform	2018-09	ug/L									< 5	< 5	< 5
Bromoform	2018-11	ug/L										< 5	< 5
Bromoform	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
Bromoform	2019-04	ug/L											< 5
Bromoform	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Bromoform	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Bromoform	2020-04	ug/L											
Bromoform	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromoform	2021-03	ug/L	< 5		< 5	< 5							< 5
Bromoform	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromoform	2022-03	ug/L	< 5		< 5	< 5							< 5
Bromoform	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromoform	2023-03	ug/L	< 5		< 5	< 5							< 5
Bromoform	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Bromomethane	2008-08	ug/L	< 4	< 4	< 4								
Bromomethane	2009-03	ug/L	< 4	< 4	< 4								
Bromomethane	2009-07	ug/L	< 4	< 4									
Bromomethane	2009-09	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00								
Bromomethane	2013-03	ug/L	< 4	< 4	< 4.00								
Bromomethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2013-11	ug/L					< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2014-06	ug/L					< 4.00 J	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2014-09	ug/L	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4		
Bromomethane	2015-03	ug/L	< 4.00	< 4.00	< 4		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2015-06	ug/L											
Bromomethane	2015-09	ug/L	< 4	< 4	< 4								
Bromomethane	2015-10	ug/L				< 4	< 4	< 4		< 4	< 4		
Bromomethane	2016-03	ug/L	**0.269 J**	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Bromomethane	2016-06	ug/L											
Bromomethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Bromomethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Bromomethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Bromomethane	2017-11	ug/L										**0.504 J**	**0.736 J**
Bromomethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Bromomethane	2018-06	ug/L										< 4	< 4
Bromomethane	2018-08	ug/L	< 4	< 4	< 4	< 4		< 4		< 4			
Bromomethane	2018-09	ug/L									< 4	< 4	< 4
Bromomethane	2018-11	ug/L										< 4	< 4
Bromomethane	2019-03	ug/L	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	
Bromomethane	2019-04	ug/L											< 4
Bromomethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Bromomethane	2020-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Bromomethane	2020-04	ug/L											
Bromomethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Bromomethane	2021-03	ug/L	< 4		< 4	< 4							< 4
Bromomethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Bromomethane	2022-03	ug/L	< 4		< 4	< 4							< 4
Bromomethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Bromomethane	2023-03	ug/L	< 4		< 4	< 4							< 4
Bromomethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Butylbenzylphthalate	2008-08	ug/L	< 10	< 10	< 10								
Butylbenzylphthalate	2009-03	ug/L	< 10	< 10	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Butylbenzylphthalate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Butylbenzylphthalate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Butylbenzylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Butylbenzylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				**0.514 J**				
Butylbenzylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Butylbenzylphthalate	2011-09	ug/L								< 10.0				
Butylbenzylphthalate	2012-03	ug/L								< 10.0				
Butylbenzylphthalate	2012-09	ug/L								< 10.0				
Butylbenzylphthalate	2013-03	ug/L								< 10.9				
Butylbenzylphthalate	2013-09	ug/L								< 10.3				
Butylbenzylphthalate	2015-06	ug/L						< 10.5	< 11.1					
Butylbenzylphthalate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Butylbenzylphthalate	2015-10	ug/L			< 10.3	< 10.5								
Butylbenzylphthalate	2016-03	ug/L												
Butylbenzylphthalate	2016-06	ug/L					< 11.4							
Butylbenzylphthalate	2016-08	ug/L					< 11							
Butylbenzylphthalate	2018-11	ug/L											< 11.6	
Butylbenzylphthalate	2019-03	ug/L											< 12.2	
Butylbenzylphthalate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Cadmium	2008-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	2009-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	2009-07	mg/L	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	2009-09	mg/L	< 0.000500	< 0.0005		< 0.000500		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		
Cadmium	2010-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2010-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2011-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2011-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2012-03	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2012-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2013-03	mg/L	< 0.000500	< 0.000500	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000500	< 0.0005	< 0.0005	< 0.0005
Cadmium	2013-09	mg/L	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2013-11	mg/L												
Cadmium	2014-03	mg/L	**0.0000816 J**	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Cadmium	2014-06	mg/L												
Cadmium	2014-09	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2015-03	mg/L	< 0.000500	**0.000215 J**	< 0.000500	< 0.000500	< 0.0005	< 0.0005	< 0.000500	< 0.000500	< 0.0005	< 0.0005	< 0.000500	< 0.000500
Cadmium	2015-06	mg/L						< 0.0005	< 0.0005					
Cadmium	2015-09	mg/L	< 0.0005	< 0.0005			**0.000311 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		
Cadmium	2015-10	mg/L			< 0.0005	< 0.0005							< 0.0005	< 0.0005
Cadmium	2016-03	mg/L	**0.000059 J**	**0.00005 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2016-06	mg/L					**0.000093 J**							
Cadmium	2016-08	mg/L	**0.000144 J**	**0.000234 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000048 J**	< 0.0005
Cadmium	2017-03	mg/L	**0.000103 J**	< 0.0005	**0.000051 J**	< 0.0005	**0.000065 J**	**0.000055 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000051 J**
Cadmium	2017-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000589**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2017-11	mg/L												
Cadmium	2018-03	mg/L	**0.000084 J**	< 0.0005	**0.000058 J**	< 0.0005	**0.000324 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000082 J**	< 0.0005
Cadmium	2018-06	mg/L												
Cadmium	2018-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2018-09	mg/L							< 0.0005	**0.000223 J**				
Cadmium	2018-11	mg/L											< 0.0005	
Cadmium	2019-03	mg/L	**0.000088 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000316 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cadmium	2019-04	mg/L												
Cadmium	2019-08	mg/L	**0.000074 J**	< 0.0001	< 0.0001	< 0.0001	**0.000189**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000043 J**	**0.000056 J**
Cadmium	2020-03	mg/L		**0.000064 J**		< 0.0001	< 0.0004	< 0.0001	< 0.0004	< 0.0001	< 0.0001	< 0.0001	**0.00004 J**	**0.000044 J**
Cadmium	2020-04	mg/L	**0.000074 J**		< 0.0001									
Cadmium	2020-08	mg/L	**0.000103**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001			< 0.0001
Cadmium	2021-03	mg/L				< 0.0001								
Cadmium	2021-08	mg/L	**0.000084 J**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001			< 0.0001
Cadmium	2022-03	mg/L				< 0.0001								
Cadmium	2022-08	mg/L	**0.000087 J**	**0.000214**	**0.000081 J**	< 0.0001	< 0.0001	< 0.0001	**0.000058 J**	< 0.0001	< 0.0001			< 0.0001
Cadmium	2023-03	mg/L				**0.000135**								
Cadmium	2023-08	mg/L	< 0.0002	**0.000107 J**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.000149 J**	**0.000162 J**			< 0.0002
Carbon Disulfide	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Carbon Disulfide	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Carbon Disulfide	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00
Carbon Disulfide	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00	< 1.00	< 1.00	< 4.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1 J	< 1.00	< 1	< 1	< 1 J
Carbon Disulfide	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2013-11	ug/L												
Carbon Disulfide	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2014-06	ug/L												
Carbon Disulfide	2014-09	ug/L	< 1	< 1	< 1	**0.253 J**	< 1	**0.152 J**	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
Carbon Disulfide	2015-06	ug/L						< 1	< 1					
Carbon Disulfide	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2015-10	ug/L			< 1	< 1							< 1	< 1
Carbon Disulfide	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2016-06	ug/L					< 1							
Carbon Disulfide	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2017-08	ug/L	< 1	< 1	< 1	**0.25 J**	< 1	**0.262 J**	**0.167 J**	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2017-11	ug/L												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
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Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Butylbenzylphthalate	2009-07	ug/L	< 10	< 10	< 10.0								
Butylbenzylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Butylbenzylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Butylbenzylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Butylbenzylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Butylbenzylphthalate	2011-09	ug/L			< 10.0								
Butylbenzylphthalate	2012-03	ug/L			< 10.0								
Butylbenzylphthalate	2012-09	ug/L			< 10.0								
Butylbenzylphthalate	2013-03	ug/L			< 10.4								
Butylbenzylphthalate	2013-09	ug/L											
Butylbenzylphthalate	2015-06	ug/L											
Butylbenzylphthalate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Butylbenzylphthalate	2015-10	ug/L				< 10.6							
Butylbenzylphthalate	2016-03	ug/L			< 10	< 10							
Butylbenzylphthalate	2016-06	ug/L											
Butylbenzylphthalate	2016-08	ug/L			< 11.1	< 11.5							
Butylbenzylphthalate	2018-11	ug/L											
Butylbenzylphthalate	2019-03	ug/L											
Butylbenzylphthalate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Cadmium	2008-08	mg/L	< 0.005	< 0.005	~~< 0.005~~								
Cadmium	2009-03	mg/L	< 0.005	< 0.005	~~< 0.005~~								
Cadmium	2009-07	mg/L	< 0.005	< 0.005	~~< 0.005~~								
Cadmium	2009-09	mg/L	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2010-03	mg/L	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2010-09	mg/L	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2011-03	mg/L	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2011-09	mg/L	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2012-03	mg/L	< 0.000500	< 0.000500	< 0.000500								
Cadmium	2012-09	mg/L	< 0.000500	< 0.000500	**0.000824**								
Cadmium	2013-03	mg/L	< 0.0005	< 0.0005	< 0.000500								
Cadmium	2013-09	mg/L	< 0.000500	< 0.000500	< 0.000500	~~< 0.000500~~	< 0.000500	< 0.000500	< 0.000500	**0.000227 J**	< 0.000500		
Cadmium	2013-11	mg/L				**~~0.000119 J~~**	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500		
Cadmium	2014-03	mg/L	< 0.000500	< 0.000500	< 0.000500	~~< 0.000500~~	**0.0000815 J**	< 0.000500	< 0.000500	< 0.000500	**0.000100 J**		
Cadmium	2014-06	mg/L				~~< 0.000500~~	< 0.000500	< 0.000500	< 0.000500	**0.0000957 J**	< 0.000500		
Cadmium	2014-09	mg/L	< 0.0005	< 0.0005	< 0.0005	~~< 0.0005~~	< 0.0005	< 0.0005	< 0.0005	**0.000114 J**	< 0.0005		
Cadmium	2015-03	mg/L	< 0.000500	< 0.000500	< 0.0005	~~< 0.000500~~	< 0.000500	< 0.000500	< 0.000500	**0.000137 J**	< 0.000500		
Cadmium	2015-06	mg/L											
Cadmium	2015-09	mg/L	< 0.0005	< 0.0005	< 0.0005								
Cadmium	2015-10	mg/L				< 0.0005	< 0.0005	< 0.0005		**0.000152 J**	< 0.0005		
Cadmium	2016-03	mg/L	**0.000059 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000044 J**		**0.000138 J**	< 0.0005		
Cadmium	2016-06	mg/L											
Cadmium	2016-08	mg/L	< 0.0005	**0.00006 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005		**0.000144 J**	< 0.0005		
Cadmium	2017-03	mg/L	**0.000128 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000054 J**		**0.000145 J**	**0.000054 J**		
Cadmium	2017-08	mg/L	**0.000116 J**	**0.000224 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005		**0.000076 J**	< 0.0005		
Cadmium	2017-11	mg/L										< 0.0005	< 0.0005
Cadmium	2018-03	mg/L	**0.000088 J**	**0.000374 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005		**0.000093 J**	**0.000112 J**	< 0.0005	< 0.0005
Cadmium	2018-06	mg/L										< 0.0005	< 0.0005
Cadmium	2018-08	mg/L	**0.000108 J**	**0.000355 J**	< 0.0005	< 0.0005		< 0.0005		**0.000075 J**			
Cadmium	2018-09	mg/L									< 0.0005	< 0.0005	< 0.0005
Cadmium	2018-11	mg/L										< 0.0005	< 0.0005
Cadmium	2019-03	mg/L	**0.00085**	**0.000085 J**	< 0.0005	< 0.0005		< 0.0005	**0.000094 J**	**0.0001 J**	< 0.0005	< 0.0005	
Cadmium	2019-04	mg/L											< 0.0005
Cadmium	2019-08	mg/L	**0.000145**	**0.000086 J**	< 0.0001	< 0.0001	**0.00005 J**	**0.000053 J**		< 0.0001	< 0.0001	< 0.0001	< 0.0001
Cadmium	2020-03	mg/L	**0.000244**	**0.000077 J**	< 0.0001	< 0.0001	**0.000054 J**	**0.000048 J**		**0.000099 J**	**0.000077 J**	< 0.0001	< 0.0001
Cadmium	2020-04	mg/L											
Cadmium	2020-08	mg/L	**0.000148**	< 0.0001	< 0.0001	< 0.0001	**0.000096 J**			< 0.0001	< 0.0001	< 0.0001	< 0.0001
Cadmium	2021-03	mg/L	**0.000324**		< 0.0001	< 0.0001							< 0.0001
Cadmium	2021-08	mg/L	< 0.0001	**0.000083 J**	< 0.0001	< 0.0001	< 0.0001			**0.000124**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2022-03	mg/L	**0.000111**		< 0.0001	< 0.0001							< 0.0001
Cadmium	2022-08	mg/L	< 0.0001	**0.000099 J**	< 0.0001	< 0.0001	< 0.0001			**0.000116**	< 0.0001	< 0.0001	< 0.0001
Cadmium	2023-03	mg/L	< 0.0001		< 0.0001	< 0.0001							< 0.0001
Cadmium	2023-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002			**0.0001 J**	< 0.0002	< 0.0002	< 0.0002
Carbon Disulfide	2008-08	ug/L	< 1	< 1	< 1								
Carbon Disulfide	2009-03	ug/L	< 1	< 1	< 1								
Carbon Disulfide	2009-07	ug/L	< 1	< 1									
Carbon Disulfide	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2010-09	ug/L	< 4.00	< 4.00	< 4.00								
Carbon Disulfide	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2013-03	ug/L	< 1	< 1	< 1.00								
Carbon Disulfide	2013-09	ug/L	< 1.00	< 1.00	< 1.00		**0.199 J**	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2014-03	ug/L	**0.226 J**	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Carbon Disulfide	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2015-06	ug/L											
Carbon Disulfide	2015-09	ug/L	< 1	< 1	< 1								
Carbon Disulfide	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Carbon Disulfide	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Carbon Disulfide	2016-06	ug/L											
Carbon Disulfide	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Carbon Disulfide	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Carbon Disulfide	2017-08	ug/L	< 1	**0.185 J**	< 1	< 1	< 1	< 1		< 1	< 1		
Carbon Disulfide	2017-11	ug/L										**0.172 J**	**0.161 J**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Carbon Disulfide	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**0.169 J**	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2018-06	ug/L												
Carbon Disulfide	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Carbon Disulfide	2018-09	ug/L							< 1	< 1				
Carbon Disulfide	2018-11	ug/L											< 1	
Carbon Disulfide	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2019-04	ug/L												
Carbon Disulfide	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2020-03	ug/L		< 1		**0.519 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon Disulfide	2020-04	ug/L	< 1		< 1									
Carbon Disulfide	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Carbon Disulfide	2021-03	ug/L				< 1								
Carbon Disulfide	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Carbon Disulfide	2022-03	ug/L				< 1								
Carbon Disulfide	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	**1.42**	< 1	< 1			< 1
Carbon Disulfide	2023-03	ug/L				< 1								
Carbon Disulfide	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Carbon Tetrachloride	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2009-07	ug/L	< 2	< 2	< 2	< 2		< 2	< 2.00	< 2.00	< 2			
Carbon Tetrachloride	2009-09	ug/L	< 2.00	< 2	< 2.00	< 10.0		< 2	< 2	< 2	< 2			
Carbon Tetrachloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 4.00	< 4.00	< 4.00	< 5.00	< 4.00	< 4.00	< 4.00	< 4.00
Carbon Tetrachloride	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2012-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2012-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2013-03	ug/L	< 2.00	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	< 2.00	< 2	< 2	< 2
Carbon Tetrachloride	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2013-11	ug/L												
Carbon Tetrachloride	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2014-06	ug/L												
Carbon Tetrachloride	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2015-03	ug/L	< 2.00	< 2	< 2.00	< 2.00	< 2	< 2	< 2.00	< 2.00	< 2	< 2	< 2.00	< 2.00
Carbon Tetrachloride	2015-06	ug/L						< 2	< 2					
Carbon Tetrachloride	2015-09	ug/L	< 2	< 2			< 2	< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2015-10	ug/L			< 2	< 2							< 2	< 2
Carbon Tetrachloride	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2016-06	ug/L					< 2							
Carbon Tetrachloride	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2017-11	ug/L												
Carbon Tetrachloride	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2018-06	ug/L												
Carbon Tetrachloride	2018-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
Carbon Tetrachloride	2018-09	ug/L							< 2	< 2				
Carbon Tetrachloride	2018-11	ug/L											< 2	
Carbon Tetrachloride	2019-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2019-04	ug/L												
Carbon Tetrachloride	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-03	ug/L		< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-04	ug/L	< 2		< 2									
Carbon Tetrachloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
Carbon Tetrachloride	2021-03	ug/L				< 2								
Carbon Tetrachloride	2021-08	ug/L	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
Carbon Tetrachloride	2022-03	ug/L				< 2								
Carbon Tetrachloride	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
Carbon Tetrachloride	2023-03	ug/L				< 2								
Carbon Tetrachloride	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			< 2
Chlorobenzene	2008-08	ug/L	< 1	**7.56**	< 1	**2.78**	< 1	< 1	< 1	**2.75**	**1.74**	< 1	< 1	< 1
Chlorobenzene	2009-03	ug/L	< 1	**4.56**	< 1	**3.92**	< 1	< 1	< 1	**2.68**	< 1	< 1	< 1	< 1
Chlorobenzene	2009-07	ug/L	< 1	**5.18**	< 1	**2.82**		< 1	< 1.00	**3.91**	< 1			
Chlorobenzene	2009-09	ug/L	< 1.00	**9.26**	< 1.00	< 5.00		< 1	< 1	**3.61**	< 1			
Chlorobenzene	2010-03	ug/L	< 1.00	**4.09**	< 1.00	**6.13**	< 1.00	< 1.00	< 1.00	**3.72**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2010-09	ug/L	< 1.00	**5.30**	< 1.00	**4.52**	< 1.00	< 1.00	< 1.00	**3.82**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2011-03	ug/L	< 1.00	**4.91**	< 1.00	**4.09**	< 1.00	< 1.00	< 1.00	**4.54**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2011-09	ug/L	< 1.00	**5.59**	< 1.00	**3.70**	< 1.00	< 1.00	< 1.00	**3.37**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2012-03	ug/L	< 1.00	**4.98**	< 1.00	**3.63**	< 1.00	< 1.00	< 1.00	**4.42**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2012-09	ug/L	< 1.00	**4.99**	< 1.00	**3.38**	< 1.00	< 1.00	< 1.00	**3.33**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2013-03	ug/L	< 1.00	**4.09**	< 1	**4.76**	< 1	< 1	< 1	**3.68**	< 1.00	< 1	< 1	< 1
Chlorobenzene	2013-09	ug/L	< 1.00	**6.08**	< 1.00	**3.93**	< 1.00	< 1.00	< 1.00	**3.82**	**0.829 J**	< 1.00	< 1.00	< 1.00
Chlorobenzene	2013-11	ug/L												
Chlorobenzene	2014-03	ug/L	< 1.00	**5.34**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**3.08**	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2014-06	ug/L												
Chlorobenzene	2014-09	ug/L	< 1	**6.61**	< 1	**3.91**	< 1	< 1	< 1	**4.08**	**0.633 J**	< 1	< 1	< 1
Chlorobenzene	2015-03	ug/L	< 1.00	< 1	< 1.00	**2.82**	< 1	< 1	< 1.00	**4.19**	**0.892 J**	< 1	< 1.00	< 1.00
Chlorobenzene	2015-06	ug/L						< 1	< 1					
Chlorobenzene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	**1.9**	< 1	< 1		
Chlorobenzene	2015-10	ug/L			< 1	< 1							< 1	< 1
Chlorobenzene	2016-03	ug/L	< 1	< 1	< 1	**4.23**	< 1	< 1	< 1	**4.24**	**0.688 J**	< 1	< 1	< 1
Chlorobenzene	2016-06	ug/L					< 1							
Chlorobenzene	2016-08	ug/L	< 1	< 1	< 1	**4.04**	< 1	< 1	< 1	**4.29**	**0.536 J**	< 1	< 1	< 1
Chlorobenzene	2017-03	ug/L	< 1	< 1	< 1	**4.12**	< 1	< 1	< 1	**3.24**	**0.426 J**	< 1	< 1	< 1
Chlorobenzene	2017-08	ug/L	< 1	< 1	< 1	**3.11**	< 1	< 1	< 1	**3.24**	**0.725 J**	< 1	< 1	< 1
Chlorobenzene	2017-11	ug/L												
Chlorobenzene	2018-03	ug/L	< 1	< 1	< 1	**3.05**	< 1	< 1	< 1	**4.33**	**0.67 J**	< 1	< 1	< 1
Chlorobenzene	2018-06	ug/L												

Table 14

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Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Carbon Disulfide	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	**0.422 J**	**0.171 J**
Carbon Disulfide	2018-06	ug/L										**0.517 J**	< 1
Carbon Disulfide	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Carbon Disulfide	2018-09	ug/L									< 1	< 1	< 1
Carbon Disulfide	2018-11	ug/L										< 1	< 1
Carbon Disulfide	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Carbon Disulfide	2019-04	ug/L											< 1
Carbon Disulfide	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Carbon Disulfide	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Carbon Disulfide	2020-04	ug/L											
Carbon Disulfide	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Carbon Disulfide	2021-03	ug/L	< 1		< 1	< 1							< 1
Carbon Disulfide	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Carbon Disulfide	2022-03	ug/L	< 1		< 1	< 1							< 1
Carbon Disulfide	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Carbon Disulfide	2023-03	ug/L	< 1		< 1	< 1							< 1
Carbon Disulfide	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Carbon Tetrachloride	2008-08	ug/L	< 2	< 2	< 2								
Carbon Tetrachloride	2009-03	ug/L	< 2	< 2	< 2								
Carbon Tetrachloride	2009-07	ug/L	< 2	< 2									
Carbon Tetrachloride	2009-09	ug/L	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00								
Carbon Tetrachloride	2011-03	ug/L	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2011-09	ug/L	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2012-03	ug/L	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2012-09	ug/L	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2013-03	ug/L	< 2	< 2	< 2.00								
Carbon Tetrachloride	2013-09	ug/L	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2013-11	ug/L					< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2014-03	ug/L	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2014-06	ug/L					< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2014-09	ug/L	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2		
Carbon Tetrachloride	2015-03	ug/L	< 2.00	< 2.00	< 2		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2015-06	ug/L											
Carbon Tetrachloride	2015-09	ug/L	< 2	< 2	< 2								
Carbon Tetrachloride	2015-10	ug/L				< 2	< 2	< 2		< 2	< 2		
Carbon Tetrachloride	2016-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
Carbon Tetrachloride	2016-06	ug/L											
Carbon Tetrachloride	2016-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
Carbon Tetrachloride	2017-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
Carbon Tetrachloride	2017-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		
Carbon Tetrachloride	2017-11	ug/L										< 2	< 2
Carbon Tetrachloride	2018-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2
Carbon Tetrachloride	2018-06	ug/L										< 2	< 2
Carbon Tetrachloride	2018-08	ug/L	< 2	< 2	< 2	< 2		< 2		< 2			
Carbon Tetrachloride	2018-09	ug/L									< 2	< 2	< 2
Carbon Tetrachloride	2018-11	ug/L										< 2	< 2
Carbon Tetrachloride	2019-03	ug/L	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	
Carbon Tetrachloride	2019-04	ug/L											< 2
Carbon Tetrachloride	2019-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2
Carbon Tetrachloride	2020-04	ug/L											
Carbon Tetrachloride	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
Carbon Tetrachloride	2021-03	ug/L	< 2		< 2	< 2							< 2
Carbon Tetrachloride	2021-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
Carbon Tetrachloride	2022-03	ug/L	< 2		< 2	< 2							< 2
Carbon Tetrachloride	2022-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
Carbon Tetrachloride	2023-03	ug/L	< 2		< 2	< 2							< 2
Carbon Tetrachloride	2023-08	ug/L	< 2	< 2	< 2	< 2	< 2			< 2	< 2	< 2	< 2
Chlorobenzene	2008-08	ug/L	**3.25**	**7.88**	< 1								
Chlorobenzene	2009-03	ug/L	**2.23**	**6.23**	< 1								
Chlorobenzene	2009-07	ug/L	**2.24**	< 1									
Chlorobenzene	2009-09	ug/L	**2.68**	**6.33**	< 1.00								
Chlorobenzene	2010-03	ug/L	**2.64**	**4.82**	< 1.00								
Chlorobenzene	2010-09	ug/L	**3.13**	**9.48**	< 1.00								
Chlorobenzene	2011-03	ug/L	**2.68**	**7.31**	< 1.00								
Chlorobenzene	2011-09	ug/L	**3.08**	**9.62**	< 1.00								
Chlorobenzene	2012-03	ug/L	**2.76**	**6.82**	< 1.00								
Chlorobenzene	2012-09	ug/L	**3.40**	**9.86**	< 1.00								
Chlorobenzene	2013-03	ug/L	**2.49**	**5.97**	< 1.00								
Chlorobenzene	2013-09	ug/L	**4.23**	**9.25**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2014-03	ug/L	< 1.00	**7.70**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2014-09	ug/L	**4.11**	**8.95**	< 1		< 1	< 1	< 1	< 1	< 1		
Chlorobenzene	2015-03	ug/L	**5.36**	**5.80**	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2015-06	ug/L											
Chlorobenzene	2015-09	ug/L	**4.92**	**6.06**	< 1								
Chlorobenzene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Chlorobenzene	2016-03	ug/L	**4.69**	**4.41**	< 1	< 1	< 1	< 1		< 1	< 1		
Chlorobenzene	2016-06	ug/L											
Chlorobenzene	2016-08	ug/L	**5**	**5.82**	< 1	< 1	< 1	< 1		< 1	< 1		
Chlorobenzene	2017-03	ug/L	**3.92**	**7.2**	< 1	< 1	< 1	< 1		< 1	< 1		
Chlorobenzene	2017-08	ug/L	**5.82**	**9.3**	< 1	< 1	< 1	< 1		< 1	< 1		
Chlorobenzene	2017-11	ug/L										< 1	**5.13**
Chlorobenzene	2018-03	ug/L	**5.65**	**7.83**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	**7.23**
Chlorobenzene	2018-06	ug/L										< 1	**5.87**

Table 14

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Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Chlorobenzene	2018-08	ug/L	< 1	< 1	< 1	**2.82**	< 1	< 1			**0.466 J**	< 1	< 1	< 1
Chlorobenzene	2018-09	ug/L							< 1	< 1				
Chlorobenzene	2018-11	ug/L											< 1	
Chlorobenzene	2019-03	ug/L	< 1	**3.4**	< 1	**3.43**	< 1	< 1	< 1	**2.91**	**0.534 J**	< 1	< 1	< 1
Chlorobenzene	2019-04	ug/L												
Chlorobenzene	2019-08	ug/L	< 1	< 1	< 1	**3.08**	< 1	< 1	< 1	**3.85**	< 1	< 1	< 1	< 1
Chlorobenzene	2020-03	ug/L		< 1		**3.7**	< 1	< 1	< 1	**4.14**	**0.557 J**	< 1	< 1	< 1
Chlorobenzene	2020-04	ug/L	< 1		< 1									
Chlorobenzene	2020-08	ug/L	< 1	< 1	< 1	**3.06**	< 1	< 1	< 1	**4.58**	**0.584 J**			< 1
Chlorobenzene	2021-03	ug/L				**4.14**								
Chlorobenzene	2021-08	ug/L	< 1	< 10	< 1	**2.93**	< 1	< 1	< 1	**3.86**	< 1			< 1
Chlorobenzene	2022-03	ug/L				**1.98**								
Chlorobenzene	2022-08	ug/L	< 1	< 1	< 1	**2.68**	< 1	< 1	< 1	**3.61**	**0.445 J**			< 1
Chlorobenzene	2023-03	ug/L				**1.72**								
Chlorobenzene	2023-08	ug/L	< 1	< 1	< 1	**2.06**	< 1	< 1	< 1	< 1	**0.727 J**			< 1
Chlorobenzilate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chlorobenzilate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chlorobenzilate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Chlorobenzilate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Chlorobenzilate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chlorobenzilate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Chlorobenzilate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Chlorobenzilate	2015-06	ug/L						< 10.5	< 11.1					
Chlorobenzilate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Chlorobenzilate	2015-10	ug/L			< 10.3	< 10.5								
Chlorobenzilate	2016-03	ug/L												
Chlorobenzilate	2016-06	ug/L					< 11.4							
Chlorobenzilate	2016-08	ug/L					< 11							
Chlorobenzilate	2018-11	ug/L											< 11.6	
Chlorobenzilate	2019-03	ug/L											< 12.2	
Chlorobenzilate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Chlorodibromomethane	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
Chlorodibromomethane	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
Chlorodibromomethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00	< 5.00	< 10.0	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2013-03	ug/L	< 5.00	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5	< 5	< 5
Chlorodibromomethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2013-11	ug/L												
Chlorodibromomethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2014-06	ug/L												
Chlorodibromomethane	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2015-03	ug/L	< 5.00	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00
Chlorodibromomethane	2015-06	ug/L						< 5	< 5					
Chlorodibromomethane	2015-09	ug/L	< 5	< 5			< 5	< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2015-10	ug/L			< 5	< 5							< 5	< 5
Chlorodibromomethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2016-06	ug/L					< 5							
Chlorodibromomethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2017-11	ug/L												
Chlorodibromomethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2018-06	ug/L												
Chlorodibromomethane	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Chlorodibromomethane	2018-09	ug/L							< 5	< 5				
Chlorodibromomethane	2018-11	ug/L											< 5	
Chlorodibromomethane	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2019-04	ug/L												
Chlorodibromomethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-04	ug/L	< 5		< 5									
Chlorodibromomethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Chlorodibromomethane	2021-03	ug/L				< 5								
Chlorodibromomethane	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Chlorodibromomethane	2022-03	ug/L				< 5								
Chlorodibromomethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Chlorodibromomethane	2023-03	ug/L				< 5								
Chlorodibromomethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Chloroethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2009-03	ug/L	< 4	< 4	< 4	**4.42**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2009-07	ug/L	< 4	< 4	< 4	< 4		< 4	< 4.00	< 4.00	< 4			
Chloroethane	2009-09	ug/L	< 4.00	< 4	< 4.00	< 20.0		< 4	< 4	< 4	< 4			
Chloroethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	**6.52**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	**4.00**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2013-03	ug/L	< 4.00	**1.27 J**	< 4	**3.33 J**	< 4	< 4	< 4	**2.14 J**	< 4.00	< 4	< 4	< 4
Chloroethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	**2.82 J**	< 4.00	< 4.00	< 4.00	**0.898 J**	**0.904 J**	< 4.00	< 4.00	< 4.00
Chloroethane	2013-11	ug/L												
Chloroethane	2014-03	ug/L	< 4.00	**2.65 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Chlorobenzene	2018-08	ug/L	**5.13**	**9.99**	< 1	< 1		< 1		< 1			
Chlorobenzene	2018-09	ug/L									< 1	< 1	**6.87**
Chlorobenzene	2018-11	ug/L										< 1	**6.26**
Chlorobenzene	2019-03	ug/L	**5.68**	**6.22**	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Chlorobenzene	2019-04	ug/L											**7.57**
Chlorobenzene	2019-08	ug/L	**7.41**	**14.4**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	**6.6**
Chlorobenzene	2020-03	ug/L	**5.88**	**11.5**	< 1	< 1	< 1	< 1		< 1	< 1	< 1	**7.43**
Chlorobenzene	2020-04	ug/L											
Chlorobenzene	2020-08	ug/L	**6.08**	**15.4**	< 1	< 1	< 1			< 1	< 1	< 1	**7.33**
Chlorobenzene	2021-03	ug/L	**5.74**		< 1	< 1							**6.78**
Chlorobenzene	2021-08	ug/L	**3.81**	**6.83**	< 1	< 1	< 1			< 1	< 1	< 1	**6.76**
Chlorobenzene	2022-03	ug/L	**2.96**		< 1	< 1							**7.07**
Chlorobenzene	2022-08	ug/L	**4.19**	**8.74**	< 1	< 1	< 1			< 1	< 1	< 1	**6.71**
Chlorobenzene	2023-03	ug/L	**4.04**		< 1	< 1							**7.41**
Chlorobenzene	2023-08	ug/L	**7.1**	**6.29**	< 1	< 1	< 1			< 1	< 1	< 1	**6.68**
Chlorobenzilate	2008-08	ug/L	< 10	< 10	< 10								
Chlorobenzilate	2009-03	ug/L	< 10	< 10	< 10								
Chlorobenzilate	2009-07	ug/L	< 10	< 10	< 10.0								
Chlorobenzilate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Chlorobenzilate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Chlorobenzilate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Chlorobenzilate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Chlorobenzilate	2015-06	ug/L											
Chlorobenzilate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Chlorobenzilate	2015-10	ug/L				< 10.6							
Chlorobenzilate	2016-03	ug/L			< 10	< 10							
Chlorobenzilate	2016-06	ug/L											
Chlorobenzilate	2016-08	ug/L			< 11.1	< 11.5							
Chlorobenzilate	2018-11	ug/L											
Chlorobenzilate	2019-03	ug/L											
Chlorobenzilate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Chlorodibromomethane	2008-08	ug/L	< 5	< 5	< 5								
Chlorodibromomethane	2009-03	ug/L	< 5	< 5	< 5								
Chlorodibromomethane	2009-07	ug/L	< 5	< 5									
Chlorodibromomethane	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Chlorodibromomethane	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2011-09	ug/L	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2012-03	ug/L	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2012-09	ug/L	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2013-03	ug/L	< 5	< 5	< 5.00								
Chlorodibromomethane	2013-09	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2013-11	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2014-03	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2014-06	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2014-09	ug/L	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
Chlorodibromomethane	2015-03	ug/L	< 5.00	< 5.00	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2015-06	ug/L											
Chlorodibromomethane	2015-09	ug/L	< 5	< 5	< 5								
Chlorodibromomethane	2015-10	ug/L				< 5	< 5	< 5		< 5	< 5		
Chlorodibromomethane	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Chlorodibromomethane	2016-06	ug/L											
Chlorodibromomethane	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Chlorodibromomethane	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Chlorodibromomethane	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Chlorodibromomethane	2017-11	ug/L										< 5	< 5
Chlorodibromomethane	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Chlorodibromomethane	2018-06	ug/L										< 5	< 5
Chlorodibromomethane	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
Chlorodibromomethane	2018-09	ug/L									< 5	< 5	< 5
Chlorodibromomethane	2018-11	ug/L										< 5	< 5
Chlorodibromomethane	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
Chlorodibromomethane	2019-04	ug/L											< 5
Chlorodibromomethane	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Chlorodibromomethane	2020-04	ug/L											
Chlorodibromomethane	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Chlorodibromomethane	2021-03	ug/L	< 5		< 5	< 5							< 5
Chlorodibromomethane	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Chlorodibromomethane	2022-03	ug/L	< 5		< 5	< 5							< 5
Chlorodibromomethane	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Chlorodibromomethane	2023-03	ug/L	< 5		< 5	< 5							< 5
Chlorodibromomethane	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Chloroethane	2008-08	ug/L	< 4	< 4	< 4								
Chloroethane	2009-03	ug/L	< 4	< 4	< 4								
Chloroethane	2009-07	ug/L	< 4	**6.19**									
Chloroethane	2009-09	ug/L	< 4.00	**4.93**	< 4.00								
Chloroethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00								
Chloroethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00								
Chloroethane	2011-03	ug/L	< 4.00	**4.20**	< 4.00								
Chloroethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00								
Chloroethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00								
Chloroethane	2012-09	ug/L	< 4.00	< 4.00	< 4.00								
Chloroethane	2013-03	ug/L	< 4	**2.41 J**	< 4.00								
Chloroethane	2013-09	ug/L	< 4.00	**1.70 J**	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2013-11	ug/L					< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2014-03	ug/L	< 4.00	**1.44 J**	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Chloroethane	2014-06	ug/L												
Chloroethane	2014-09	ug/L	< 4	< 4	< 4	**2.85 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2015-03	ug/L	< 4.00	< 4	< 4.00	< 4.00	< 4	< 4	< 4.00	**0.500 J**	< 4	< 4	< 4.00	< 4.00
Chloroethane	2015-06	ug/L						< 4	< 4					
Chloroethane	2015-09	ug/L	< 4	< 4			< 4	< 4	< 4	< 4	< 4	< 4		
Chloroethane	2015-10	ug/L			< 4	**3.09 J**							< 4	< 4
Chloroethane	2016-03	ug/L	< 4	< 4	< 4	**4.69**	< 4	< 4	< 4	**0.641 J**	< 4	< 4	< 4	< 4
Chloroethane	2016-06	ug/L					< 4							
Chloroethane	2016-08	ug/L	< 4	< 4	< 4	**3.3 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2017-03	ug/L	< 4	< 4	< 4	**3.86 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2017-08	ug/L	< 4	< 4	< 4	**2.92 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2017-11	ug/L												
Chloroethane	2018-03	ug/L	< 4	< 4	< 4	**0.499 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2018-06	ug/L												
Chloroethane	2018-08	ug/L	< 4	< 4	< 4	**3.45 J**	< 4	< 4			< 4	< 4	< 4	< 4
Chloroethane	2018-09	ug/L							< 4	< 4				
Chloroethane	2018-11	ug/L											< 4	
Chloroethane	2019-03	ug/L	< 4	< 4	< 4	**2.5 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2019-04	ug/L												
Chloroethane	2019-08	ug/L	< 4	< 4	< 4	**4.79**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2020-03	ug/L		< 4		**3.66 J**	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Chloroethane	2020-04	ug/L	< 4		< 4									
Chloroethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Chloroethane	2021-03	ug/L				**3.22 J**								
Chloroethane	2021-08	ug/L	< 4	< 40	< 4	**2.68 J**	< 4	< 4	< 4	< 4	< 4			< 4
Chloroethane	2022-03	ug/L				**0.928 J**								
Chloroethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Chloroethane	2023-03	ug/L				**0.999 J**								
Chloroethane	2023-08	ug/L	< 4	< 4	< 4	**1.35 J**	< 4	< 4	< 4	< 4	< 4			< 4
Chloroform	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Chloroform	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Chloroform	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2012-09	ug/L	< 1.00	< 1.00	< 2.00	< 2.00	< 2.00	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Chloroform	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2013-11	ug/L												
Chloroform	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	2014-06	ug/L												
Chloroform	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
Chloroform	2015-06	ug/L						< 1	< 1					
Chloroform	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Chloroform	2015-10	ug/L			< 1	< 1							< 1	< 1
Chloroform	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2016-06	ug/L					< 1							
Chloroform	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2017-11	ug/L												
Chloroform	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	2018-06	ug/L												
Chloroform	2018-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloroform	2018-09	ug/L							< 3	< 3				
Chloroform	2018-11	ug/L											< 3	
Chloroform	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2019-04	ug/L												
Chloroform	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2020-03	ug/L		< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloroform	2020-04	ug/L	< 3		< 3									
Chloroform	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloroform	2021-03	ug/L				< 3								
Chloroform	2021-08	ug/L	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloroform	2022-03	ug/L				< 3								
Chloroform	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloroform	2023-03	ug/L				< 3								
Chloroform	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloromethane	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2009-07	ug/L	< 3	< 3	< 3	< 3		< 3	< 3.00	< 3.00	< 3			
Chloromethane	2009-09	ug/L	< 3.00	< 3	< 3.00	< 15.0		< 3	< 3	< 3	< 3			
Chloromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2011-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2012-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2012-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2013-03	ug/L	< 3.00	< 3.00	< 3	< 3	< 3	< 3	< 3	< 3	< 3.00	< 3	< 3	< 3
Chloromethane	2013-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2013-11	ug/L												
Chloromethane	2014-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2014-06	ug/L												
Chloromethane	2014-09	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Chloroethane	2014-06	ug/L					< 4.00	< 4.00	< 4.00	**0.428 J**	< 4.00		
Chloroethane	2014-09	ug/L	< 4	**1.36 J**	< 4		< 4	< 4	< 4	< 4	< 4		
Chloroethane	2015-03	ug/L	< 4.00	< 4.00	< 4		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2015-06	ug/L											
Chloroethane	2015-09	ug/L	< 4	< 4	< 4								
Chloroethane	2015-10	ug/L				< 4	< 4	< 4		**1.43 J**	< 4		
Chloroethane	2016-03	ug/L	**0.387 J**	**0.748 J**	< 4	< 4	< 4	< 4		**1.55 J**	< 4		
Chloroethane	2016-06	ug/L											
Chloroethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Chloroethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Chloroethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Chloroethane	2017-11	ug/L										< 4	< 4
Chloroethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Chloroethane	2018-06	ug/L										< 4	< 4
Chloroethane	2018-08	ug/L	< 4	< 4	< 4	< 4		< 4		< 4			
Chloroethane	2018-09	ug/L									< 4	< 4	< 4
Chloroethane	2018-11	ug/L										< 4	< 4
Chloroethane	2019-03	ug/L	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	
Chloroethane	2019-04	ug/L											< 4
Chloroethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		**0.807 J**	< 4	< 4	< 4
Chloroethane	2020-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Chloroethane	2020-04	ug/L											
Chloroethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Chloroethane	2021-03	ug/L	< 4		< 4	< 4							< 4
Chloroethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Chloroethane	2022-03	ug/L	< 4		< 4	< 4							< 4
Chloroethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Chloroethane	2023-03	ug/L	< 4		< 4	< 4							< 4
Chloroethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Chloroform	2008-08	ug/L	< 1	< 1	< 1								
Chloroform	2009-03	ug/L	< 1	< 1	< 1								
Chloroform	2009-07	ug/L	< 1	< 1									
Chloroform	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Chloroform	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Chloroform	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Chloroform	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Chloroform	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Chloroform	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Chloroform	2012-09	ug/L	< 1.00	< 1.00	< 2.00								
Chloroform	2013-03	ug/L	< 1	< 1	< 1.00								
Chloroform	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2014-06	ug/L					< 1.00	**0.337 J**	< 1.00	< 1.00	< 1.00		
Chloroform	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Chloroform	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chloroform	2015-06	ug/L											
Chloroform	2015-09	ug/L	< 1	< 1	< 1								
Chloroform	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Chloroform	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Chloroform	2016-06	ug/L											
Chloroform	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Chloroform	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Chloroform	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Chloroform	2017-11	ug/L										< 1	< 1
Chloroform	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Chloroform	2018-06	ug/L										< 3	< 3
Chloroform	2018-08	ug/L	< 3	< 3	< 3	< 3		< 3		< 3			
Chloroform	2018-09	ug/L									< 3	< 3	< 3
Chloroform	2018-11	ug/L										< 3	< 3
Chloroform	2019-03	ug/L	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	
Chloroform	2019-04	ug/L											< 3
Chloroform	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Chloroform	2020-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Chloroform	2020-04	ug/L											
Chloroform	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloroform	2021-03	ug/L	< 3		< 3	< 3							< 3
Chloroform	2021-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloroform	2022-03	ug/L	< 3		< 3	< 3							< 3
Chloroform	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloroform	2023-03	ug/L	< 3		< 3	< 3							< 3
Chloroform	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloromethane	2008-08	ug/L	< 3	< 3	< 3								
Chloromethane	2009-03	ug/L	< 3	< 3	< 3								
Chloromethane	2009-07	ug/L	< 3	< 3									
Chloromethane	2009-09	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2011-09	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2012-03	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2012-09	ug/L	< 3.00	< 3.00	< 3.00								
Chloromethane	2013-03	ug/L	< 3	< 3	< 3.00								
Chloromethane	2013-09	ug/L	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2013-11	ug/L					< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2014-03	ug/L	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2014-06	ug/L					< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2014-09	ug/L	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Chloromethane	2015-03	ug/L	< 3.00	< 3	< 3.00	< 3.00	< 3	< 3	< 3.00	< 3.00	< 3	< 3	< 3.00	< 3.00
Chloromethane	2015-06	ug/L						< 3	< 3					
Chloromethane	2015-09	ug/L	< 3	< 3			< 3	< 3	< 3	< 3	< 3	< 3		
Chloromethane	2015-10	ug/L			< 3	< 3							< 3	< 3
Chloromethane	2016-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2016-06	ug/L					< 3							
Chloromethane	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2017-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2017-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2017-11	ug/L												
Chloromethane	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2018-06	ug/L												
Chloromethane	2018-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloromethane	2018-09	ug/L							< 3	< 3				
Chloromethane	2018-11	ug/L											< 3	
Chloromethane	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2019-04	ug/L												
Chloromethane	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2020-03	ug/L		< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Chloromethane	2020-04	ug/L	< 3		< 3									
Chloromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloromethane	2021-03	ug/L				< 3								
Chloromethane	2021-08	ug/L	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloromethane	2022-03	ug/L				< 3								
Chloromethane	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloromethane	2023-03	ug/L				< 3								
Chloromethane	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Chloroprene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroprene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroprene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Chloroprene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Chloroprene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroprene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
Chloroprene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
Chloroprene	2012-09	ug/L		< 4.00										
Chloroprene	2015-06	ug/L						< 1	< 1					
Chloroprene	2015-09	ug/L	< 1	< 1				< 1	< 1	< 1	< 1			
Chloroprene	2015-10	ug/L			< 1	< 1								
Chloroprene	2016-03	ug/L												
Chloroprene	2016-06	ug/L					< 1							
Chloroprene	2016-08	ug/L					< 1							
Chloroprene	2018-11	ug/L											< 1	
Chloroprene	2019-03	ug/L											< 1	
Chloroprene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			
Chromium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chromium	2009-09	mg/L	< 0.0200	< 0.02		< 0.0200		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Chromium	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	**0.0518**	< 0.0200
Chromium	2013-03	mg/L	< 0.0200	< 0.0400	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0200	**0.00206 J**	< 0.02	< 0.02
Chromium	2013-09	mg/L	**0.00265 J**	**0.00209 J**	**0.00183 J**	**0.00361 J**	**0.00582 J**	**0.00811 J**	**0.00721 J**	**0.00379 J**	**0.00359 J**	**0.00268 J**	**0.00216 J**	**0.00436 J**
Chromium	2013-11	mg/L												
Chromium	2014-03	mg/L	**0.00249 J**	**0.00424 J**	**0.00228 J**	**0.00273 J**	**0.00225 J**	**0.00382 J**	**0.00362 J**	**0.00599 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Chromium	2014-06	mg/L												
Chromium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2015-03	mg/L	< 0.00500	**0.00326 J**	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.00500	**0.00134 J**	< 0.005	< 0.005	< 0.00500	< 0.00500
Chromium	2015-06	mg/L						< 0.005	< 0.005					
Chromium	2015-09	mg/L	< 0.005	**0.00232 J**			< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Chromium	2015-10	mg/L			< 0.005	< 0.005							< 0.005	**0.00219 J**
Chromium	2016-03	mg/L	< 0.005	**0.00294 J**	< 0.005	**0.000478 J**	< 0.005	< 0.005	< 0.005	**0.00128 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2016-06	mg/L					< 0.005							
Chromium	2016-08	mg/L	**0.000368 J**	**0.00228 J**	< 0.005	**0.00045 J**	< 0.005	< 0.005	< 0.005	**0.00118 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2017-03	mg/L	< 0.005	**0.00201 J**	< 0.005	< 0.005	< 0.005	**0.00233 J**	< 0.005	**0.00141 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2017-08	mg/L	< 0.005	**0.00196 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00129 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2017-11	mg/L												
Chromium	2018-03	mg/L	< 0.005	**0.00289 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00135 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2018-06	mg/L												
Chromium	2018-08	mg/L	< 0.005	**0.00244 J**	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2018-09	mg/L							< 0.005	**0.00155 J**				
Chromium	2018-11	mg/L											< 0.005	
Chromium	2019-03	mg/L	< 0.005	**0.00103 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00111 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2019-04	mg/L												
Chromium	2019-08	mg/L	< 0.005	**0.00635**	< 0.005	**0.00262 J**	< 0.005	< 0.005	< 0.005	**0.00128 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2020-03	mg/L		**0.00279 J**		< 0.005	< 0.02	< 0.005	< 0.02	**0.00148 J**	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2020-04	mg/L	< 0.005		< 0.005									
Chromium	2020-08	mg/L	< 0.005	**0.00186 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00165 J**	< 0.005			< 0.005
Chromium	2021-03	mg/L				< 0.005								
Chromium	2021-08	mg/L	< 0.005	**0.00368 J**	< 0.005	**0.007**	< 0.005	< 0.005	< 0.005	**0.00179 J**	< 0.005			< 0.005
Chromium	2022-03	mg/L				< 0.005								
Chromium	2022-08	mg/L	< 0.005	**0.00195 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00128 J**	< 0.005			< 0.005
Chromium	2023-03	mg/L				< 0.005								
Chromium	2023-08	mg/L	< 0.005	**0.00236 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.002 J**	< 0.005			< 0.005
Chrysene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Chloromethane	2015-03	ug/L	< 3.00	< 3.00	< 3		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2015-06	ug/L											
Chloromethane	2015-09	ug/L	< 3	< 3	< 3								
Chloromethane	2015-10	ug/L				< 3	< 3	< 3		< 3	< 3		
Chloromethane	2016-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3		
Chloromethane	2016-06	ug/L											
Chloromethane	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3		
Chloromethane	2017-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3		
Chloromethane	2017-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3		
Chloromethane	2017-11	ug/L										< 3	< 3
Chloromethane	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Chloromethane	2018-06	ug/L										< 3	< 3
Chloromethane	2018-08	ug/L	< 3	< 3	< 3	< 3		< 3		< 3			
Chloromethane	2018-09	ug/L									< 3	< 3	< 3
Chloromethane	2018-11	ug/L										< 3	< 3
Chloromethane	2019-03	ug/L	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	
Chloromethane	2019-04	ug/L											< 3
Chloromethane	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Chloromethane	2020-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Chloromethane	2020-04	ug/L											
Chloromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloromethane	2021-03	ug/L	< 3		< 3	< 3							< 3
Chloromethane	2021-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloromethane	2022-03	ug/L	< 3		< 3	< 3							< 3
Chloromethane	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloromethane	2023-03	ug/L	< 3		< 3	< 3							< 3
Chloromethane	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Chloroprene	2008-08	ug/L	< 1	< 1	< 1								
Chloroprene	2009-03	ug/L	< 1	< 1	< 1								
Chloroprene	2009-07	ug/L	< 1	< 1									
Chloroprene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Chloroprene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Chloroprene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Chloroprene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Chloroprene	2012-09	ug/L											
Chloroprene	2015-06	ug/L											
Chloroprene	2015-09	ug/L	< 1	< 1	< 1								
Chloroprene	2015-10	ug/L				< 1							
Chloroprene	2016-03	ug/L			< 1	< 1							
Chloroprene	2016-06	ug/L											
Chloroprene	2016-08	ug/L			< 1	< 1							
Chloroprene	2018-11	ug/L											
Chloroprene	2019-03	ug/L											
Chloroprene	2020-08	ug/L	< 1	< 1	< 1	< 1							
Chromium	2008-08	mg/L	< 0.05	< 0.05	< 0.05								
Chromium	2009-03	mg/L	< 0.05	< 0.05	< 0.05								
Chromium	2009-07	mg/L	< 0.05	< 0.05	< 0.05								
Chromium	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Chromium	2013-03	mg/L	< 0.02	< 0.02	< 0.0200								
Chromium	2013-09	mg/L	**0.00188 J**	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	**0.00353 J**	< 0.0200	< 0.0200	< 0.0200		
Chromium	2013-11	mg/L				**~~0.00387 J~~**	**0.00160 J**	< 0.0200	< 0.0200	**0.00365 J**	< 0.0200		
Chromium	2014-03	mg/L	< 0.0200	**0.00199 J**	< 0.0200	**~~0.00383 J~~**	< 0.0200	< 0.0200	< 0.0200	**0.00299 J**	< 0.0200		
Chromium	2014-06	mg/L				~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Chromium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	~~< 0.005~~	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Chromium	2015-03	mg/L	< 0.00500	< 0.00500	< 0.005	**~~0.00149 J~~**	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500		
Chromium	2015-06	mg/L											
Chromium	2015-09	mg/L	< 0.005	< 0.005	< 0.005								
Chromium	2015-10	mg/L				< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Chromium	2016-03	mg/L	< 0.005	< 0.005	< 0.005	**0.000468 J**	< 0.005	< 0.005		< 0.005	< 0.005		
Chromium	2016-06	mg/L											
Chromium	2016-08	mg/L	< 0.005	**0.000457 J**	< 0.005	**0.000654 J**	< 0.005	< 0.005		< 0.005	**0.000885 J**		
Chromium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Chromium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Chromium	2017-11	mg/L										< 0.005	< 0.005
Chromium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2018-06	mg/L										< 0.005	< 0.005
Chromium	2018-08	mg/L	< 0.005	**0.003 J**	< 0.005	< 0.005		< 0.005		< 0.005			
Chromium	2018-09	mg/L									< 0.005	< 0.005	< 0.005
Chromium	2018-11	mg/L										< 0.005	< 0.005
Chromium	2019-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Chromium	2019-04	mg/L											< 0.005
Chromium	2019-08	mg/L	**0.00306 J**	**0.0102 J**	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	**0.00418 J**	< 0.005
Chromium	2020-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2020-04	mg/L											
Chromium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2021-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Chromium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.00118 J**	< 0.005	< 0.005	< 0.005
Chromium	2022-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Chromium	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Chromium	2023-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Chromium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Chrysene	2008-08	ug/L	< 10	< 10	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Chrysene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chrysene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Chrysene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Chrysene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Chrysene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Chrysene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Chrysene	2015-06	ug/L						< 10.5	< 11.1					
Chrysene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Chrysene	2015-10	ug/L			< 10.3	< 10.5								
Chrysene	2016-03	ug/L												
Chrysene	2016-06	ug/L					< 11.4							
Chrysene	2016-08	ug/L					< 11							
Chrysene	2018-11	ug/L											< 11.6	
Chrysene	2019-03	ug/L											< 12.2	
Chrysene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
cis-1,2-Dichloroethene	2008-08	ug/L	< 1	**2.65**	< 1	**17.5**	< 1	< 1	< 1	**1.05**	**4.6**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2009-03	ug/L	< 1	**2.21**	< 1	**15.2**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	2009-07	ug/L	< 1	**1.68**	< 1	**9.92**		< 1	< 1.00	< 1.00	< 1			
cis-1,2-Dichloroethene	2009-09	ug/L	< 1.00	**2.48**	< 1.00	**10.5**		< 1	< 1	**1.56**	< 1			
cis-1,2-Dichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	**5.66**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00
cis-1,2-Dichloroethene	2010-09	ug/L	< 1.00	**2.07**	< 1.00	**5.66**	< 1.00	< 1.00	< 1.00	**1.11**	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2011-03	ug/L	< 1.00	**1.29**	< 1.00	**6.55**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2011-09	ug/L	< 1.00	**2.40**	< 1.00	**4.11**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2012-03	ug/L	< 1.00	**1.61**	< 1.00	**5.69**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2012-09	ug/L	< 1.00	**1.60**	< 1.00	**5.50**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2013-03	ug/L	< 1.00	**0.419 J**	< 1	**5.94**	< 1	< 1	**0.133 J**	< 1	< 1.00	< 1	< 1	< 1
cis-1,2-Dichloroethene	2013-09	ug/L	< 1.00	**2.29**	< 1.00	**3.09**	< 1.00	< 1.00	**0.171 J**	**0.616 J**	**0.496 J**	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2013-11	ug/L												
cis-1,2-Dichloroethene	2014-03	ug/L	< 1.00	**3.11**	< 1.00	**1.07**	< 1.00	< 1.00	< 1.00	**0.402 J**	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2014-06	ug/L												
cis-1,2-Dichloroethene	2014-09	ug/L	< 1	**2.11**	< 1	**1.86**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	2015-03	ug/L	< 1.00	< 1	< 1.00	**1.45**	< 1	< 1	**0.156 J**	**0.418 J**	**0.478 J**	< 1	< 1.00	< 1.00
cis-1,2-Dichloroethene	2015-06	ug/L						**0.191 J**	**0.187 J**					
cis-1,2-Dichloroethene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	**0.63 J**	< 1	< 1		
cis-1,2-Dichloroethene	2015-10	ug/L			< 1	**0.973 J**							< 1	< 1
cis-1,2-Dichloroethene	2016-03	ug/L	< 1	< 1	< 1	**0.578 J**	< 1	**0.286 J**	< 1	**0.512 J**	**1.27**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2016-06	ug/L					< 1							
cis-1,2-Dichloroethene	2016-08	ug/L	< 1	< 1	< 1	**0.345 J**	< 1	< 1	< 1	**0.587 J**	**0.9 J**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2017-03	ug/L	< 1	< 1	< 1	**0.442 J**	< 1	< 1	< 1	**0.502 J**	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	2017-08	ug/L	< 1	< 1	< 1	**0.607 J**	< 1	< 1	< 1	**0.522 J**	**0.577 J**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2017-11	ug/L												
cis-1,2-Dichloroethene	2018-03	ug/L	< 1	< 1	< 1	**1.21**	< 1	< 1	< 1	**0.272 J**	**0.743 J**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2018-06	ug/L												
cis-1,2-Dichloroethene	2018-08	ug/L	< 1	< 1	< 1	**1.08**	< 1	< 1			**0.489 J**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2018-09	ug/L							< 1	**0.391 J**				
cis-1,2-Dichloroethene	2018-11	ug/L											< 1	
cis-1,2-Dichloroethene	2019-03	ug/L	< 1	**0.617 J**	< 1	< 1	< 1	< 1	**0.417 J**	**0.681 J**	**0.402 J**	< 1	**2.77**	< 1
cis-1,2-Dichloroethene	2019-04	ug/L												
cis-1,2-Dichloroethene	2019-08	ug/L	< 1	< 1	< 1	**0.394 J**	< 1	< 1	< 1	**0.977 J**	**0.7 J**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2020-03	ug/L		< 1		**0.992 J**	< 1	< 1	< 1	**1.14**	**1.38**	< 1	< 1	< 1
cis-1,2-Dichloroethene	2020-04	ug/L	< 1		< 1									
cis-1,2-Dichloroethene	2020-08	ug/L	< 1	< 1	< 1	**0.876 J**	< 1	< 1	< 1	**0.756 J**	**0.845 J**			< 1
cis-1,2-Dichloroethene	2021-03	ug/L				< 1								
cis-1,2-Dichloroethene	2021-08	ug/L	< 1	< 10	< 1	**0.46 J**	< 1	< 1	< 1	**0.446 J**	**1.13**			< 1
cis-1,2-Dichloroethene	2022-03	ug/L				**0.996 J**								
cis-1,2-Dichloroethene	2022-08	ug/L	< 1	< 1	< 1	**0.937 J**	< 1	< 1	< 1	**0.5 J**	**0.719 J**			< 1
cis-1,2-Dichloroethene	2023-03	ug/L				**1.15**								
cis-1,2-Dichloroethene	2023-08	ug/L	< 1	< 1	< 1	**0.837 J**	< 1	< 1	< 1	< 1	**0.353 J**			< 1
cis-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
cis-1,3-Dichloropropene	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
cis-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00	< 5.00	< 10.0	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2013-03	ug/L	< 5.00	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5	< 5	< 5
cis-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2013-11	ug/L												
cis-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2014-06	ug/L												
cis-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2015-03	ug/L	< 5.00	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00
cis-1,3-Dichloropropene	2015-06	ug/L						< 5	< 5					
cis-1,3-Dichloropropene	2015-09	ug/L	< 5	< 5			< 5	< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2015-10	ug/L			< 5	< 5							< 5	< 5
cis-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2016-06	ug/L					< 5							
cis-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2017-11	ug/L												
cis-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-06	ug/L												
cis-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-09	ug/L							< 5	< 5				

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Chrysene	2009-03	ug/L	< 10	< 10	< 10								
Chrysene	2009-07	ug/L	< 10	< 10	< 10.0								
Chrysene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Chrysene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Chrysene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Chrysene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Chrysene	2015-06	ug/L											
Chrysene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Chrysene	2015-10	ug/L				< 10.6							
Chrysene	2016-03	ug/L			< 10	< 10							
Chrysene	2016-06	ug/L											
Chrysene	2016-08	ug/L			< 11.1	< 11.5							
Chrysene	2018-11	ug/L											
Chrysene	2019-03	ug/L											
Chrysene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
cis-1,2-Dichloroethene	2008-08	ug/L	< 1	**1.84**	< 1								
cis-1,2-Dichloroethene	2009-03	ug/L	< 1	**1.19**	< 1								
cis-1,2-Dichloroethene	2009-07	ug/L	< 1	< 1									
cis-1,2-Dichloroethene	2009-09	ug/L	< 1.00	**1.34**	< 1.00								
cis-1,2-Dichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2013-03	ug/L	< 1	**0.347 J**	< 1.00								
cis-1,2-Dichloroethene	2013-09	ug/L	**0.158 J**	**0.375 J**	< 1.00		< 1.00	< 1.00	< 1.00	**0.210 J**	< 1.00		
cis-1,2-Dichloroethene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	**0.208 J**	< 1.00		
cis-1,2-Dichloroethene	2014-09	ug/L	< 1	**0.344 J**	< 1		< 1	< 1	< 1	**0.853 J**	< 1		
cis-1,2-Dichloroethene	2015-03	ug/L	< 1.00	**0.210 J**	< 1		< 1.00	< 1.00	< 1.00	**0.454 J**	< 1.00		
cis-1,2-Dichloroethene	2015-06	ug/L											
cis-1,2-Dichloroethene	2015-09	ug/L	< 1	< 1	< 1								
cis-1,2-Dichloroethene	2015-10	ug/L				< 1	< 1	< 1		**1.34**	< 1		
cis-1,2-Dichloroethene	2016-03	ug/L	**0.135 J**	**0.245 J**	< 1	< 1	< 1	< 1		**0.657 J**	< 1		
cis-1,2-Dichloroethene	2016-06	ug/L											
cis-1,2-Dichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**0.429 J**	< 1		
cis-1,2-Dichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		**0.349 J**	< 1		
cis-1,2-Dichloroethene	2017-08	ug/L	< 1	**0.245 J**	< 1	< 1	< 1	< 1		**0.42 J**	< 1		
cis-1,2-Dichloroethene	2017-11	ug/L										< 1	**0.582 J**
cis-1,2-Dichloroethene	2018-03	ug/L	**0.14 J**	**0.229 J**	< 1	< 1	< 1	< 1		**0.475 J**	< 1	< 1	**0.735 J**
cis-1,2-Dichloroethene	2018-06	ug/L										< 1	**0.706 J**
cis-1,2-Dichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		**0.279 J**			
cis-1,2-Dichloroethene	2018-09	ug/L									< 1	< 1	**0.612 J**
cis-1,2-Dichloroethene	2018-11	ug/L										< 1	**0.506 J**
cis-1,2-Dichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	**0.726 J**	< 1	< 1	
cis-1,2-Dichloroethene	2019-04	ug/L											**0.464 J**
cis-1,2-Dichloroethene	2019-08	ug/L	< 1	**0.254 J**	< 1	< 1	< 1	< 1		**1.56**	< 1	< 1	**0.555 J**
cis-1,2-Dichloroethene	2020-03	ug/L	< 1	**0.226 J**	< 1	< 1	< 1	< 1		**0.649 J**	< 1	< 1	**0.596 J**
cis-1,2-Dichloroethene	2020-04	ug/L											
cis-1,2-Dichloroethene	2020-08	ug/L	< 1	**0.266 J**	< 1	< 1	< 1			**1.38**	< 1	< 1	**0.537 J**
cis-1,2-Dichloroethene	2021-03	ug/L	< 1		< 1	< 1							**0.566 J**
cis-1,2-Dichloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	**0.466 J**
cis-1,2-Dichloroethene	2022-03	ug/L	< 1		< 1	< 1							**0.462 J**
cis-1,2-Dichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			**0.428 J**	< 1	< 1	**0.4 J**
cis-1,2-Dichloroethene	2023-03	ug/L	< 1		< 1	< 1							**0.423 J**
cis-1,2-Dichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5								
cis-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5								
cis-1,3-Dichloropropene	2009-07	ug/L	< 5	< 5									
cis-1,3-Dichloropropene	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
cis-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2013-03	ug/L	< 5	< 5	< 5.00								
cis-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2013-11	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2014-06	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
cis-1,3-Dichloropropene	2015-03	ug/L	< 5.00	< 5.00	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2015-06	ug/L											
cis-1,3-Dichloropropene	2015-09	ug/L	< 5	< 5	< 5								
cis-1,3-Dichloropropene	2015-10	ug/L				< 5	< 5	< 5		< 5	< 5		
cis-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
cis-1,3-Dichloropropene	2016-06	ug/L											
cis-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
cis-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
cis-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
cis-1,3-Dichloropropene	2017-11	ug/L										< 5	< 5
cis-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2018-06	ug/L										< 5	< 5
cis-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
cis-1,3-Dichloropropene	2018-09	ug/L									< 5	< 5	< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
cis-1,3-Dichloropropene	2018-11	ug/L											< 5	
cis-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2019-04	ug/L												
cis-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-04	ug/L	< 5		< 5									
cis-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
cis-1,3-Dichloropropene	2021-03	ug/L				< 5								
cis-1,3-Dichloropropene	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
cis-1,3-Dichloropropene	2022-03	ug/L				< 5								
cis-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
cis-1,3-Dichloropropene	2023-03	ug/L				< 5								
cis-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Cobalt	2008-08	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	< 0.05	< 0.05
Cobalt	2009-03	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	< 0.05	< 0.05
Cobalt	2009-07	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~		< 0.05	< 0.05	~~< 0.05~~	< 0.05	< 0.05	< 0.05	< 0.05
Cobalt	2009-09	mg/L	~~< 0.0200~~	~~< 0.02~~		~~< 0.0200~~		< 0.02	< 0.02	~~< 0.02~~	< 0.02	< 0.02		
Cobalt	2010-03	mg/L	~~< 0.0200~~	~~< 0.0200~~	~~< 0.0200~~	~~**0.0242**~~	~~< 0.0200~~	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Cobalt	2010-09	mg/L	**0.00636 J**	~~**0.00239 J**~~	~~< 0.0200~~	~~**0.00934 J**~~	~~< 0.0200~~	**0.00160 J**	< 0.0200	~~**0.00541 J**~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Cobalt	2011-03	mg/L	**0.00834 J**	~~< 0.0200~~	~~< 0.0200~~	~~**0.00700 J**~~	~~< 0.0200~~	< 0.0200	< 0.0200	~~**0.00193 J**~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Cobalt	2011-09	mg/L	**0.00615 J**	~~**0.00165 J**~~	~~< 0.0200~~	~~**0.00456 J**~~	~~< 0.0200~~	< 0.0200	< 0.0200	~~**0.00192 J**~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Cobalt	2012-03	mg/L	**0.00948 J**	~~< 0.0200~~	~~< 0.0200~~	~~**0.00570 J**~~	~~< 0.0200~~	< 0.0200	< 0.0200	~~**0.00301 J**~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Cobalt	2012-09	mg/L	**0.00999 J**	~~**0.00208 J**~~	~~< 0.0200~~	~~**0.00256 J**~~	~~< 0.0200~~	< 0.0200	< 0.0200	~~**0.00324 J**~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Cobalt	2013-03	mg/L	**0.00882 J**	~~**0.00490 J**~~	~~< 0.02~~	~~**0.00879 J**~~	~~< 0.02~~	< 0.02	**0.00201 J**	~~**0.00425 J**~~	< 0.0200	< 0.02	< 0.02	< 0.02
Cobalt	2013-09	mg/L	**0.00740**	~~**0.00150 J**~~	~~< 0.00700~~	~~< 0.00700~~	~~< 0.00700~~	< 0.00700	< 0.00700	~~< 0.00700~~	< 0.00700	< 0.00700	< 0.00700	< 0.00700
Cobalt	2013-11	mg/L												
Cobalt	2014-03	mg/L	**0.00827**	~~< 0.0140~~	~~< 0.00700~~	~~**0.00247 J**~~	~~< 0.00700~~	< 0.00700	< 0.00700	~~**0.00502 J**~~	< 0.00700	< 0.00700	< 0.00700	< 0.00700
Cobalt	2014-06	mg/L												
Cobalt	2014-09	mg/L	**0.0079**	**0.00163**	**0.000372 J**	**0.00289**	**0.000574**	< 0.0005	**0.00054**	**0.00338**	< 0.0005	**0.000124 J**	**0.000321 J**	< 0.0005
Cobalt	2015-03	mg/L	**0.00881**	**0.0058**	**0.000388 J**	**0.00261**	**0.00125**	< 0.0005	**0.000582**	**0.00272**	< 0.0005	**0.000182 J**	**0.000895**	< 0.000500
Cobalt	2015-06	mg/L						< 0.0005	**0.000724**					
Cobalt	2015-09	mg/L	**0.00912**	**0.00411**			**0.00247**	< 0.0005	**0.000441 J**	**0.00246**	< 0.0005	**0.000136 J**		
Cobalt	2015-10	mg/L			**0.000721**	**0.00108**							< 0.0005	< 0.0005
Cobalt	2016-03	mg/L	**0.00985**	**0.00574**	**0.00078**	**0.00123**	**0.00215**	< 0.0005	**0.000494 J**	**0.00345**	< 0.0005	**0.000135 J**	**0.000905**	< 0.0005
Cobalt	2016-06	mg/L					**0.00197**							
Cobalt	2016-08	mg/L	**0.00924**	**0.00422**	**0.000632**	**0.00215**	**0.000956**	**0.000028 J**	**0.000405 J**	**0.00246**	< 0.0005	**0.000145 J**	**0.000284 J**	< 0.0005
Cobalt	2017-03	mg/L	**0.00942**	**0.00373**	**0.000875**	**0.00148**	**0.00155**	**0.000052 J**	**0.00052**	**0.00327**	< 0.0005	**0.000182 J**	**0.000999**	< 0.0005
Cobalt	2017-08	mg/L	**0.00788**	**0.00397**	**0.000743**	**0.00103**	**0.00129**	< 0.0005	**0.00025 J**	**0.0028**	< 0.0005	**0.000136 J**	**0.000803**	< 0.0005
Cobalt	2017-11	mg/L												
Cobalt	2018-03	mg/L	**0.00981**	**0.00602**	**0.000566**	**0.000782**	**0.00139**	< 0.0005	**0.000426 J**	**0.00271**	< 0.0005	**0.000143 J**	**0.000501**	< 0.0005
Cobalt	2018-06	mg/L												
Cobalt	2018-08	mg/L	**0.00918**	**0.00493**	**0.000877**	**0.000614**	**0.00213**	< 0.0005			< 0.0005	**0.000127 J**	**0.001**	**0.000068 J**
Cobalt	2018-09	mg/L							**0.000257 J**	**0.00246**				
Cobalt	2018-11	mg/L											**0.0007**	
Cobalt	2019-03	mg/L	**0.0118**	**0.00234**	**0.00077**	**0.00243**	**0.00368**	< 0.0005	**0.000533**	**0.0034**	< 0.0005	**0.000161 J**	**0.000504**	< 0.0005
Cobalt	2019-04	mg/L												
Cobalt	2019-08	mg/L	**0.00792**	**0.00431**	**0.000792**	**0.00114**	**0.00138**	< 0.0005	**0.00016 J**	**0.00306**	< 0.0005	**0.000131 J**	**0.000497 J**	< 0.0005
Cobalt	2020-03	mg/L		**0.00572**		**0.00102**	**0.00156 J**	< 0.0005	< 0.002	**0.00322**	< 0.0005	**0.000108 J**	**0.000347 J**	< 0.0005
Cobalt	2020-04	mg/L	**0.00876**		**0.000802**									
Cobalt	2020-08	mg/L	**0.009**	**0.00411**	**0.000896**	**0.000785**	**0.00243**	< 0.0005	**0.000168 J**	**0.00383**	< 0.0005			< 0.0005
Cobalt	2021-03	mg/L				**0.000849**								
Cobalt	2021-08	mg/L	**0.00852**	**0.00741**	**0.000933**	**0.00111**	**0.00209**	**0.000221 J**	**0.000206 J**	**0.00328**	< 0.0005			< 0.0005
Cobalt	2022-03	mg/L				**0.00111**								
Cobalt	2022-08	mg/L	**0.00919**	**0.00401**	**0.000956**	**0.000601**	**0.00372**	**0.000214 J**	**0.000243 J**	**0.00272**	< 0.0005			< 0.0005
Cobalt	2023-03	mg/L				**0.000698**								
Cobalt	2023-08	mg/L	**0.01**	**0.00489**	**0.000822**	**0.000874**	**0.0032**	< 0.0005	< 0.0005	**0.00338**	**0.000175 J**			< 0.0005
Copper	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Copper	2009-03	mg/L	**0.055**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	2009-07	mg/L	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Copper	2009-09	mg/L	< 0.0200	< 0.02		< 0.0200		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Copper	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2011-09	mg/L	**0.0244**	< 0.0200	< 0.0200	< 0.0200	**0.0301**	**0.0345**	**0.0325**	**0.0289**	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2013-03	mg/L	**0.00182 J**	< 0.0400	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0200	**0.00151 J**	< 0.02 J	< 0.02
Copper	2013-09	mg/L	< 0.0200 J	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2013-11	mg/L												
Copper	2014-03	mg/L	**0.00465 J**	< 0.0400	< 0.0200	**0.00166 J**	< 0.0200	< 0.0200	< 0.0200	< 0.0400	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Copper	2014-06	mg/L												
Copper	2014-09	mg/L	**0.00371**	< 0.002	< 0.002	**0.00051 J**	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Copper	2015-03	mg/L	**0.00321**	< 0.002	< 0.00200	< 0.00200 J	< 0.002	< 0.002	< 0.00200	< 0.00200	< 0.002	< 0.002	< 0.00200	< 0.00200
Copper	2015-06	mg/L						< 0.002	< 0.002					
Copper	2015-09	mg/L	**0.00267**	< 0.002			< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	**0.00104 J**		
Copper	2015-10	mg/L			< 0.002 J	< 0.002							< 0.002	< 0.002
Copper	2016-03	mg/L	**0.00294 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2016-06	mg/L					< 0.005							
Copper	2016-08	mg/L	**0.00759**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2017-03	mg/L	**0.00359 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2017-11	mg/L												
Copper	2018-03	mg/L	**0.00299 J**	< 0.005	< 0.005	**0.00417 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2018-06	mg/L												
Copper	2018-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00298 J**	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Copper	2018-09	mg/L							< 0.005	< 0.005				
Copper	2018-11	mg/L											< 0.005	
Copper	2019-03	mg/L	**0.00354 J**	< 0.005	< 0.005	< 0.005	**0.00614**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
cis-1,3-Dichloropropene	2018-11	ug/L										< 5	< 5
cis-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	2019-04	ug/L											< 5
cis-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2020-04	ug/L											
cis-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2021-03	ug/L	< 5		< 5	< 5							< 5
cis-1,3-Dichloropropene	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2022-03	ug/L	< 5		< 5	< 5							< 5
cis-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	2023-03	ug/L	< 5		< 5	< 5							< 5
cis-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Cobalt	2008-08	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~								
Cobalt	2009-03	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~								
Cobalt	2009-07	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~								
Cobalt	2009-09	mg/L	~~< 0.0200~~	~~< 0.0200~~	~~< 0.0200~~								
Cobalt	2010-03	mg/L	~~< 0.0200~~	~~< 0.0200~~	~~< 0.0200~~								
Cobalt	2010-09	mg/L	~~< 0.0200~~	~~**0.00172 J**~~	~~< 0.0200~~								
Cobalt	2011-03	mg/L	~~< 0.0200~~	~~< 0.0200~~	~~< 0.0200~~								
Cobalt	2011-09	mg/L	~~< 0.0200~~	~~< 0.0200~~	~~< 0.0200~~								
Cobalt	2012-03	mg/L	~~< 0.0200~~	~~< 0.0200~~	~~< 0.0200~~								
Cobalt	2012-09	mg/L	~~**0.00298 J**~~	~~< 0.0200~~	~~< 0.0200~~								
Cobalt	2013-03	mg/L	~~< 0.02~~	~~**0.00274 J**~~	~~< 0.0200~~								
Cobalt	2013-09	mg/L	~~< 0.00700~~	~~< 0.00700~~	~~< 0.00700~~	~~< 0.00700~~	~~< 0.00700~~	< 0.00700	< 0.00700	~~< 0.00700~~	~~< 0.00700~~		
Cobalt	2013-11	mg/L				~~**0.0127**~~	~~< 0.00700~~	< 0.00700	**0.00324 J**	~~**0.00209 J**~~	~~**0.00155 J**~~		
Cobalt	2014-03	mg/L	~~< 0.00700~~	~~**0.00132 J**~~	~~< 0.00700~~	~~**0.00230 J**~~	~~< 0.00700~~	< 0.00700	**0.00180 J**	~~< 0.00700~~	~~< 0.00700~~		
Cobalt	2014-06	mg/L				~~< 0.00700~~	~~< 0.00700~~	< 0.00700	< 0.00700	~~< 0.00700~~	~~< 0.00700~~		
Cobalt	2014-09	mg/L	**0.000997**	**0.0015**	**0.000203 J**	~~**0.00126**~~	**0.000583**	**0.000119 J**	**0.00121**	**0.00224**	**0.00191**		
Cobalt	2015-03	mg/L	**0.00114**	**0.00136**	**0.000107 J**	~~**0.000396 J**~~	**0.000805**	**0.000505**	**0.00137**	**0.00233**	**0.00115**		
Cobalt	2015-06	mg/L											
Cobalt	2015-09	mg/L	**0.00127**	**0.00143**	**0.000338 J**								
Cobalt	2015-10	mg/L				**0.000363 J**	**0.000671**	**0.000172 J**		**0.00249**	**0.00104**		
Cobalt	2016-03	mg/L	**0.00122**	**0.00117**	**0.000226 J**	**0.000359 J**	**0.000672**	**0.000382 J**		**0.00227**	**0.000954**		
Cobalt	2016-06	mg/L											
Cobalt	2016-08	mg/L	**0.00115**	**0.00128**	**0.000206 J**	**0.000373 J**	**0.000962**	**0.000375 J**		**0.00224**	**0.000938**		
Cobalt	2017-03	mg/L	**0.00112**	**0.00129**	**0.000116 J**	**0.000948**	**0.000827**	**0.000614**		**0.00276**	**0.00323**		
Cobalt	2017-08	mg/L	**0.0013**	**0.00175**	**0.000176 J**	**0.000337 J**	**0.000735**	**0.000546**		**0.00264**	**0.00257**		
Cobalt	2017-11	mg/L										**0.00262**	**0.0269**
Cobalt	2018-03	mg/L	**0.00129**	**0.00132**	**0.000142 J**	**0.000415 J**	**0.00082**	**0.000659**		**0.00294**	**0.00197**	**0.00387**	**0.0191**
Cobalt	2018-06	mg/L										**0.00515**	**0.0232**
Cobalt	2018-08	mg/L	**0.00114**	**0.00201**	**0.000132 J**	**0.000359 J**		**0.000775**		**0.00297**			
Cobalt	2018-09	mg/L									**0.0021**	**0.00558**	**0.0214**
Cobalt	2018-11	mg/L										**0.00653**	**0.0192**
Cobalt	2019-03	mg/L	**0.0014**	**0.00132**	< 0.0005	**0.00035 J**		**0.000743**	**0.000578**	**0.00333**	**0.00259**	**0.00824**	
Cobalt	2019-04	mg/L											**0.016**
Cobalt	2019-08	mg/L	**0.00144**	**0.00201**	**0.000158 J**	< 0.0005	**0.000816**	**0.00122**		**0.00499**	**0.00381**		**0.0181**
Cobalt	2020-03	mg/L	**0.00128**	**0.0017**	**0.000099 J**	**0.000414 J**	**0.000948**	**0.00103**		**0.00372**	**0.00292**		**0.0184**
Cobalt	2020-04	mg/L											
Cobalt	2020-08	mg/L	**0.00148**	**0.00187**	**0.000141 J**	**0.000361 J**	**0.000504**			**0.00732**	**0.00298**		**0.0194**
Cobalt	2021-03	mg/L	**0.00135**		**0.000113 J**	**0.000413 J**							**0.018**
Cobalt	2021-08	mg/L	**0.00105**	**0.00165**	**0.000117 J**	**0.000498 J**	**0.00103**			**0.00383**	**0.00725**		**0.0168**
Cobalt	2022-03	mg/L	**0.000995**		< 0.0005	**0.000454 J**							**0.0163**
Cobalt	2022-08	mg/L	**0.00115**	**0.00153**	< 0.0005	**0.000278 J**	**0.000878**			**0.00277**	**0.00352**		**0.0191**
Cobalt	2023-03	mg/L	**0.00104**		< 0.0005	**0.000382 J**							**0.0173**
Cobalt	2023-08	mg/L	**0.00147**	**0.00126**	**0.000186 J**	**0.000378 J**	**0.00105**			**0.00315**	**0.00275**		**0.0169**
Copper	2008-08	mg/L	< 0.05	< 0.05	~~< 0.05~~								
Copper	2009-03	mg/L	< 0.02	< 0.02	< 0.02								
Copper	2009-07	mg/L	< 0.02	< 0.02	< 0.02								
Copper	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Copper	2013-03	mg/L	< 0.02	< 0.02	< 0.0200								
Copper	2013-09	mg/L	< 0.0200	< 0.0200	< 0.0200 J	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Copper	2013-11	mg/L				~~< 0.0200 J~~	**0.00193 J**	< 0.0200	**0.00204 J**	**0.00224 J**	< 0.0200		
Copper	2014-03	mg/L	< 0.0200	< 0.0200	< 0.0200	~~**0.00172 J**~~	< 0.0200	< 0.0200	< 0.0200	**0.00176 J**	< 0.0200		
Copper	2014-06	mg/L				~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Copper	2014-09	mg/L	< 0.002	< 0.002	< 0.002	~~**0.00111 J**~~	< 0.002	< 0.002	< 0.002	**0.000962 J**	< 0.002		
Copper	2015-03	mg/L	< 0.00200 J	< 0.00200	< 0.002	~~< 0.00200~~	< 0.00200 J	< 0.00200 J	< 0.00200 J	**0.00118 J**	< 0.00200 J		
Copper	2015-06	mg/L											
Copper	2015-09	mg/L	**0.00114 J**	< 0.002	< 0.002								
Copper	2015-10	mg/L				< 0.002	< 0.002	< 0.002		**0.000944 J**	< 0.002 J		
Copper	2016-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Copper	2016-06	mg/L											
Copper	2016-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Copper	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Copper	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Copper	2017-11	mg/L										< 0.005	< 0.005
Copper	2018-03	mg/L	< 0.005	< 0.005	< 0.005	**0.0108**	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Copper	2018-06	mg/L										< 0.005	< 0.005
Copper	2018-08	mg/L	< 0.005	**0.00324 J**	< 0.005	< 0.005		< 0.005		< 0.005			
Copper	2018-09	mg/L									< 0.005	< 0.005	< 0.005
Copper	2018-11	mg/L										< 0.005	< 0.005
Copper	2019-03	mg/L	**0.00514**	**0.0066**	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Copper	2019-04	mg/L												
Copper	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-03	mg/L		< 0.005		< 0.005	< 0.02	< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-04	mg/L	< 0.005		< 0.005									
Copper	2020-08	mg/L	**0.00177 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Copper	2021-03	mg/L				< 0.005								
Copper	2021-08	mg/L	**0.00313 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Copper	2022-03	mg/L				< 0.005								
Copper	2022-08	mg/L	**0.00182 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Copper	2023-03	mg/L				< 0.005								
Copper	2023-08	mg/L	**0.00211 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Cyanide	2008-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide	2009-03	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide	2010-09	mg/L	< 0.0100	< 0.0100	< 0.0100	< 0.0100				< 0.0100				
Cyanide	2015-06	mg/L						< 0.01	< 0.01					
Cyanide	2015-09	mg/L	< 0.01	< 0.01				< 0.01	< 0.01	< 0.01	< 0.01			
Cyanide	2015-10	mg/L			< 0.01	< 0.01								
Cyanide	2016-03	mg/L												
Cyanide	2016-06	mg/L					< 0.01							
Cyanide	2016-08	mg/L					< 0.01							
Cyanide	2018-11	mg/L											< 0.01	
Cyanide	2019-03	mg/L											< 0.01	
Cyanide	2020-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
Cyanide	2021-03	mg/L												
delta-BHC	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
delta-BHC	2008-09	ug/L										< 0.016		< 0.016
delta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
delta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
delta-BHC	2012-03	ug/L												
delta-BHC	2013-03	ug/L												
delta-BHC	2014-03	ug/L												
delta-BHC	2015-06	ug/L						< 0.0348	< 0.032					
delta-BHC	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	**0.00333 J**	< 0.0352			
delta-BHC	2015-10	ug/L			< 0.0372	< 0.0364								
delta-BHC	2016-03	ug/L												
delta-BHC	2016-06	ug/L					< 0.0364							
delta-BHC	2016-08	ug/L					< 0.0337							
delta-BHC	2017-03	ug/L												
delta-BHC	2017-08	ug/L												
delta-BHC	2018-11	ug/L											< 0.036	
delta-BHC	2019-03	ug/L											**0.00268 J**	
delta-BHC	2019-08	ug/L												
delta-BHC	2020-08	ug/L	< 0.0376	**0.00568 J**	< 0.0376	< 0.0376	< 0.0376	< 0.0376	**0.0035 J**	< 0.0376	< 0.039			
Diallate	2008-08	ug/L	< 10	< 10	< 10	< 10	**2.27 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diallate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diallate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Diallate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Diallate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Diallate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Diallate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Diallate	2013-09	ug/L					< 10.2							
Diallate	2015-06	ug/L						< 10.5	< 11.1					
Diallate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Diallate	2015-10	ug/L			< 10.3	< 10.5								
Diallate	2016-03	ug/L												
Diallate	2016-06	ug/L					< 11.4							
Diallate	2016-08	ug/L					< 11							
Diallate	2018-11	ug/L											< 11.6	
Diallate	2019-03	ug/L											< 12.2	
Diallate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Dibenzo(a,h)anthracene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzo(a,h)anthracene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Dibenzo(a,h)anthracene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Dibenzo(a,h)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dibenzo(a,h)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dibenzo(a,h)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dibenzo(a,h)anthracene	2015-06	ug/L						< 10.5	< 11.1					
Dibenzo(a,h)anthracene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Dibenzo(a,h)anthracene	2015-10	ug/L			< 10.3	< 10.5								
Dibenzo(a,h)anthracene	2016-03	ug/L												
Dibenzo(a,h)anthracene	2016-06	ug/L					< 11.4							
Dibenzo(a,h)anthracene	2016-08	ug/L					< 11							
Dibenzo(a,h)anthracene	2018-11	ug/L											< 11.6	
Dibenzo(a,h)anthracene	2019-03	ug/L											< 12.2	
Dibenzo(a,h)anthracene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Dibenzofuran	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dibenzofuran	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Dibenzofuran	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Dibenzofuran	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dibenzofuran	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dibenzofuran	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dibenzofuran	2015-06	ug/L						< 10.5	< 11.1					
Dibenzofuran	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Dibenzofuran	2015-10	ug/L			< 10.3	< 10.5								
Dibenzofuran	2016-03	ug/L												
Dibenzofuran	2016-06	ug/L					< 11.4							

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

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Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Copper	2019-04	mg/L											< 0.005
Copper	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Copper	2020-04	mg/L											
Copper	2020-08	mg/L	**0.00152 J**	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Copper	2021-03	mg/L	**0.0053**		< 0.005	< 0.005							< 0.005
Copper	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.00311 J**	< 0.005	< 0.005	< 0.005
Copper	2022-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Copper	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Copper	2023-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Copper	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Cyanide	2008-08	mg/L	< 0.01	< 0.01	< 0.01								
Cyanide	2009-03	mg/L	< 0.01	< 0.01	< 0.01								
Cyanide	2010-09	mg/L	< 0.0100	< 0.0100	< 0.0100								
Cyanide	2015-06	mg/L											
Cyanide	2015-09	mg/L	< 0.01	**0.0045 J**	< 0.01								
Cyanide	2015-10	mg/L				< 0.01							
Cyanide	2016-03	mg/L			< 0.01	< 0.01							
Cyanide	2016-06	mg/L											
Cyanide	2016-08	mg/L			< 0.01	< 0.01							
Cyanide	2018-11	mg/L											
Cyanide	2019-03	mg/L											
Cyanide	2020-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01							
Cyanide	2021-03	mg/L	< 0.01		< 0.01								
delta-BHC	2008-08	ug/L	< 0.047	< 0.053									
delta-BHC	2008-09	ug/L			< 0.016								
delta-BHC	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
delta-BHC	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
delta-BHC	2012-03	ug/L			< 0.0320								
delta-BHC	2013-03	ug/L			< 0.0344								
delta-BHC	2014-03	ug/L			< 0.0330								
delta-BHC	2015-06	ug/L											
delta-BHC	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
delta-BHC	2015-10	ug/L				< 0.0364							
delta-BHC	2016-03	ug/L			< 0.034	< 0.0356							
delta-BHC	2016-06	ug/L											
delta-BHC	2016-08	ug/L			< 0.0356	< 0.0327							
delta-BHC	2017-03	ug/L			< 0.0337	< 0.0356							
delta-BHC	2017-08	ug/L			< 0.0337	< 0.0344							
delta-BHC	2018-11	ug/L											
delta-BHC	2019-03	ug/L											
delta-BHC	2019-08	ug/L				< 0.0337							
delta-BHC	2020-08	ug/L	< 0.0376	**0.00435 J**	< 0.039	< 0.0376							
Diallate	2008-08	ug/L	< 10	< 10	< 10								
Diallate	2009-03	ug/L	< 10	< 10	< 10								
Diallate	2009-07	ug/L	< 10	< 10	< 10.0								
Diallate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Diallate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Diallate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Diallate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Diallate	2013-09	ug/L											
Diallate	2015-06	ug/L											
Diallate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Diallate	2015-10	ug/L				< 10.6							
Diallate	2016-03	ug/L			< 10	< 10							
Diallate	2016-06	ug/L											
Diallate	2016-08	ug/L			< 11.1	< 11.5							
Diallate	2018-11	ug/L											
Diallate	2019-03	ug/L											
Diallate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Dibenzo(a,h)anthracene	2008-08	ug/L	< 10	< 10	< 10								
Dibenzo(a,h)anthracene	2009-03	ug/L	< 10	< 10	< 10								
Dibenzo(a,h)anthracene	2009-07	ug/L	< 10	< 10	< 10.0								
Dibenzo(a,h)anthracene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzo(a,h)anthracene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzo(a,h)anthracene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzo(a,h)anthracene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzo(a,h)anthracene	2015-06	ug/L											
Dibenzo(a,h)anthracene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Dibenzo(a,h)anthracene	2015-10	ug/L				< 10.6							
Dibenzo(a,h)anthracene	2016-03	ug/L			< 10	< 10							
Dibenzo(a,h)anthracene	2016-06	ug/L											
Dibenzo(a,h)anthracene	2016-08	ug/L			< 11.1	< 11.5							
Dibenzo(a,h)anthracene	2018-11	ug/L											
Dibenzo(a,h)anthracene	2019-03	ug/L											
Dibenzo(a,h)anthracene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Dibenzofuran	2008-08	ug/L	< 10	< 10	< 10								
Dibenzofuran	2009-03	ug/L	< 10	< 10	< 10								
Dibenzofuran	2009-07	ug/L	< 10	< 10	< 10.0								
Dibenzofuran	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzofuran	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzofuran	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzofuran	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Dibenzofuran	2015-06	ug/L											
Dibenzofuran	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Dibenzofuran	2015-10	ug/L				< 10.6							
Dibenzofuran	2016-03	ug/L			< 10	< 10							
Dibenzofuran	2016-06	ug/L											

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Dibenzofuran	2016-08	ug/L					< 11							
Dibenzofuran	2018-11	ug/L											< 11.6	
Dibenzofuran	2019-03	ug/L											< 12.2	
Dibenzofuran	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Dibromomethane	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Dibromomethane	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Dibromomethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00
Dibromomethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Dibromomethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2013-11	ug/L												
Dibromomethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2014-06	ug/L												
Dibromomethane	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
Dibromomethane	2015-06	ug/L						< 1	< 1					
Dibromomethane	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2015-10	ug/L			< 1	< 1							< 1	< 1
Dibromomethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2016-06	ug/L					< 1							
Dibromomethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2017-11	ug/L												
Dibromomethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2018-06	ug/L												
Dibromomethane	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Dibromomethane	2018-09	ug/L							< 1	< 1				
Dibromomethane	2018-11	ug/L											< 1	
Dibromomethane	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2019-04	ug/L												
Dibromomethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromomethane	2020-04	ug/L	< 1		< 1									
Dibromomethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Dibromomethane	2021-03	ug/L				< 1								
Dibromomethane	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Dibromomethane	2022-03	ug/L				< 1								
Dibromomethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Dibromomethane	2023-03	ug/L				< 1								
Dibromomethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Dichlorodifluoromethane	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Dichlorodifluoromethane	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Dichlorodifluoromethane	2009-07	ug/L	< 3	< 3	< 3	< 3		< 3	< 3.00	< 3.00	< 3			
Dichlorodifluoromethane	2009-09	ug/L	< 3.00	< 3	< 3.00	< 15.0		< 3	< 3	< 3	< 3			
Dichlorodifluoromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Dichlorodifluoromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00				< 3.00				
Dichlorodifluoromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00				< 3.00				
Dichlorodifluoromethane	2012-09	ug/L		< 3.00										
Dichlorodifluoromethane	2015-06	ug/L						**0.311 J**	< 3					
Dichlorodifluoromethane	2015-09	ug/L	< 3	< 3				< 3	< 3	< 3	< 3			
Dichlorodifluoromethane	2015-10	ug/L			< 3	< 3								
Dichlorodifluoromethane	2016-03	ug/L												
Dichlorodifluoromethane	2016-06	ug/L					< 3							
Dichlorodifluoromethane	2016-08	ug/L					< 3							
Dichlorodifluoromethane	2018-11	ug/L											< 3	
Dichlorodifluoromethane	2019-03	ug/L											< 3	
Dichlorodifluoromethane	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			
Dieldrin	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Dieldrin	2008-09	ug/L										< 0.016		< 0.016
Dieldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Dieldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Dieldrin	2012-03	ug/L												
Dieldrin	2013-03	ug/L												
Dieldrin	2014-03	ug/L												
Dieldrin	2014-09	ug/L												
Dieldrin	2015-03	ug/L												
Dieldrin	2015-06	ug/L						< 0.0348	< 0.032					
Dieldrin	2015-09	ug/L	< 0.0356	**0.00418 J**				< 0.036	< 0.0327	**0.00396 J**	< 0.0352			
Dieldrin	2015-10	ug/L			< 0.0372	< 0.0364								
Dieldrin	2016-03	ug/L												
Dieldrin	2016-06	ug/L					< 0.0364							
Dieldrin	2016-08	ug/L					< 0.0337							
Dieldrin	2017-03	ug/L												
Dieldrin	2017-08	ug/L												
Dieldrin	2018-11	ug/L											< 0.036	
Dieldrin	2019-03	ug/L											< 0.0372	
Dieldrin	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Diethylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diethylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diethylphthalate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Diethylphthalate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Dibenzofuran	2016-08	ug/L			< 11.1	< 11.5							
Dibenzofuran	2018-11	ug/L											
Dibenzofuran	2019-03	ug/L											
Dibenzofuran	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Dibromomethane	2008-08	ug/L	< 1	< 1	< 1								
Dibromomethane	2009-03	ug/L	< 1	< 1	< 1								
Dibromomethane	2009-07	ug/L	< 1	< 1									
Dibromomethane	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Dibromomethane	2013-03	ug/L	< 1	< 1	< 1.00								
Dibromomethane	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Dibromomethane	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2015-06	ug/L											
Dibromomethane	2015-09	ug/L	< 1	< 1	< 1								
Dibromomethane	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Dibromomethane	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Dibromomethane	2016-06	ug/L											
Dibromomethane	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Dibromomethane	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Dibromomethane	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Dibromomethane	2017-11	ug/L										< 1	< 1
Dibromomethane	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Dibromomethane	2018-06	ug/L										< 1	< 1
Dibromomethane	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Dibromomethane	2018-09	ug/L									< 1	< 1	< 1
Dibromomethane	2018-11	ug/L										< 1	< 1
Dibromomethane	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Dibromomethane	2019-04	ug/L											< 1
Dibromomethane	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Dibromomethane	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Dibromomethane	2020-04	ug/L											
Dibromomethane	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Dibromomethane	2021-03	ug/L	< 1		< 1	< 1							< 1
Dibromomethane	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Dibromomethane	2022-03	ug/L	< 1		< 1	< 1							< 1
Dibromomethane	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Dibromomethane	2023-03	ug/L	< 1		< 1	< 1							< 1
Dibromomethane	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Dichlorodifluoromethane	2008-08	ug/L	< 3	< 3	< 3								
Dichlorodifluoromethane	2009-03	ug/L	< 3	< 3	< 3								
Dichlorodifluoromethane	2009-07	ug/L	< 3	< 3									
Dichlorodifluoromethane	2009-09	ug/L	< 3.00	< 3.00	< 3.00								
Dichlorodifluoromethane	2010-03	ug/L	< 3.00	< 3.00	< 3.00								
Dichlorodifluoromethane	2010-09	ug/L	< 3.00	< 3.00	< 3.00								
Dichlorodifluoromethane	2011-03	ug/L	< 3.00	< 3.00	< 3.00								
Dichlorodifluoromethane	2012-09	ug/L											
Dichlorodifluoromethane	2015-06	ug/L											
Dichlorodifluoromethane	2015-09	ug/L	< 3	< 3	< 3								
Dichlorodifluoromethane	2015-10	ug/L				< 3							
Dichlorodifluoromethane	2016-03	ug/L			< 3	< 3							
Dichlorodifluoromethane	2016-06	ug/L											
Dichlorodifluoromethane	2016-08	ug/L			< 3	< 3							
Dichlorodifluoromethane	2018-11	ug/L											
Dichlorodifluoromethane	2019-03	ug/L											
Dichlorodifluoromethane	2020-08	ug/L	< 3	< 3	< 3	< 3							
Dieldrin	2008-08	ug/L	< 0.047	< 0.053									
Dieldrin	2008-09	ug/L			< 0.016								
Dieldrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Dieldrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Dieldrin	2012-03	ug/L			< 0.0320								
Dieldrin	2013-03	ug/L			< 0.0344								
Dieldrin	2014-03	ug/L			< 0.0330								
Dieldrin	2014-09	ug/L			< 0.032								
Dieldrin	2015-03	ug/L			**0.0029 J**								
Dieldrin	2015-06	ug/L											
Dieldrin	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Dieldrin	2015-10	ug/L				< 0.0364							
Dieldrin	2016-03	ug/L			< 0.034	< 0.0356							
Dieldrin	2016-06	ug/L											
Dieldrin	2016-08	ug/L			< 0.0356	< 0.0327							
Dieldrin	2017-03	ug/L			< 0.0337	< 0.0356							
Dieldrin	2017-08	ug/L			< 0.0337	< 0.0344							
Dieldrin	2018-11	ug/L											
Dieldrin	2019-03	ug/L											
Dieldrin	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Diethylphthalate	2008-08	ug/L	< 10	< 10	< 10								
Diethylphthalate	2009-03	ug/L	< 10	< 10	< 10								
Diethylphthalate	2009-07	ug/L	< 10	< 10	< 10.0								
Diethylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Diethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Diethylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Diethylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Diethylphthalate	2011-09	ug/L												
Diethylphthalate	2012-03	ug/L												
Diethylphthalate	2012-09	ug/L												
Diethylphthalate	2013-03	ug/L												
Diethylphthalate	2013-09	ug/L												
Diethylphthalate	2015-06	ug/L						< 10.5	< 11.1					
Diethylphthalate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Diethylphthalate	2015-10	ug/L			< 10.3	< 10.5								
Diethylphthalate	2016-03	ug/L												
Diethylphthalate	2016-06	ug/L					< 11.4							
Diethylphthalate	2016-08	ug/L					< 11							
Diethylphthalate	2018-11	ug/L											< 11.6	
Diethylphthalate	2019-03	ug/L											< 12.2	
Diethylphthalate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Dimethoate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethoate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethoate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Dimethoate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Dimethoate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dimethoate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dimethoate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dimethoate	2015-06	ug/L						< 10.5	< 11.1					
Dimethoate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Dimethoate	2015-10	ug/L			< 10.3	< 10.5								
Dimethoate	2016-03	ug/L												
Dimethoate	2016-06	ug/L					< 11.4							
Dimethoate	2016-08	ug/L					< 11							
Dimethoate	2018-11	ug/L											< 11.6	
Dimethoate	2019-03	ug/L											< 12.2	
Dimethoate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Dimethylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dimethylphthalate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Dimethylphthalate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Dimethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dimethylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dimethylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dimethylphthalate	2015-06	ug/L						< 10.5	< 11.1					
Dimethylphthalate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Dimethylphthalate	2015-10	ug/L			< 10.3	< 10.5								
Dimethylphthalate	2016-03	ug/L												
Dimethylphthalate	2016-06	ug/L					< 11.4							
Dimethylphthalate	2016-08	ug/L					< 11							
Dimethylphthalate	2018-11	ug/L											< 11.6	
Dimethylphthalate	2019-03	ug/L											< 12.2	
Dimethylphthalate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Di-n-butylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	**1.66 J**	< 10	< 10	< 10	< 10	< 10
Di-n-butylphthalate	2009-03	ug/L	< 10	**1.47 J**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Di-n-butylphthalate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Di-n-butylphthalate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Di-n-butylphthalate	2010-03	ug/L	**1.03 J**	**1.32 J**	**0.982 J**	**1.17 J**	**0.857 J**	**0.984 J**	**0.794 J**	**1.34 J**	**0.787 J**	**1.05 J**	**0.800 J**	**0.638 J**
Di-n-butylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 0.777 U				
Di-n-butylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	**0.718 J**				< 10.0				
Di-n-butylphthalate	2011-09	ug/L	**0.621 J**	< 10.0 J	< 10.0	**0.808 J**				**0.769 J**				
Di-n-butylphthalate	2012-03	ug/L	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J				< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J	< 10.0 J
Di-n-butylphthalate	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Di-n-butylphthalate	2013-03	ug/L	< 10.2 J	< 10.2 J	< 10.6	**0.789 J**			< 10.9	< 10.9 J	< 10.2	< 10.5	< 10.2 J	< 11.1 J
Di-n-butylphthalate	2013-09	ug/L	< 11.0	< 11.0	< 10.8	< 10.9	< 10.2	< 10.2	< 10.2	< 10.3	< 10.9	< 11.1	< 10.4	< 10.6
Di-n-butylphthalate	2014-03	ug/L												
Di-n-butylphthalate	2014-09	ug/L												
Di-n-butylphthalate	2015-03	ug/L												
Di-n-butylphthalate	2015-06	ug/L						< 10.5	< 11.1					
Di-n-butylphthalate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Di-n-butylphthalate	2015-10	ug/L			< 10.3	< 10.5								
Di-n-butylphthalate	2016-03	ug/L												
Di-n-butylphthalate	2016-06	ug/L					< 11.4							
Di-n-butylphthalate	2016-08	ug/L					< 11							
Di-n-butylphthalate	2017-03	ug/L												
Di-n-butylphthalate	2017-08	ug/L												
Di-n-butylphthalate	2018-11	ug/L											< 11.6	
Di-n-butylphthalate	2019-03	ug/L											< 12.2	
Di-n-butylphthalate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Di-n-octylphthalate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Di-n-octylphthalate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Di-n-octylphthalate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Di-n-octylphthalate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Di-n-octylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Di-n-octylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Di-n-octylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Di-n-octylphthalate	2011-09	ug/L												
Di-n-octylphthalate	2012-03	ug/L												
Di-n-octylphthalate	2012-09	ug/L												
Di-n-octylphthalate	2013-03	ug/L												
Di-n-octylphthalate	2013-09	ug/L												
Di-n-octylphthalate	2015-06	ug/L						< 21.1	< 22.2					

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Diethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Diethylphthalate	2010-09	ug/L	< 10.0	**0.328 J**	< 10.0								
Diethylphthalate	2011-03	ug/L	< 10.0	**0.297 J**	< 10.0								
Diethylphthalate	2011-09	ug/L		< 10.0 J	< 10.0								
Diethylphthalate	2012-03	ug/L		< 10.0	< 10.0								
Diethylphthalate	2012-09	ug/L		**0.299 J**	< 10.0								
Diethylphthalate	2013-03	ug/L		< 21.5	< 10.4								
Diethylphthalate	2013-09	ug/L		< 10.9									
Diethylphthalate	2015-06	ug/L											
Diethylphthalate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Diethylphthalate	2015-10	ug/L				< 10.6							
Diethylphthalate	2016-03	ug/L			< 10	< 10							
Diethylphthalate	2016-06	ug/L											
Diethylphthalate	2016-08	ug/L			< 11.1	< 11.5							
Diethylphthalate	2018-11	ug/L											
Diethylphthalate	2019-03	ug/L											
Diethylphthalate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Dimethoate	2008-08	ug/L	< 10	< 10	< 10								
Dimethoate	2009-03	ug/L	< 10	< 10	< 10								
Dimethoate	2009-07	ug/L	< 10	< 10	< 10.0								
Dimethoate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Dimethoate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Dimethoate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Dimethoate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Dimethoate	2015-06	ug/L											
Dimethoate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Dimethoate	2015-10	ug/L				< 10.6							
Dimethoate	2016-03	ug/L			< 10	< 10							
Dimethoate	2016-06	ug/L											
Dimethoate	2016-08	ug/L			< 11.1	< 11.5							
Dimethoate	2018-11	ug/L											
Dimethoate	2019-03	ug/L											
Dimethoate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Dimethylphthalate	2008-08	ug/L	< 10	< 10	< 10								
Dimethylphthalate	2009-03	ug/L	< 10	< 10	< 10								
Dimethylphthalate	2009-07	ug/L	< 10	< 10	< 10.0								
Dimethylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Dimethylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Dimethylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Dimethylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Dimethylphthalate	2015-06	ug/L											
Dimethylphthalate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Dimethylphthalate	2015-10	ug/L				< 10.6							
Dimethylphthalate	2016-03	ug/L			< 10	< 10							
Dimethylphthalate	2016-06	ug/L											
Dimethylphthalate	2016-08	ug/L			< 11.1	< 11.5							
Dimethylphthalate	2018-11	ug/L											
Dimethylphthalate	2019-03	ug/L											
Dimethylphthalate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Di-n-butylphthalate	2008-08	ug/L	< 10	< 10	< 10								
Di-n-butylphthalate	2009-03	ug/L	< 10	< 10	< 10								
Di-n-butylphthalate	2009-07	ug/L	< 10	< 10	< 10.0								
Di-n-butylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Di-n-butylphthalate	2010-03	ug/L	**1.06 J**	**1.13 J**	**1.92 J**								
Di-n-butylphthalate	2010-09	ug/L	**0.830 J**	**0.806 J**	**0.618 J**								
Di-n-butylphthalate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Di-n-butylphthalate	2011-09	ug/L	**0.594 J**	< 10.0 J	< 10.0 J								
Di-n-butylphthalate	2012-03	ug/L	< 10.0 J	< 10.0 J	< 10.0 J								
Di-n-butylphthalate	2012-09	ug/L	< 10.0	< 10.0	**0.662 J**								
Di-n-butylphthalate	2013-03	ug/L	< 10.5	**1.74 J**	< 10.4 J								
Di-n-butylphthalate	2013-09	ug/L	< 10.1	< 10.9	< 10.2								
Di-n-butylphthalate	2014-03	ug/L			**2.69 J**								
Di-n-butylphthalate	2014-09	ug/L			< 10								
Di-n-butylphthalate	2015-03	ug/L			< 10.6								
Di-n-butylphthalate	2015-06	ug/L											
Di-n-butylphthalate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Di-n-butylphthalate	2015-10	ug/L				< 10.6							
Di-n-butylphthalate	2016-03	ug/L			< 10	< 10							
Di-n-butylphthalate	2016-06	ug/L											
Di-n-butylphthalate	2016-08	ug/L			< 11.1	< 11.5							
Di-n-butylphthalate	2017-03	ug/L			< 10.2	< 11.4							
Di-n-butylphthalate	2017-08	ug/L			< 10.6	< 11.1							
Di-n-butylphthalate	2018-11	ug/L											
Di-n-butylphthalate	2019-03	ug/L											
Di-n-butylphthalate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Di-n-octylphthalate	2008-08	ug/L	< 10	< 10	< 10								
Di-n-octylphthalate	2009-03	ug/L	< 10	< 10	< 10								
Di-n-octylphthalate	2009-07	ug/L	< 10	< 10	< 10.0								
Di-n-octylphthalate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Di-n-octylphthalate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Di-n-octylphthalate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Di-n-octylphthalate	2011-03	ug/L	**0.274 J**	< 10.0	< 10.0								
Di-n-octylphthalate	2011-09	ug/L	< 10.0		< 10.0								
Di-n-octylphthalate	2012-03	ug/L	< 10.0		< 10.0								
Di-n-octylphthalate	2012-09	ug/L	< 10.0		< 10.0								
Di-n-octylphthalate	2013-03	ug/L	**0.411 J**		< 20.8								
Di-n-octylphthalate	2013-09	ug/L	< 20.2										
Di-n-octylphthalate	2015-06	ug/L											

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Di-n-octylphthalate	2015-09	ug/L	< 22.2	< 22.5				< 22.2	< 20.4	< 22.5	< 22.2			
Di-n-octylphthalate	2015-10	ug/L			< 20.6	< 21.1								
Di-n-octylphthalate	2016-03	ug/L												
Di-n-octylphthalate	2016-06	ug/L					< 22.7 J							
Di-n-octylphthalate	2016-08	ug/L					< 22							
Di-n-octylphthalate	2018-11	ug/L											< 23.3	
Di-n-octylphthalate	2019-03	ug/L											< 24.4	
Di-n-octylphthalate	2020-08	ug/L	< 23.5	< 24.4	< 21.5	< 21.7	< 22.7	< 22.7	< 22.5	< 23.5	< 23.8			
Dinoseb	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dinoseb	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Dinoseb	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Dinoseb	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Dinoseb	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Dinoseb	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dinoseb	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Dinoseb	2015-06	ug/L						< 10.5	< 11.1					
Dinoseb	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Dinoseb	2015-10	ug/L			< 10.3	< 10.5								
Dinoseb	2016-03	ug/L												
Dinoseb	2016-06	ug/L					< 11.4							
Dinoseb	2016-08	ug/L					< 11							
Dinoseb	2018-11	ug/L											< 11.6	
Dinoseb	2019-03	ug/L											< 12.2	
Dinoseb	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Diphenylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diphenylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Diphenylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Diphenylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Diphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Diphenylamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R				< 10.0 R				
Diphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Diphenylamine	2015-06	ug/L						< 10.5	< 11.1					
Diphenylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Diphenylamine	2015-10	ug/L			< 10.3	< 10.5								
Diphenylamine	2016-03	ug/L												
Diphenylamine	2016-06	ug/L					< 11.4							
Diphenylamine	2016-08	ug/L					< 11							
Diphenylamine	2018-11	ug/L											< 11.6	
Diphenylamine	2019-03	ug/L											< 12.2	
Diphenylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Disulfoton	2008-08	ug/L	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70
Disulfoton	2009-03	ug/L	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70
Disulfoton	2009-07	ug/L	< 70	< 70	< 70	< 70	< 70	< 70	< 70.0	< 70.0	< 70	< 70	< 70	< 70.0
Disulfoton	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Disulfoton	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Disulfoton	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Disulfoton	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Disulfoton	2011-09	ug/L												
Disulfoton	2012-03	ug/L												
Disulfoton	2012-09	ug/L												
Disulfoton	2013-03	ug/L												
Disulfoton	2013-09	ug/L												
Disulfoton	2015-06	ug/L						< 10.5	< 11.1					
Disulfoton	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Disulfoton	2015-10	ug/L			< 10.3	< 10.5								
Disulfoton	2016-03	ug/L												
Disulfoton	2016-06	ug/L					< 11.4							
Disulfoton	2016-08	ug/L					< 11							
Disulfoton	2018-11	ug/L											< 11.6	
Disulfoton	2019-03	ug/L											< 12.2	
Disulfoton	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Endosulfan I	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Endosulfan I	2008-09	ug/L										< 0.016		< 0.016
Endosulfan I	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endosulfan I	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Endosulfan I	2015-06	ug/L						**0.00275 J**	< 0.032					
Endosulfan I	2015-09	ug/L	< 0.0356	**0.00222 J**				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Endosulfan I	2015-10	ug/L			< 0.0372	< 0.0364								
Endosulfan I	2016-03	ug/L												
Endosulfan I	2016-06	ug/L					< 0.0364							
Endosulfan I	2016-08	ug/L					< 0.0337							
Endosulfan I	2018-11	ug/L											< 0.036	
Endosulfan I	2019-03	ug/L											< 0.0372	
Endosulfan I	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	**0.00306 J**	< 0.0376	< 0.039			
Endosulfan II	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Endosulfan II	2008-09	ug/L										< 0.016		< 0.016
Endosulfan II	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endosulfan II	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Endosulfan II	2015-06	ug/L						< 0.0348	< 0.032					
Endosulfan II	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Endosulfan II	2015-10	ug/L			< 0.0372	< 0.0364								
Endosulfan II	2016-03	ug/L												
Endosulfan II	2016-06	ug/L					< 0.0364							
Endosulfan II	2016-08	ug/L					< 0.0337							
Endosulfan II	2018-11	ug/L											< 0.036	
Endosulfan II	2019-03	ug/L											< 0.0372	
Endosulfan II	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Endosulfan Sulfate	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Di-n-octylphthalate	2015-09	ug/L	< 21.7	< 21.1	< 22.5								
Di-n-octylphthalate	2015-10	ug/L				< 21.3							
Di-n-octylphthalate	2016-03	ug/L			< 20 J	< 20 J							
Di-n-octylphthalate	2016-06	ug/L											
Di-n-octylphthalate	2016-08	ug/L			**1.73 J**	< 23							
Di-n-octylphthalate	2018-11	ug/L											
Di-n-octylphthalate	2019-03	ug/L											
Di-n-octylphthalate	2020-08	ug/L	< 23.5	< 22	< 23.5	< 23.5							
Dinoseb	2008-08	ug/L	< 10	< 10	< 10								
Dinoseb	2009-03	ug/L	< 10	< 10	< 10								
Dinoseb	2009-07	ug/L	< 10	< 10	< 10.0								
Dinoseb	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Dinoseb	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Dinoseb	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Dinoseb	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Dinoseb	2015-06	ug/L											
Dinoseb	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Dinoseb	2015-10	ug/L				< 10.6							
Dinoseb	2016-03	ug/L			< 10	< 10							
Dinoseb	2016-06	ug/L											
Dinoseb	2016-08	ug/L			< 11.1	< 11.5							
Dinoseb	2018-11	ug/L											
Dinoseb	2019-03	ug/L											
Dinoseb	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Diphenylamine	2008-08	ug/L	< 10	< 10	< 10								
Diphenylamine	2009-03	ug/L	< 10	< 10	< 10								
Diphenylamine	2009-07	ug/L	< 10	< 10	< 10.0								
Diphenylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Diphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Diphenylamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R								
Diphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Diphenylamine	2015-06	ug/L											
Diphenylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Diphenylamine	2015-10	ug/L				< 10.6							
Diphenylamine	2016-03	ug/L			< 10	< 10							
Diphenylamine	2016-06	ug/L											
Diphenylamine	2016-08	ug/L			< 11.1	< 11.5							
Diphenylamine	2018-11	ug/L											
Diphenylamine	2019-03	ug/L											
Diphenylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Disulfoton	2008-08	ug/L	< 70	< 70	< 70								
Disulfoton	2009-03	ug/L	< 70	< 70	< 70								
Disulfoton	2009-07	ug/L	< 70	< 70	< 70.0								
Disulfoton	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Disulfoton	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Disulfoton	2010-09	ug/L	< 10.0	< 10.0	**1.11 J**								
Disulfoton	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Disulfoton	2011-09	ug/L			< 10.0								
Disulfoton	2012-03	ug/L			< 10.0								
Disulfoton	2012-09	ug/L			< 10.0								
Disulfoton	2013-03	ug/L			< 10.4								
Disulfoton	2013-09	ug/L			< 10.2								
Disulfoton	2015-06	ug/L											
Disulfoton	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Disulfoton	2015-10	ug/L				< 10.6							
Disulfoton	2016-03	ug/L			< 10	< 10							
Disulfoton	2016-06	ug/L											
Disulfoton	2016-08	ug/L			< 11.1	< 11.5							
Disulfoton	2018-11	ug/L											
Disulfoton	2019-03	ug/L											
Disulfoton	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Endosulfan I	2008-08	ug/L	< 0.047	< 0.053									
Endosulfan I	2008-09	ug/L			< 0.016								
Endosulfan I	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Endosulfan I	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Endosulfan I	2015-06	ug/L											
Endosulfan I	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Endosulfan I	2015-10	ug/L				< 0.0364							
Endosulfan I	2016-03	ug/L			< 0.034	< 0.0356							
Endosulfan I	2016-06	ug/L											
Endosulfan I	2016-08	ug/L			< 0.0356	< 0.0327							
Endosulfan I	2018-11	ug/L											
Endosulfan I	2019-03	ug/L											
Endosulfan I	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Endosulfan II	2008-08	ug/L	< 0.047	< 0.053									
Endosulfan II	2008-09	ug/L			< 0.016								
Endosulfan II	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Endosulfan II	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Endosulfan II	2015-06	ug/L											
Endosulfan II	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Endosulfan II	2015-10	ug/L				< 0.0364							
Endosulfan II	2016-03	ug/L			< 0.034	< 0.0356							
Endosulfan II	2016-06	ug/L											
Endosulfan II	2016-08	ug/L			< 0.0356	< 0.0327							
Endosulfan II	2018-11	ug/L											
Endosulfan II	2019-03	ug/L											
Endosulfan II	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Endosulfan Sulfate	2008-08	ug/L	< 0.047	< 0.053									

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Endosulfan Sulfate	2008-09	ug/L										< 0.016		< 0.016
Endosulfan Sulfate	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endosulfan Sulfate	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Endosulfan Sulfate	2015-06	ug/L						< 0.0348	< 0.032					
Endosulfan Sulfate	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Endosulfan Sulfate	2015-10	ug/L			< 0.0372	< 0.0364								
Endosulfan Sulfate	2016-03	ug/L												
Endosulfan Sulfate	2016-06	ug/L					< 0.0364							
Endosulfan Sulfate	2016-08	ug/L					< 0.0337							
Endosulfan Sulfate	2018-11	ug/L											< 0.036	
Endosulfan Sulfate	2019-03	ug/L											< 0.0372	
Endosulfan Sulfate	2020-08	ug/L	**0.00429 J**	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Endrin	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Endrin	2008-09	ug/L										< 0.016		< 0.016
Endrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Endrin	2015-06	ug/L						< 0.0348 J	< 0.032					
Endrin	2015-09	ug/L	**0.00282 J**	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Endrin	2015-10	ug/L			< 0.0372	< 0.0364								
Endrin	2016-03	ug/L												
Endrin	2016-06	ug/L					< 0.0364							
Endrin	2016-08	ug/L					< 0.0337							
Endrin	2018-11	ug/L											< 0.036	
Endrin	2019-03	ug/L											< 0.0372	
Endrin	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	**0.00456 J**	< 0.039			
Endrin Aldehyde	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Endrin Aldehyde	2008-09	ug/L										< 0.016		< 0.016
Endrin Aldehyde	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Endrin Aldehyde	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Endrin Aldehyde	2015-06	ug/L						< 0.0348	< 0.032					
Endrin Aldehyde	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Endrin Aldehyde	2015-10	ug/L			< 0.0372	< 0.0364								
Endrin Aldehyde	2016-03	ug/L												
Endrin Aldehyde	2016-06	ug/L					< 0.0364							
Endrin Aldehyde	2016-08	ug/L					< 0.0337							
Endrin Aldehyde	2018-11	ug/L											< 0.036	
Endrin Aldehyde	2019-03	ug/L											< 0.0372	
Endrin Aldehyde	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Ethyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethyl Methacrylate	2009-07	ug/L	< 2	< 2	< 2	< 2		< 2	< 2.00	< 2.00	< 2			
Ethyl Methacrylate	2009-09	ug/L	< 2.00	< 2	< 2.00	< 10.0		< 2	< 2	< 2	< 2			
Ethyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 5.00
Ethyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0				< 20.0				
Ethyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00				< 2.00				
Ethyl Methacrylate	2012-09	ug/L		< 2.00										
Ethyl Methacrylate	2015-06	ug/L						< 2	< 2					
Ethyl Methacrylate	2015-09	ug/L	< 2	< 2				< 2	< 2	< 2	< 2			
Ethyl Methacrylate	2015-10	ug/L			< 2	< 2								
Ethyl Methacrylate	2016-03	ug/L												
Ethyl Methacrylate	2016-06	ug/L					< 2							
Ethyl Methacrylate	2016-08	ug/L					< 2							
Ethyl Methacrylate	2018-11	ug/L											< 2	
Ethyl Methacrylate	2019-03	ug/L											< 2	
Ethyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			
Ethyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Ethyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Ethyl Methanesulfonate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Ethyl Methanesulfonate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Ethyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Ethyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Ethyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Ethyl Methanesulfonate	2015-06	ug/L						< 10.5	< 11.1					
Ethyl Methanesulfonate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Ethyl Methanesulfonate	2015-10	ug/L			< 10.3	< 10.5								
Ethyl Methanesulfonate	2016-03	ug/L												
Ethyl Methanesulfonate	2016-06	ug/L					< 11.4							
Ethyl Methanesulfonate	2016-08	ug/L					< 11							
Ethyl Methanesulfonate	2018-11	ug/L											< 11.6	
Ethyl Methanesulfonate	2019-03	ug/L											< 12.2	
Ethyl Methanesulfonate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Ethylbenzene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Ethylbenzene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Ethylbenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Ethylbenzene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2013-11	ug/L												
Ethylbenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2014-06	ug/L												
Ethylbenzene	2014-09	ug/L	< 1	< 1	< 1	**0.333 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Endosulfan Sulfate	2008-09	ug/L			< 0.016								
Endosulfan Sulfate	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Endosulfan Sulfate	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Endosulfan Sulfate	2015-06	ug/L											
Endosulfan Sulfate	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Endosulfan Sulfate	2015-10	ug/L				< 0.0364							
Endosulfan Sulfate	2016-03	ug/L			< 0.034	< 0.0356							
Endosulfan Sulfate	2016-06	ug/L											
Endosulfan Sulfate	2016-08	ug/L			< 0.0356	< 0.0327							
Endosulfan Sulfate	2018-11	ug/L											
Endosulfan Sulfate	2019-03	ug/L											
Endosulfan Sulfate	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Endrin	2008-08	ug/L	< 0.047	< 0.053									
Endrin	2008-09	ug/L			< 0.016								
Endrin	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Endrin	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Endrin	2015-06	ug/L											
Endrin	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Endrin	2015-10	ug/L				< 0.0364							
Endrin	2016-03	ug/L			< 0.034	< 0.0356							
Endrin	2016-06	ug/L											
Endrin	2016-08	ug/L			< 0.0356	< 0.0327							
Endrin	2018-11	ug/L											
Endrin	2019-03	ug/L											
Endrin	2020-08	ug/L	< 0.0376	**0.00465 J**	< 0.039	< 0.0376							
Endrin Aldehyde	2008-08	ug/L	< 0.047	< 0.053									
Endrin Aldehyde	2008-09	ug/L			< 0.016								
Endrin Aldehyde	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Endrin Aldehyde	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Endrin Aldehyde	2015-06	ug/L											
Endrin Aldehyde	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Endrin Aldehyde	2015-10	ug/L				< 0.0364							
Endrin Aldehyde	2016-03	ug/L			< 0.034	< 0.0356							
Endrin Aldehyde	2016-06	ug/L											
Endrin Aldehyde	2016-08	ug/L			< 0.0356	< 0.0327							
Endrin Aldehyde	2018-11	ug/L											
Endrin Aldehyde	2019-03	ug/L											
Endrin Aldehyde	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Ethyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2								
Ethyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2								
Ethyl Methacrylate	2009-07	ug/L	< 2	< 2									
Ethyl Methacrylate	2009-09	ug/L	< 2.00	< 2.00	< 2.00								
Ethyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Ethyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0								
Ethyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00								
Ethyl Methacrylate	2012-09	ug/L											
Ethyl Methacrylate	2015-06	ug/L											
Ethyl Methacrylate	2015-09	ug/L	< 2	< 2	< 2								
Ethyl Methacrylate	2015-10	ug/L				< 2							
Ethyl Methacrylate	2016-03	ug/L			< 2	< 2							
Ethyl Methacrylate	2016-06	ug/L											
Ethyl Methacrylate	2016-08	ug/L			< 2	< 2							
Ethyl Methacrylate	2018-11	ug/L											
Ethyl Methacrylate	2019-03	ug/L											
Ethyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2							
Ethyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10								
Ethyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10								
Ethyl Methanesulfonate	2009-07	ug/L	< 10	< 10	< 10.0								
Ethyl Methanesulfonate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Ethyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Ethyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Ethyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Ethyl Methanesulfonate	2015-06	ug/L											
Ethyl Methanesulfonate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Ethyl Methanesulfonate	2015-10	ug/L				< 10.6							
Ethyl Methanesulfonate	2016-03	ug/L			< 10	< 10							
Ethyl Methanesulfonate	2016-06	ug/L											
Ethyl Methanesulfonate	2016-08	ug/L			< 11.1	< 11.5							
Ethyl Methanesulfonate	2018-11	ug/L											
Ethyl Methanesulfonate	2019-03	ug/L											
Ethyl Methanesulfonate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Ethylbenzene	2008-08	ug/L	< 1	< 1	< 1								
Ethylbenzene	2009-03	ug/L	< 1	< 1	< 1								
Ethylbenzene	2009-07	ug/L	< 1	< 1									
Ethylbenzene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2013-03	ug/L	< 1	< 1	< 1.00								
Ethylbenzene	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		

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Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Ethylbenzene	2015-06	ug/L						< 1	< 1					
Ethylbenzene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Ethylbenzene	2015-10	ug/L			< 1	< 1							< 1	< 1
Ethylbenzene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2016-06	ug/L					< 1							
Ethylbenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2017-03	ug/L	< 1	**0.298 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2017-11	ug/L												
Ethylbenzene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2018-06	ug/L												
Ethylbenzene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Ethylbenzene	2018-09	ug/L							< 1	< 1				
Ethylbenzene	2018-11	ug/L											< 1	
Ethylbenzene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2019-04	ug/L												
Ethylbenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethylbenzene	2020-04	ug/L	< 1		< 1									
Ethylbenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Ethylbenzene	2021-03	ug/L				< 1								
Ethylbenzene	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Ethylbenzene	2022-03	ug/L				< 1								
Ethylbenzene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Ethylbenzene	2023-03	ug/L				< 1								
Ethylbenzene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Famphur	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Famphur	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Famphur	2009-07	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0	< 20.0	< 20	< 20	< 20	< 20.0
Famphur	2009-09	ug/L	< 20.0	< 20	< 20.0	< 20.0	< 20.0	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0
Famphur	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
Famphur	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0				< 20.0				
Famphur	2011-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0				< 20.0				
Famphur	2015-06	ug/L						< 21.1	< 22.2					
Famphur	2015-09	ug/L	< 22.2	< 22.5				< 22.2	< 20.4	< 22.5	< 22.2			
Famphur	2015-10	ug/L			< 20.6	< 21.1								
Famphur	2016-03	ug/L												
Famphur	2016-06	ug/L					< 22.7							
Famphur	2016-08	ug/L					< 22							
Famphur	2018-11	ug/L											< 11.6	
Famphur	2019-03	ug/L											< 12.2	
Famphur	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Fluoranthene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluoranthene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Fluoranthene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Fluoranthene	2015-06	ug/L						< 10.5	< 11.1					
Fluoranthene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Fluoranthene	2015-10	ug/L			< 10.3	< 10.5								
Fluoranthene	2016-03	ug/L												
Fluoranthene	2016-06	ug/L					< 11.4							
Fluoranthene	2016-08	ug/L					< 11							
Fluoranthene	2018-11	ug/L											< 11.6	
Fluoranthene	2019-03	ug/L											< 12.2	
Fluoranthene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Fluorene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Fluorene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Fluorene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	**0.367 J**	< 10	< 10.0
Fluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Fluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Fluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Fluorene	2012-03	ug/L										< 10.0		
Fluorene	2012-09	ug/L										< 10.0		
Fluorene	2013-03	ug/L										< 10.5		
Fluorene	2013-09	ug/L										< 11.1		
Fluorene	2015-06	ug/L						< 10.5	< 11.1					
Fluorene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Fluorene	2015-10	ug/L			< 10.3	< 10.5								
Fluorene	2016-03	ug/L												
Fluorene	2016-06	ug/L					< 11.4							
Fluorene	2016-08	ug/L					< 11							
Fluorene	2018-11	ug/L											< 11.6	
Fluorene	2019-03	ug/L											< 12.2	
Fluorene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Fluorotrichloromethane	2008-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2009-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2009-07	ug/L	< 4	< 4	< 4	< 4		< 4	< 4.00	< 4.00	< 4			
Fluorotrichloromethane	2009-09	ug/L	< 4.00	< 4	< 4.00	< 20.0		< 4	< 4	< 4	< 4			
Fluorotrichloromethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2012-09	ug/L	< 4.00	< 4.00	< 5.00	< 5.00	< 5.00	< 4.00	< 5.00	< 5.00	< 4.00	< 4.00	< 4.00	< 4.00

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Ethylbenzene	2015-06	ug/L											
Ethylbenzene	2015-09	ug/L	< 1	< 1	< 1								
Ethylbenzene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Ethylbenzene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Ethylbenzene	2016-06	ug/L											
Ethylbenzene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Ethylbenzene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Ethylbenzene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Ethylbenzene	2017-11	ug/L										< 1	< 1
Ethylbenzene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Ethylbenzene	2018-06	ug/L										< 1	< 1
Ethylbenzene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Ethylbenzene	2018-09	ug/L									< 1	< 1	< 1
Ethylbenzene	2018-11	ug/L										< 1	< 1
Ethylbenzene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Ethylbenzene	2019-04	ug/L											< 1
Ethylbenzene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Ethylbenzene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Ethylbenzene	2020-04	ug/L											
Ethylbenzene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Ethylbenzene	2021-03	ug/L	< 1		< 1	< 1							< 1
Ethylbenzene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Ethylbenzene	2022-03	ug/L	< 1		< 1	< 1							< 1
Ethylbenzene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Ethylbenzene	2023-03	ug/L	< 1		< 1	< 1							< 1
Ethylbenzene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Famphur	2008-08	ug/L	< 20	< 20	< 20								
Famphur	2009-03	ug/L	< 20	< 20	< 20								
Famphur	2009-07	ug/L	< 20	< 20	< 20.0								
Famphur	2009-09	ug/L	< 20.0	< 20.0	< 20.0								
Famphur	2010-03	ug/L	< 20.0	< 20.0	< 20.0								
Famphur	2010-09	ug/L	< 20.0	< 20.0	< 20.0								
Famphur	2011-03	ug/L	< 20.0	< 20.0	< 20.0								
Famphur	2015-06	ug/L											
Famphur	2015-09	ug/L	< 21.7	< 21.1	< 22.5								
Famphur	2015-10	ug/L				< 21.3							
Famphur	2016-03	ug/L			< 20	< 20							
Famphur	2016-06	ug/L											
Famphur	2016-08	ug/L			< 22.2	< 23							
Famphur	2018-11	ug/L											
Famphur	2019-03	ug/L											
Famphur	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Fluoranthene	2008-08	ug/L	< 10	< 10	< 10								
Fluoranthene	2009-03	ug/L	< 10	< 10	< 10								
Fluoranthene	2009-07	ug/L	< 10	< 10	< 10.0								
Fluoranthene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Fluoranthene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Fluoranthene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Fluoranthene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Fluoranthene	2015-06	ug/L											
Fluoranthene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Fluoranthene	2015-10	ug/L				< 10.6							
Fluoranthene	2016-03	ug/L			< 10	< 10							
Fluoranthene	2016-06	ug/L											
Fluoranthene	2016-08	ug/L			< 11.1	< 11.5							
Fluoranthene	2018-11	ug/L											
Fluoranthene	2019-03	ug/L											
Fluoranthene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Fluorene	2008-08	ug/L	< 10	< 10	< 10								
Fluorene	2009-03	ug/L	< 10	< 10	< 10								
Fluorene	2009-07	ug/L	< 10	< 10	< 10.0								
Fluorene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Fluorene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Fluorene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Fluorene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Fluorene	2012-03	ug/L			< 10.0								
Fluorene	2012-09	ug/L			< 10.0								
Fluorene	2013-03	ug/L			< 10.4								
Fluorene	2013-09	ug/L											
Fluorene	2015-06	ug/L											
Fluorene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Fluorene	2015-10	ug/L				< 10.6							
Fluorene	2016-03	ug/L			< 10	< 10							
Fluorene	2016-06	ug/L											
Fluorene	2016-08	ug/L			< 11.1	< 11.5							
Fluorene	2018-11	ug/L											
Fluorene	2019-03	ug/L											
Fluorene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Fluorotrichloromethane	2008-08	ug/L	< 4	< 4	< 4								
Fluorotrichloromethane	2009-03	ug/L	< 4	< 4	< 4								
Fluorotrichloromethane	2009-07	ug/L	< 4	< 4									
Fluorotrichloromethane	2009-09	ug/L	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2010-03	ug/L	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2010-09	ug/L	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2011-03	ug/L	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2011-09	ug/L	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2012-03	ug/L	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2012-09	ug/L	< 4.00	< 4.00	< 5.00								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Fluorotrichloromethane	2013-03	ug/L	< 4.00	< 4.00	< 4	< 4	< 4	< 4	< 4	< 4	< 4.00	< 4	< 4	< 4
Fluorotrichloromethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2013-11	ug/L												
Fluorotrichloromethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2014-06	ug/L												
Fluorotrichloromethane	2014-09	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2015-03	ug/L	< 4.00	< 4	< 4.00	< 4.00	< 4	< 4	< 4.00	< 4.00	< 4	< 4	< 4.00	< 4.00
Fluorotrichloromethane	2015-06	ug/L						< 4	< 4					
Fluorotrichloromethane	2015-09	ug/L	< 4	< 4			< 4	< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2015-10	ug/L			< 4	< 4							< 4	< 4
Fluorotrichloromethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2016-06	ug/L					< 4							
Fluorotrichloromethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2017-11	ug/L												
Fluorotrichloromethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2018-06	ug/L												
Fluorotrichloromethane	2018-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Fluorotrichloromethane	2018-09	ug/L							< 4	< 4				
Fluorotrichloromethane	2018-11	ug/L											< 4	
Fluorotrichloromethane	2019-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2019-04	ug/L												
Fluorotrichloromethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-03	ug/L		< 4		< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-04	ug/L	< 4		< 4									
Fluorotrichloromethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Fluorotrichloromethane	2021-03	ug/L				< 4								
Fluorotrichloromethane	2021-08	ug/L	< 4	< 40	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Fluorotrichloromethane	2022-03	ug/L				< 4								
Fluorotrichloromethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Fluorotrichloromethane	2023-03	ug/L				< 4								
Fluorotrichloromethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4			< 4
Heptachlor	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Heptachlor	2008-09	ug/L										< 0.016		< 0.016
Heptachlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Heptachlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Heptachlor	2012-03	ug/L												
Heptachlor	2013-03	ug/L												
Heptachlor	2014-03	ug/L												
Heptachlor	2014-09	ug/L												
Heptachlor	2015-03	ug/L												
Heptachlor	2015-06	ug/L						< 0.0348	< 0.032					
Heptachlor	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Heptachlor	2015-10	ug/L			< 0.0372	< 0.0364								
Heptachlor	2016-03	ug/L												
Heptachlor	2016-06	ug/L					< 0.0364							
Heptachlor	2016-08	ug/L					< 0.0337							
Heptachlor	2017-03	ug/L												
Heptachlor	2017-08	ug/L												
Heptachlor	2018-11	ug/L											< 0.036	
Heptachlor	2019-03	ug/L											< 0.0372	
Heptachlor	2020-08	ug/L	**0.00687 J**	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Heptachlor Epoxide	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Heptachlor Epoxide	2008-09	ug/L										< 0.016		< 0.016
Heptachlor Epoxide	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Heptachlor Epoxide	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Heptachlor Epoxide	2015-06	ug/L						< 0.0348	< 0.032					
Heptachlor Epoxide	2015-09	ug/L	< 0.0356	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Heptachlor Epoxide	2015-10	ug/L			< 0.0372	< 0.0364								
Heptachlor Epoxide	2016-03	ug/L												
Heptachlor Epoxide	2016-06	ug/L					< 0.0364							
Heptachlor Epoxide	2016-08	ug/L					< 0.0337							
Heptachlor Epoxide	2018-11	ug/L											< 0.036	
Heptachlor Epoxide	2019-03	ug/L											< 0.0372	
Heptachlor Epoxide	2020-08	ug/L	< 0.0376	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Hexachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Hexachlorobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Hexachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachlorobenzene	2015-06	ug/L						< 10.5	< 11.1					
Hexachlorobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Hexachlorobenzene	2015-10	ug/L			< 10.3	< 10.5								
Hexachlorobenzene	2016-03	ug/L												
Hexachlorobenzene	2016-06	ug/L					< 11.4							
Hexachlorobenzene	2016-08	ug/L					< 11							
Hexachlorobenzene	2018-11	ug/L											< 11.6	
Hexachlorobenzene	2019-03	ug/L											< 12.2	
Hexachlorobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Hexachlorobutadiene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Hexachlorobutadiene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Hexachlorobutadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachlorobutadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Fluorotrichloromethane	2013-03	ug/L	< 4	< 4	< 4.00								
Fluorotrichloromethane	2013-09	ug/L	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2013-11	ug/L					< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2014-03	ug/L	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2014-06	ug/L					< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2014-09	ug/L	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4		
Fluorotrichloromethane	2015-03	ug/L	< 4.00	< 4.00	< 4		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2015-06	ug/L											
Fluorotrichloromethane	2015-09	ug/L	< 4	< 4	< 4								
Fluorotrichloromethane	2015-10	ug/L				< 4	< 4	< 4		< 4	< 4		
Fluorotrichloromethane	2016-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Fluorotrichloromethane	2016-06	ug/L											
Fluorotrichloromethane	2016-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Fluorotrichloromethane	2017-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Fluorotrichloromethane	2017-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		
Fluorotrichloromethane	2017-11	ug/L										< 4	< 4
Fluorotrichloromethane	2018-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Fluorotrichloromethane	2018-06	ug/L										< 4	< 4
Fluorotrichloromethane	2018-08	ug/L	< 4	< 4	< 4	< 4		< 4		< 4			
Fluorotrichloromethane	2018-09	ug/L									< 4	< 4	< 4
Fluorotrichloromethane	2018-11	ug/L										< 4	< 4
Fluorotrichloromethane	2019-03	ug/L	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4	< 4	
Fluorotrichloromethane	2019-04	ug/L											< 4
Fluorotrichloromethane	2019-08	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-03	ug/L	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4	< 4	< 4
Fluorotrichloromethane	2020-04	ug/L											
Fluorotrichloromethane	2020-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Fluorotrichloromethane	2021-03	ug/L	< 4		< 4	< 4							< 4
Fluorotrichloromethane	2021-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Fluorotrichloromethane	2022-03	ug/L	< 4		< 4	< 4							< 4
Fluorotrichloromethane	2022-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Fluorotrichloromethane	2023-03	ug/L	< 4		< 4	< 4							< 4
Fluorotrichloromethane	2023-08	ug/L	< 4	< 4	< 4	< 4	< 4			< 4	< 4	< 4	< 4
Heptachlor	2008-08	ug/L	< 0.047	< 0.053									
Heptachlor	2008-09	ug/L			< 0.016								
Heptachlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Heptachlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Heptachlor	2012-03	ug/L			< 0.0320								
Heptachlor	2013-03	ug/L			< 0.0344								
Heptachlor	2014-03	ug/L			< 0.0330								
Heptachlor	2014-09	ug/L			< 0.032								
Heptachlor	2015-03	ug/L			< 0.0337								
Heptachlor	2015-06	ug/L											
Heptachlor	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Heptachlor	2015-10	ug/L				< 0.0364							
Heptachlor	2016-03	ug/L			< 0.034	< 0.0356							
Heptachlor	2016-06	ug/L											
Heptachlor	2016-08	ug/L			< 0.0356	< 0.0327							
Heptachlor	2017-03	ug/L			< 0.0337	< 0.0356							
Heptachlor	2017-08	ug/L			< 0.0337	< 0.0344							
Heptachlor	2018-11	ug/L											
Heptachlor	2019-03	ug/L											
Heptachlor	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Heptachlor Epoxide	2008-08	ug/L	< 0.047	< 0.053									
Heptachlor Epoxide	2008-09	ug/L			< 0.016								
Heptachlor Epoxide	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Heptachlor Epoxide	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Heptachlor Epoxide	2015-06	ug/L											
Heptachlor Epoxide	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Heptachlor Epoxide	2015-10	ug/L				< 0.0364							
Heptachlor Epoxide	2016-03	ug/L			< 0.034	< 0.0356							
Heptachlor Epoxide	2016-06	ug/L											
Heptachlor Epoxide	2016-08	ug/L			< 0.0356	< 0.0327							
Heptachlor Epoxide	2018-11	ug/L											
Heptachlor Epoxide	2019-03	ug/L											
Heptachlor Epoxide	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Hexachlorobenzene	2008-08	ug/L	< 10	< 10	< 10								
Hexachlorobenzene	2009-03	ug/L	< 10	< 10	< 10								
Hexachlorobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
Hexachlorobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobenzene	2015-06	ug/L											
Hexachlorobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Hexachlorobenzene	2015-10	ug/L				< 10.6							
Hexachlorobenzene	2016-03	ug/L			< 10	< 10							
Hexachlorobenzene	2016-06	ug/L											
Hexachlorobenzene	2016-08	ug/L			< 11.1	< 11.5							
Hexachlorobenzene	2018-11	ug/L											
Hexachlorobenzene	2019-03	ug/L											
Hexachlorobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Hexachlorobutadiene	2008-08	ug/L	< 10	< 10	< 10								
Hexachlorobutadiene	2009-03	ug/L	< 10	< 10	< 10								
Hexachlorobutadiene	2009-07	ug/L	< 10	< 10	< 10.0								
Hexachlorobutadiene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobutadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobutadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Hexachlorobutadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachlorobutadiene	2015-06	ug/L						< 10.5	< 11.1					
Hexachlorobutadiene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Hexachlorobutadiene	2015-10	ug/L			< 10.3	< 10.5								
Hexachlorobutadiene	2016-03	ug/L												
Hexachlorobutadiene	2016-06	ug/L					< 11.4							
Hexachlorobutadiene	2016-08	ug/L					< 11							
Hexachlorobutadiene	2018-11	ug/L											< 11.6	
Hexachlorobutadiene	2019-03	ug/L											< 12.2	
Hexachlorobutadiene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Hexachlorocyclopentadiene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorocyclopentadiene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorocyclopentadiene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Hexachlorocyclopentadiene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Hexachlorocyclopentadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachlorocyclopentadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachlorocyclopentadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachlorocyclopentadiene	2015-06	ug/L						< 21.1	< 22.2					
Hexachlorocyclopentadiene	2015-09	ug/L	< 22.2	< 22.5				< 22.2	< 20.4	< 22.5	< 22.2			
Hexachlorocyclopentadiene	2015-10	ug/L			< 20.6	< 21.1								
Hexachlorocyclopentadiene	2016-03	ug/L												
Hexachlorocyclopentadiene	2016-06	ug/L					< 22.7							
Hexachlorocyclopentadiene	2016-08	ug/L					< 22							
Hexachlorocyclopentadiene	2018-11	ug/L											< 11.6	
Hexachlorocyclopentadiene	2019-03	ug/L											< 12.2	
Hexachlorocyclopentadiene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Hexachloroethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Hexachloroethane	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Hexachloroethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachloroethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachloroethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachloroethane	2012-03	ug/L												
Hexachloroethane	2012-09	ug/L												
Hexachloroethane	2013-03	ug/L												
Hexachloroethane	2015-06	ug/L						< 10.5	< 11.1					
Hexachloroethane	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Hexachloroethane	2015-10	ug/L			< 10.3	< 10.5								
Hexachloroethane	2016-03	ug/L												
Hexachloroethane	2016-06	ug/L					< 11.4							
Hexachloroethane	2016-08	ug/L					< 11							
Hexachloroethane	2018-11	ug/L											< 11.6	
Hexachloroethane	2019-03	ug/L											< 12.2	
Hexachloroethane	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Hexachloropropene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloropropene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachloropropene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Hexachloropropene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Hexachloropropene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Hexachloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachloropropene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Hexachloropropene	2015-06	ug/L						< 10.5	< 11.1					
Hexachloropropene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Hexachloropropene	2015-10	ug/L			< 10.3	< 10.5								
Hexachloropropene	2016-03	ug/L												
Hexachloropropene	2016-06	ug/L					< 11.4							
Hexachloropropene	2016-08	ug/L					< 11							
Hexachloropropene	2018-11	ug/L											< 11.6	
Hexachloropropene	2019-03	ug/L											< 12.2	
Hexachloropropene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Indeno(1,2,3-cd)pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Indeno(1,2,3-cd)pyrene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Indeno(1,2,3-cd)pyrene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Indeno(1,2,3-cd)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Indeno(1,2,3-cd)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Indeno(1,2,3-cd)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Indeno(1,2,3-cd)pyrene	2012-03	ug/L												
Indeno(1,2,3-cd)pyrene	2012-09	ug/L												
Indeno(1,2,3-cd)pyrene	2013-03	ug/L												
Indeno(1,2,3-cd)pyrene	2015-06	ug/L						< 10.5	< 11.1					
Indeno(1,2,3-cd)pyrene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Indeno(1,2,3-cd)pyrene	2015-10	ug/L			< 10.3	< 10.5								
Indeno(1,2,3-cd)pyrene	2016-03	ug/L												
Indeno(1,2,3-cd)pyrene	2016-06	ug/L					< 11.4							
Indeno(1,2,3-cd)pyrene	2016-08	ug/L					< 11							
Indeno(1,2,3-cd)pyrene	2018-11	ug/L											< 11.6	
Indeno(1,2,3-cd)pyrene	2019-03	ug/L											< 12.2	
Indeno(1,2,3-cd)pyrene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Iodomethane	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2009-07	ug/L	< 10	< 20	< 10	< 10		< 10	< 20.0	< 20.0	< 10			
Iodomethane	2009-09	ug/L	< 20.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
Iodomethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2011-09	ug/L	< 10.0	< 20.0	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 20.0	< 10.0	< 10.0	< 50.0

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Hexachlorobutadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorobutadiene	2015-06	ug/L											
Hexachlorobutadiene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Hexachlorobutadiene	2015-10	ug/L				< 10.6							
Hexachlorobutadiene	2016-03	ug/L			< 10	< 10							
Hexachlorobutadiene	2016-06	ug/L											
Hexachlorobutadiene	2016-08	ug/L			< 11.1	< 11.5							
Hexachlorobutadiene	2018-11	ug/L											
Hexachlorobutadiene	2019-03	ug/L											
Hexachlorobutadiene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Hexachlorocyclopentadiene	2008-08	ug/L	< 10	< 10	< 10								
Hexachlorocyclopentadiene	2009-03	ug/L	< 10	< 10	< 10								
Hexachlorocyclopentadiene	2009-07	ug/L	< 10	< 10	< 10.0								
Hexachlorocyclopentadiene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorocyclopentadiene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorocyclopentadiene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorocyclopentadiene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachlorocyclopentadiene	2015-06	ug/L											
Hexachlorocyclopentadiene	2015-09	ug/L	< 21.7	< 21.1	< 22.5								
Hexachlorocyclopentadiene	2015-10	ug/L				< 21.3							
Hexachlorocyclopentadiene	2016-03	ug/L			< 20	< 20							
Hexachlorocyclopentadiene	2016-06	ug/L											
Hexachlorocyclopentadiene	2016-08	ug/L			< 22.2	< 23							
Hexachlorocyclopentadiene	2018-11	ug/L											
Hexachlorocyclopentadiene	2019-03	ug/L											
Hexachlorocyclopentadiene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Hexachloroethane	2008-08	ug/L	< 10	< 10	< 10								
Hexachloroethane	2009-03	ug/L	< 10	< 10	< 10								
Hexachloroethane	2009-07	ug/L	< 10	< 10	< 10.0								
Hexachloroethane	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloroethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloroethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloroethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloroethane	2012-03	ug/L			< 10.0								
Hexachloroethane	2012-09	ug/L			< 10.0								
Hexachloroethane	2013-03	ug/L			< 10.4								
Hexachloroethane	2015-06	ug/L											
Hexachloroethane	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Hexachloroethane	2015-10	ug/L				< 10.6							
Hexachloroethane	2016-03	ug/L			< 10	< 10							
Hexachloroethane	2016-06	ug/L											
Hexachloroethane	2016-08	ug/L			< 11.1	< 11.5							
Hexachloroethane	2018-11	ug/L											
Hexachloroethane	2019-03	ug/L											
Hexachloroethane	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Hexachloropropene	2008-08	ug/L	< 10	< 10	< 10								
Hexachloropropene	2009-03	ug/L	< 10	< 10	< 10								
Hexachloropropene	2009-07	ug/L	< 10	< 10	< 10.0								
Hexachloropropene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloropropene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloropropene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Hexachloropropene	2015-06	ug/L											
Hexachloropropene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Hexachloropropene	2015-10	ug/L				< 10.6							
Hexachloropropene	2016-03	ug/L			< 10	< 10							
Hexachloropropene	2016-06	ug/L											
Hexachloropropene	2016-08	ug/L			< 11.1	< 11.5							
Hexachloropropene	2018-11	ug/L											
Hexachloropropene	2019-03	ug/L											
Hexachloropropene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Indeno(1,2,3-cd)pyrene	2008-08	ug/L	< 10	< 10	< 10								
Indeno(1,2,3-cd)pyrene	2009-03	ug/L	< 10	< 10	< 10								
Indeno(1,2,3-cd)pyrene	2009-07	ug/L	< 10	< 10	< 10.0								
Indeno(1,2,3-cd)pyrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Indeno(1,2,3-cd)pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Indeno(1,2,3-cd)pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Indeno(1,2,3-cd)pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Indeno(1,2,3-cd)pyrene	2012-03	ug/L			< 10.0								
Indeno(1,2,3-cd)pyrene	2012-09	ug/L			< 10.0								
Indeno(1,2,3-cd)pyrene	2013-03	ug/L			< 10.4								
Indeno(1,2,3-cd)pyrene	2015-06	ug/L											
Indeno(1,2,3-cd)pyrene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Indeno(1,2,3-cd)pyrene	2015-10	ug/L				< 10.6							
Indeno(1,2,3-cd)pyrene	2016-03	ug/L			< 10	< 10							
Indeno(1,2,3-cd)pyrene	2016-06	ug/L											
Indeno(1,2,3-cd)pyrene	2016-08	ug/L			< 11.1	< 11.5							
Indeno(1,2,3-cd)pyrene	2018-11	ug/L											
Indeno(1,2,3-cd)pyrene	2019-03	ug/L											
Indeno(1,2,3-cd)pyrene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Iodomethane	2008-08	ug/L	< 10	< 10	< 10								
Iodomethane	2009-03	ug/L	< 10	< 10	< 10								
Iodomethane	2009-07	ug/L	< 20	< 10									
Iodomethane	2009-09	ug/L	< 10.0	< 20.0	< 10.0								
Iodomethane	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Iodomethane	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Iodomethane	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Iodomethane	2011-09	ug/L	< 50.0	< 20.0	< 20.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Iodomethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
Iodomethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2013-11	ug/L												
Iodomethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2014-06	ug/L												
Iodomethane	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
Iodomethane	2015-06	ug/L						< 10	< 10					
Iodomethane	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
Iodomethane	2015-10	ug/L			< 10	< 10							< 10	< 10
Iodomethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2016-06	ug/L					< 10							
Iodomethane	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2017-11	ug/L												
Iodomethane	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2018-06	ug/L												
Iodomethane	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Iodomethane	2018-09	ug/L							< 10	< 10				
Iodomethane	2018-11	ug/L											< 10	
Iodomethane	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2019-04	ug/L												
Iodomethane	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2020-03	ug/L		< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Iodomethane	2020-04	ug/L	< 10		< 10									
Iodomethane	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Iodomethane	2021-03	ug/L				< 10								
Iodomethane	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Iodomethane	2022-03	ug/L				< 10								
Iodomethane	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Iodomethane	2023-03	ug/L				< 10								
Iodomethane	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Isobutanol	2008-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isobutanol	2009-03	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isobutanol	2010-09	mg/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isobutanol	2015-06	mg/L						< 10	< 10					
Isobutanol	2015-09	mg/L	< 10	< 10				< 10	< 10	< 10	< 10			
Isobutanol	2015-10	mg/L			< 10	< 10								
Isobutanol	2016-03	mg/L												
Isobutanol	2016-06	mg/L					< 10							
Isobutanol	2016-08	mg/L					< 10							
Isobutanol	2018-11	mg/L											< 10	
Isobutanol	2019-03	mg/L											< 10	
Isobutanol	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			
Isodrin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isodrin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isodrin	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Isodrin	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Isodrin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Isodrin	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isodrin	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isodrin	2015-06	ug/L						< 10.5	< 11.1					
Isodrin	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Isodrin	2015-10	ug/L			< 10.3	< 10.5								
Isodrin	2016-03	ug/L												
Isodrin	2016-06	ug/L					< 11.4							
Isodrin	2016-08	ug/L					< 11							
Isodrin	2018-11	ug/L											< 11.6	
Isodrin	2019-03	ug/L											< 12.2	
Isodrin	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Isophorone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isophorone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isophorone	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Isophorone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Isophorone	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Isophorone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isophorone	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isophorone	2015-06	ug/L						< 10.5	< 11.1					
Isophorone	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Isophorone	2015-10	ug/L			< 10.3	< 10.5								
Isophorone	2016-03	ug/L												
Isophorone	2016-06	ug/L					< 11.4							
Isophorone	2016-08	ug/L					< 11							
Isophorone	2018-11	ug/L											< 11.6	
Isophorone	2019-03	ug/L											< 12.2	
Isophorone	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Isosafrole	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isosafrole	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isosafrole	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Isosafrole	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Isosafrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Isosafrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isosafrole	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Isosafrole	2011-09	ug/L												
Isosafrole	2012-03	ug/L												

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Iodomethane	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
Iodomethane	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
Iodomethane	2013-03	ug/L	< 10	< 10	< 10.0								
Iodomethane	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
Iodomethane	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2015-06	ug/L											
Iodomethane	2015-09	ug/L	< 10	< 10	< 10								
Iodomethane	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
Iodomethane	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Iodomethane	2016-06	ug/L											
Iodomethane	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Iodomethane	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Iodomethane	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Iodomethane	2017-11	ug/L										< 10	< 10
Iodomethane	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Iodomethane	2018-06	ug/L										< 10	< 10
Iodomethane	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
Iodomethane	2018-09	ug/L									< 10	< 10	< 10
Iodomethane	2018-11	ug/L										< 10	< 10
Iodomethane	2019-03	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	
Iodomethane	2019-04	ug/L											< 10
Iodomethane	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Iodomethane	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Iodomethane	2020-04	ug/L											
Iodomethane	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Iodomethane	2021-03	ug/L	< 10		< 10	< 10							< 10
Iodomethane	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Iodomethane	2022-03	ug/L	< 10		< 10	< 10							< 10
Iodomethane	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Iodomethane	2023-03	ug/L	< 10		< 10	< 10							< 10
Iodomethane	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Isobutanol	2008-08	mg/L	< 10	< 10	< 10								
Isobutanol	2009-03	mg/L	< 10	< 10	< 10								
Isobutanol	2010-09	mg/L	< 10.0	< 10.0	< 10.0								
Isobutanol	2015-06	mg/L											
Isobutanol	2015-09	mg/L	< 10	< 10	< 10								
Isobutanol	2015-10	mg/L				< 10							
Isobutanol	2016-03	mg/L			< 10	< 10							
Isobutanol	2016-06	mg/L											
Isobutanol	2016-08	mg/L			< 10	< 10							
Isobutanol	2018-11	mg/L											
Isobutanol	2019-03	mg/L											
Isobutanol	2020-08	mg/L	< 10	< 10	< 10	< 10							
Isodrin	2008-08	ug/L	< 10	< 10	< 10								
Isodrin	2009-03	ug/L	< 10	< 10	< 10								
Isodrin	2009-07	ug/L	< 10	< 10	< 10.0								
Isodrin	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Isodrin	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Isodrin	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Isodrin	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Isodrin	2015-06	ug/L											
Isodrin	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Isodrin	2015-10	ug/L				< 10.6							
Isodrin	2016-03	ug/L			< 10	< 10							
Isodrin	2016-06	ug/L											
Isodrin	2016-08	ug/L			< 11.1	< 11.5							
Isodrin	2018-11	ug/L											
Isodrin	2019-03	ug/L											
Isodrin	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Isophorone	2008-08	ug/L	< 10	< 10	< 10								
Isophorone	2009-03	ug/L	< 10	< 10	< 10								
Isophorone	2009-07	ug/L	< 10	< 10	< 10.0								
Isophorone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Isophorone	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Isophorone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Isophorone	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Isophorone	2015-06	ug/L											
Isophorone	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Isophorone	2015-10	ug/L				< 10.6							
Isophorone	2016-03	ug/L			< 10	< 10							
Isophorone	2016-06	ug/L											
Isophorone	2016-08	ug/L			< 11.1	< 11.5							
Isophorone	2018-11	ug/L											
Isophorone	2019-03	ug/L											
Isophorone	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Isosafrole	2008-08	ug/L	< 10	< 10	< 10								
Isosafrole	2009-03	ug/L	< 10	< 10	< 10								
Isosafrole	2009-07	ug/L	< 10	< 10	< 10.0								
Isosafrole	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Isosafrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Isosafrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Isosafrole	2011-03	ug/L	< 10.0	< 10.0	**0.184 J**								
Isosafrole	2011-09	ug/L			**0.184 J**								
Isosafrole	2012-03	ug/L			< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Isosafrole	2012-09	ug/L												
Isosafrole	2013-03	ug/L												
Isosafrole	2013-09	ug/L												
Isosafrole	2015-06	ug/L						< 10.5	< 11.1					
Isosafrole	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Isosafrole	2015-10	ug/L			< 10.3	< 10.5								
Isosafrole	2016-03	ug/L												
Isosafrole	2016-06	ug/L					< 11.4							
Isosafrole	2016-08	ug/L					< 11							
Isosafrole	2018-11	ug/L											< 11.6	
Isosafrole	2019-03	ug/L											< 12.2	
Isosafrole	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Kepone	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Kepone	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Kepone	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Kepone	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Kepone	2010-03	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
Kepone	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Kepone	2011-03	ug/L	< 0.840	< 10.0	< 10.0	< 10.0				< 0.537				
Kepone	2011-09	ug/L												
Kepone	2012-03	ug/L												
Kepone	2012-09	ug/L												
Kepone	2013-03	ug/L												
Kepone	2013-09	ug/L												
Kepone	2015-06	ug/L						< 10.5	< 11.1					
Kepone	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Kepone	2015-10	ug/L			< 10.3	< 10.5								
Kepone	2016-03	ug/L												
Kepone	2016-06	ug/L					< 11.4							
Kepone	2016-08	ug/L					< 11							
Kepone	2018-11	ug/L											< 11.6	
Kepone	2019-03	ug/L											< 12.2	
Kepone	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Lead	2008-08	mg/L	< 0.01	< 0.01	< 0.01	**0.01**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	2009-03	mg/L	**0.01**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	2009-07	mg/L	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	2009-09	mg/L	< 0.00400	< 0.004		**0.0208**		< 0.004	< 0.004	< 0.004	< 0.004	< 0.004		
Lead	2010-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2010-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2011-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2011-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2012-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2012-09	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2013-03	mg/L	< 0.00400	< 0.00400	< 0.004 J	< 0.004 J	< 0.004	< 0.004	< 0.004	< 0.004	< 0.00400	< 0.004	< 0.004	< 0.004
Lead	2013-09	mg/L	**0.00104 J**	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2013-11	mg/L												
Lead	2014-03	mg/L	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400
Lead	2014-06	mg/L												
Lead	2014-09	mg/L	**0.000169 J**	< 0.0005	**0.000181 J**	**0.000347 J**	< 0.0005	**0.000131 J**	**0.000137 J**	**0.000344 J**	< 0.0005	< 0.0005	**0.000123 J**	< 0.0005
Lead	2015-03	mg/L	< 0.000500	**0.000529**	**0.000154 J**	**0.000169 J**	**0.000407 J**	< 0.0005	< 0.000500	**0.000133 J**	**0.000211 J**	**0.000914**	**0.000168 J**	**0.000110 J**
Lead	2015-06	mg/L						< 0.0005	< 0.0005					
Lead	2015-09	mg/L	**0.000106 J**	**0.000449 J**			< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00015 J**		
Lead	2015-10	mg/L			< 0.0005	**0.000148 J**							< 0.0005	< 0.0005
Lead	2016-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2016-06	mg/L					**0.000662**							
Lead	2016-08	mg/L	**0.000213 J**	**0.000409 J**	**0.000237 J**	< 0.0005	**0.000995**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2017-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000395 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2017-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2017-11	mg/L												
Lead	2018-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000328 J**	< 0.0005
Lead	2018-06	mg/L												
Lead	2018-08	mg/L	< 0.0005	< 0.0005	< 0.0005	**0.000435 J**	< 0.0005	< 0.0005			< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2018-09	mg/L							< 0.0005	< 0.0005				
Lead	2018-11	mg/L											< 0.0005	
Lead	2019-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2019-04	mg/L												
Lead	2019-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2020-03	mg/L		< 0.0005		< 0.0005	< 0.002	< 0.0005	< 0.002	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2020-04	mg/L	< 0.0005		< 0.0005									
Lead	2020-08	mg/L	< 0.0005	**0.000144 J**	< 0.0005	**0.000123 J**	< 0.0005	< 0.0005	**0.00011 J**	< 0.0005	< 0.0005			< 0.0005
Lead	2021-03	mg/L				< 0.0005								
Lead	2021-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005
Lead	2022-03	mg/L				< 0.0005								
Lead	2022-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000281 J**	< 0.0005	< 0.0005			< 0.0005
Lead	2023-03	mg/L				**0.000397 J**								
Lead	2023-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000427 J**	**0.0006**			< 0.0005
Lindane (BHC, Gamma-)	2008-08	ug/L	< 0.054	< 0.053	< 0.047	< 0.047	< 0.052	< 0.053	< 0.054	< 0.056	< 0.053		< 0.053	
Lindane (BHC, Gamma-)	2008-09	ug/L										< 0.016		< 0.016
Lindane (BHC, Gamma-)	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Lindane (BHC, Gamma-)	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Lindane (BHC, Gamma-)	2015-06	ug/L						< 0.0348	< 0.032					
Lindane (BHC, Gamma-)	2015-09	ug/L	**0.00225 J**	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Lindane (BHC, Gamma-)	2015-10	ug/L			< 0.0372	< 0.0364								
Lindane (BHC, Gamma-)	2016-03	ug/L												
Lindane (BHC, Gamma-)	2016-06	ug/L					< 0.0364							
Lindane (BHC, Gamma-)	2016-08	ug/L					< 0.0337							
Lindane (BHC, Gamma-)	2018-11	ug/L											< 0.036	
Lindane (BHC, Gamma-)	2019-03	ug/L											< 0.0372	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Isosafrole	2012-09	ug/L			< 10.0								
Isosafrole	2013-03	ug/L			< 10.4								
Isosafrole	2013-09	ug/L			< 10.2								
Isosafrole	2015-06	ug/L											
Isosafrole	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Isosafrole	2015-10	ug/L				< 10.6							
Isosafrole	2016-03	ug/L			< 10	< 10							
Isosafrole	2016-06	ug/L											
Isosafrole	2016-08	ug/L			< 11.1	< 11.5							
Isosafrole	2018-11	ug/L											
Isosafrole	2019-03	ug/L											
Isosafrole	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Kepone	2008-08	ug/L	< 10	< 10	< 10								
Kepone	2009-03	ug/L	< 10	< 10	< 10								
Kepone	2009-07	ug/L	< 10	< 10	< 10.0								
Kepone	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Kepone	2010-03	ug/L	< 20.0	< 20.0	< 20.0								
Kepone	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Kepone	2011-03	ug/L	**0.597 J**	< 10.0	< 10.0								
Kepone	2011-09	ug/L	< 10.0		< 10.0								
Kepone	2012-03	ug/L	< 10.0		< 10.0								
Kepone	2012-09	ug/L	< 10.0		< 10.0								
Kepone	2013-03	ug/L	< 10.5		< 10.4								
Kepone	2013-09	ug/L	< 10.1										
Kepone	2015-06	ug/L											
Kepone	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Kepone	2015-10	ug/L				< 10.6							
Kepone	2016-03	ug/L			< 10	< 10							
Kepone	2016-06	ug/L											
Kepone	2016-08	ug/L			< 11.1	< 11.5							
Kepone	2018-11	ug/L											
Kepone	2019-03	ug/L											
Kepone	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Lead	2008-08	mg/L	< 0.01	< 0.01	~~< 0.01~~								
Lead	2009-03	mg/L	< 0.01	< 0.01	~~< 0.01~~								
Lead	2009-07	mg/L	< 0.01	< 0.01	~~< 0.01~~								
Lead	2009-09	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2010-03	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2010-09	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2011-03	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2011-09	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2012-03	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2012-09	mg/L	< 0.00400	< 0.00400	< 0.00400								
Lead	2013-03	mg/L	< 0.004	< 0.004	< 0.00400								
Lead	2013-09	mg/L	< 0.00400	< 0.00400	< 0.00400	~~**0.00810**~~	< 0.00400	**0.00324 J**	**0.00145 J**	**0.00198 J**	**0.00109 J**		
Lead	2013-11	mg/L				~~**0.0208**~~	< 0.00400	**0.00144 J**	< 0.00400	< 0.00400	< 0.00400		
Lead	2014-03	mg/L	< 0.00400	< 0.00400	< 0.00400	~~**0.00276 J**~~	< 0.00400	< 0.00400	< 0.00400	< 0.00400	< 0.00400		
Lead	2014-06	mg/L				~~**0.00435**~~	**0.00148 J**	< 0.00400	**0.00139 J**	< 0.00400	< 0.00400		
Lead	2014-09	mg/L	**0.000214 J**	< 0.0005	**0.000117 J**	~~**0.00261**~~	**0.000375 J**	**0.000114 J**	**0.000499 J**	**0.000248 J**	**0.000213 J**		
Lead	2015-03	mg/L	< 0.000500	< 0.000500	< 0.0005	~~< 0.000500 J~~	**0.000870**	**0.000330 J**	**0.000558**	< 0.000500	**0.000129 J**		
Lead	2015-06	mg/L											
Lead	2015-09	mg/L	**0.00017 J**	< 0.0005	< 0.0005								
Lead	2015-10	mg/L				< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005		
Lead	2016-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005		
Lead	2016-06	mg/L											
Lead	2016-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005		
Lead	2017-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005		
Lead	2017-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005		
Lead	2017-11	mg/L										**0.000398 J**	< 0.0005
Lead	2018-03	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2018-06	mg/L										< 0.0005	< 0.0005
Lead	2018-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005		< 0.0005			
Lead	2018-09	mg/L									< 0.0005	< 0.0005	< 0.0005
Lead	2018-11	mg/L										< 0.0005	< 0.0005
Lead	2019-03	mg/L	**0.000843**	< 0.0005	< 0.0005	< 0.0005		< 0.0005	**0.000363 J**	< 0.0005	< 0.0005	< 0.0005	
Lead	2019-04	mg/L											< 0.0005
Lead	2019-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	**0.000274 J**	< 0.0005	< 0.0005
Lead	2020-03	mg/L	**0.000521**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2020-04	mg/L											
Lead	2020-08	mg/L	**0.000271 J**	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	**0.000176 J**	< 0.0005	< 0.0005
Lead	2021-03	mg/L	**0.000699**		< 0.0005	< 0.0005							< 0.0005
Lead	2021-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	**0.000469 J**	**0.000234 J**	< 0.0005
Lead	2022-03	mg/L	< 0.0005		< 0.0005	< 0.0005							< 0.0005
Lead	2022-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lead	2023-03	mg/L	< 0.0005		< 0.0005	< 0.0005							< 0.0005
Lead	2023-08	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005			< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lindane (BHC, Gamma-)	2008-08	ug/L	< 0.047	< 0.053									
Lindane (BHC, Gamma-)	2008-09	ug/L			< 0.016								
Lindane (BHC, Gamma-)	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Lindane (BHC, Gamma-)	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Lindane (BHC, Gamma-)	2015-06	ug/L											
Lindane (BHC, Gamma-)	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Lindane (BHC, Gamma-)	2015-10	ug/L				< 0.0364							
Lindane (BHC, Gamma-)	2016-03	ug/L			< 0.034	< 0.0356							
Lindane (BHC, Gamma-)	2016-06	ug/L											
Lindane (BHC, Gamma-)	2016-08	ug/L			< 0.0356	< 0.0327							
Lindane (BHC, Gamma-)	2018-11	ug/L											
Lindane (BHC, Gamma-)	2019-03	ug/L											

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Lindane (BHC, Gamma-)	2020-08	ug/L	**0.00411 J**	< 0.039	< 0.0376	**0.00369 J**	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
m/p-Cresol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
m/p-Cresol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
m/p-Cresol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
m/p-Cresol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
m/p-Cresol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
m/p-Cresol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
m/p-Cresol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
m/p-Cresol	2014-03	ug/L												
m/p-Cresol	2014-09	ug/L												
m/p-Cresol	2015-03	ug/L												
m/p-Cresol	2015-06	ug/L						< 10.5	< 11.1					
m/p-Cresol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	**0.312 J**	< 11.2	< 11.1			
m/p-Cresol	2015-10	ug/L			< 10.3	< 10.5								
m/p-Cresol	2016-03	ug/L												
m/p-Cresol	2016-06	ug/L					< 11.4							
m/p-Cresol	2016-08	ug/L					< 11							
m/p-Cresol	2017-03	ug/L												
m/p-Cresol	2017-08	ug/L												
m/p-Cresol	2018-11	ug/L											< 11.6	
m/p-Cresol	2019-03	ug/L											< 12.2	
m/p-Cresol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Mercury	2008-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	**0.0003**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Mercury	2009-03	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Mercury	2010-03	mg/L						< 0.000200						
Mercury	2010-09	mg/L	< 0.000200		< 0.000200	< 0.000200				< 0.000200				
Mercury	2011-03	mg/L	< 0.000200	< 0.000200	< 0.000200	< 0.000200				< 0.000200				
Mercury	2013-09	mg/L						< 0.000200						
Mercury	2013-11	mg/L												
Mercury	2014-03	mg/L						< 0.000200						
Mercury	2014-06	mg/L												
Mercury	2014-09	mg/L						< 0.0002						
Mercury	2015-03	mg/L												
Mercury	2015-06	mg/L						< 0.0002	< 0.0002					
Mercury	2015-09	mg/L	< 0.0002	< 0.0002				< 0.0002	< 0.0002	< 0.0002	< 0.0002			
Mercury	2015-10	mg/L			< 0.0002	< 0.0002								
Mercury	2016-03	mg/L						< 0.0002						
Mercury	2016-06	mg/L					< 0.0002							
Mercury	2016-08	mg/L					< 0.0002	< 0.0002						
Mercury	2017-03	mg/L						< 0.0002						
Mercury	2017-08	mg/L						< 0.0002						
Mercury	2018-03	mg/L						< 0.0002						
Mercury	2018-08	mg/L						< 0.0002						
Mercury	2018-11	mg/L											< 0.0002	
Mercury	2019-03	mg/L						< 0.0002					< 0.0002	
Mercury	2019-08	mg/L						< 0.0002						
Mercury	2020-03	mg/L						< 0.0002						
Mercury	2020-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002			
Mercury	2021-08	mg/L						< 0.0002						
Mercury	2022-08	mg/L						< 0.0002						
Mercury	2023-08	mg/L						< 0.0002						
Methacrylonitrile	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methacrylonitrile	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methacrylonitrile	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Methacrylonitrile	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Methacrylonitrile	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Methacrylonitrile	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
Methacrylonitrile	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00				< 1.00				
Methacrylonitrile	2012-09	ug/L		< 1.00										
Methacrylonitrile	2015-06	ug/L						< 10	< 10					
Methacrylonitrile	2015-09	ug/L	< 10	< 10				< 10	< 10	< 10	< 10			
Methacrylonitrile	2015-10	ug/L			< 10	< 10								
Methacrylonitrile	2016-03	ug/L												
Methacrylonitrile	2016-06	ug/L					< 10							
Methacrylonitrile	2016-08	ug/L					< 10							
Methacrylonitrile	2018-11	ug/L											< 10	
Methacrylonitrile	2019-03	ug/L											< 10	
Methacrylonitrile	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			
Methapyrilene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methapyrilene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methapyrilene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Methapyrilene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Methapyrilene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Methapyrilene	2010-09	ug/L	< 10.0	< 10.0	**0.295 J**	< 10.0				< 10.0				
Methapyrilene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Methapyrilene	2011-09	ug/L			< 10.0									
Methapyrilene	2012-03	ug/L			< 10.0									
Methapyrilene	2012-09	ug/L			< 10.0									
Methapyrilene	2013-03	ug/L			< 10.6									
Methapyrilene	2013-09	ug/L			< 10.8									
Methapyrilene	2015-06	ug/L						< 10.5	< 11.1					
Methapyrilene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Methapyrilene	2015-10	ug/L			< 10.3	< 10.5								
Methapyrilene	2016-03	ug/L												
Methapyrilene	2016-06	ug/L					< 11.4							
Methapyrilene	2016-08	ug/L					< 11							
Methapyrilene	2018-11	ug/L											< 11.6	
Methapyrilene	2019-03	ug/L											< 12.2	

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Lindane (BHC, Gamma-)	2020-08	ug/L	**0.00341 J**	**0.0089 J**	< 0.039	< 0.0376							
m/p-Cresol	2008-08	ug/L	< 10	< 10	< 10								
m/p-Cresol	2009-03	ug/L	< 10	< 10	< 10								
m/p-Cresol	2009-07	ug/L	< 10	< 10	< 10.0								
m/p-Cresol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
m/p-Cresol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
m/p-Cresol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
m/p-Cresol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
m/p-Cresol	2014-03	ug/L			< 10.2								
m/p-Cresol	2014-09	ug/L			< 10								
m/p-Cresol	2015-03	ug/L			< 10.6								
m/p-Cresol	2015-06	ug/L											
m/p-Cresol	2015-09	ug/L	< 10.9	< 10.5	**0.255 J**								
m/p-Cresol	2015-10	ug/L				< 10.6							
m/p-Cresol	2016-03	ug/L			< 10	< 10							
m/p-Cresol	2016-06	ug/L											
m/p-Cresol	2016-08	ug/L			< 11.1	< 11.5							
m/p-Cresol	2017-03	ug/L			< 10.2	< 11.4							
m/p-Cresol	2017-08	ug/L			< 10.6	< 11.1							
m/p-Cresol	2018-11	ug/L											
m/p-Cresol	2019-03	ug/L											
m/p-Cresol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Mercury	2008-08	mg/L	< 0.0002	< 0.0002	< 0.0002								
Mercury	2009-03	mg/L	< 0.0002	< 0.0002	< 0.0002								
Mercury	2010-03	mg/L			< 0.000200								
Mercury	2010-09	mg/L	< 0.000200	< 0.000200	< 0.000200								
Mercury	2011-03	mg/L	< 0.000200	< 0.000200	< 0.000200								
Mercury	2013-09	mg/L				~~< 0.000200~~							
Mercury	2013-11	mg/L				~~< 0.000200 J~~							
Mercury	2014-03	mg/L			< 0.000200	~~< 0.000200~~							
Mercury	2014-06	mg/L				~~< 0.000200~~							
Mercury	2014-09	mg/L			< 0.0002	~~< 0.0002~~							
Mercury	2015-03	mg/L			< 0.0002	~~< 0.000200~~							
Mercury	2015-06	mg/L											
Mercury	2015-09	mg/L	< 0.0002	< 0.0002	< 0.0002								
Mercury	2015-10	mg/L				< 0.0002							
Mercury	2016-03	mg/L			< 0.0002	< 0.0002							
Mercury	2016-06	mg/L											
Mercury	2016-08	mg/L			< 0.0002	< 0.0002							
Mercury	2017-03	mg/L			< 0.0002	< 0.0002							
Mercury	2017-08	mg/L			< 0.0002	< 0.0002							
Mercury	2018-03	mg/L			< 0.0002	< 0.0002							
Mercury	2018-08	mg/L			< 0.0002	< 0.0002							
Mercury	2018-11	mg/L											
Mercury	2019-03	mg/L			< 0.0002	< 0.0002							
Mercury	2019-08	mg/L			< 0.0002	< 0.0002							
Mercury	2020-03	mg/L			< 0.0002	< 0.0002							
Mercury	2020-08	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002							
Mercury	2021-08	mg/L			< 0.0002	< 0.0002							
Mercury	2022-08	mg/L			< 0.0002	< 0.0002							
Mercury	2023-08	mg/L			< 0.0002	< 0.0002							
Methacrylonitrile	2008-08	ug/L	< 1	< 1	< 1								
Methacrylonitrile	2009-03	ug/L	< 1	< 1	< 1								
Methacrylonitrile	2009-07	ug/L	< 1	< 1									
Methacrylonitrile	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Methacrylonitrile	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Methacrylonitrile	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Methacrylonitrile	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Methacrylonitrile	2012-09	ug/L											
Methacrylonitrile	2015-06	ug/L											
Methacrylonitrile	2015-09	ug/L	< 10	< 10	< 10								
Methacrylonitrile	2015-10	ug/L				< 10							
Methacrylonitrile	2016-03	ug/L			< 10	< 10							
Methacrylonitrile	2016-06	ug/L											
Methacrylonitrile	2016-08	ug/L			< 10	< 10							
Methacrylonitrile	2018-11	ug/L											
Methacrylonitrile	2019-03	ug/L											
Methacrylonitrile	2020-08	ug/L	< 10	< 10	< 10	< 10							
Methapyrilene	2008-08	ug/L	< 10	< 10	< 10								
Methapyrilene	2009-03	ug/L	< 10	< 10	< 10								
Methapyrilene	2009-07	ug/L	< 10	< 10	< 10.0								
Methapyrilene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Methapyrilene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Methapyrilene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Methapyrilene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Methapyrilene	2011-09	ug/L			< 10.0								
Methapyrilene	2012-03	ug/L			< 10.0								
Methapyrilene	2012-09	ug/L			< 10.0								
Methapyrilene	2013-03	ug/L			< 10.4								
Methapyrilene	2013-09	ug/L											
Methapyrilene	2015-06	ug/L											
Methapyrilene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Methapyrilene	2015-10	ug/L				< 10.6							
Methapyrilene	2016-03	ug/L			< 10	< 10							
Methapyrilene	2016-06	ug/L											
Methapyrilene	2016-08	ug/L			< 11.1	< 11.5							
Methapyrilene	2018-11	ug/L											
Methapyrilene	2019-03	ug/L											

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Methapyrilene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Methoxychlor	2008-08	ug/L	< 0.11	< 0.11	< 0.093	< 0.093	< 0.1	< 0.11	< 0.11	< 0.11	< 0.11		< 0.11	
Methoxychlor	2008-09	ug/L										< 0.016		< 0.016
Methoxychlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032	< 0.032
Methoxychlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320	< 0.0320				< 0.0320				
Methoxychlor	2015-06	ug/L						< 0.0348	**0.00593 J**					
Methoxychlor	2015-09	ug/L	**0.00665 J**	< 0.0356				< 0.036	< 0.0327	< 0.0356	< 0.0352			
Methoxychlor	2015-10	ug/L			< 0.0372	< 0.0364								
Methoxychlor	2016-03	ug/L												
Methoxychlor	2016-06	ug/L					< 0.0364							
Methoxychlor	2016-08	ug/L					< 0.0337							
Methoxychlor	2018-11	ug/L											< 0.036	
Methoxychlor	2019-03	ug/L											< 0.0372	
Methoxychlor	2020-08	ug/L	**0.00649 J**	< 0.039	< 0.0376	< 0.0376	< 0.0376	< 0.0376	< 0.039	< 0.0376	< 0.039			
Methyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl Methacrylate	2009-07	ug/L	< 2	< 2	< 2	< 2		< 2	< 2.00	< 2.00	< 2			
Methyl Methacrylate	2009-09	ug/L	< 2.00	< 2	< 2.00	< 10.0		< 2	< 2	< 2	< 2			
Methyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 5.00
Methyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0	< 20.0				< 20.0				
Methyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00				< 2.00				
Methyl Methacrylate	2012-09	ug/L		< 2.00										
Methyl Methacrylate	2015-06	ug/L						< 2	< 2					
Methyl Methacrylate	2015-09	ug/L	< 2	< 2				< 2	< 2	< 2	< 2			
Methyl Methacrylate	2015-10	ug/L			< 2	< 2								
Methyl Methacrylate	2016-03	ug/L												
Methyl Methacrylate	2016-06	ug/L					< 2							
Methyl Methacrylate	2016-08	ug/L					< 2							
Methyl Methacrylate	2018-11	ug/L											< 2	
Methyl Methacrylate	2019-03	ug/L											< 2	
Methyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2			
Methyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl Methanesulfonate	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Methyl Methanesulfonate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Methyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Methyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Methyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Methyl Methanesulfonate	2012-03	ug/L												
Methyl Methanesulfonate	2012-09	ug/L												
Methyl Methanesulfonate	2013-03	ug/L												
Methyl Methanesulfonate	2015-06	ug/L						< 10.5	< 11.1					
Methyl Methanesulfonate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Methyl Methanesulfonate	2015-10	ug/L			< 10.3	< 10.5								
Methyl Methanesulfonate	2016-03	ug/L												
Methyl Methanesulfonate	2016-06	ug/L					< 11.4							
Methyl Methanesulfonate	2016-08	ug/L					< 11							
Methyl Methanesulfonate	2018-11	ug/L											< 11.6	
Methyl Methanesulfonate	2019-03	ug/L											< 12.2	
Methyl Methanesulfonate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Methyl Parathion	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl Parathion	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl Parathion	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Methyl Parathion	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Methyl Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Methyl Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Methyl Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Methyl Parathion	2011-09	ug/L		**0.188 J**										
Methyl Parathion	2012-03	ug/L		< 10.0										
Methyl Parathion	2012-09	ug/L		< 10.0										
Methyl Parathion	2013-03	ug/L		< 10.2										
Methyl Parathion	2013-09	ug/L		< 11.0										
Methyl Parathion	2015-06	ug/L						< 10.5	< 11.1					
Methyl Parathion	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Methyl Parathion	2015-10	ug/L			< 10.3	< 10.5								
Methyl Parathion	2016-03	ug/L												
Methyl Parathion	2016-06	ug/L					< 11.4							
Methyl Parathion	2016-08	ug/L					< 11							
Methyl Parathion	2018-11	ug/L											< 11.6	
Methyl Parathion	2019-03	ug/L											< 12.2	
Methyl Parathion	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Methylene Chloride	2008-08	ug/L	< 5	< 10	< 5	< 5	< 5	< 5	< 10	< 10	< 10	< 10	< 10	< 10
Methylene Chloride	2009-03	ug/L	< 5	< 5	**6.01**	< 5	< 5	< 5	**5.8**	< 5	**8.5**	< 5	< 5	< 5
Methylene Chloride	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
Methylene Chloride	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
Methylene Chloride	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2013-03	ug/L	< 5.00	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5	< 5	< 5
Methylene Chloride	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**0.185 J**
Methylene Chloride	2013-11	ug/L												
Methylene Chloride	2014-03	ug/L	< 5.00	< 5.00	< 5.00	**0.213 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00 J	< 5.00	< 5.00 J	< 5.00 J
Methylene Chloride	2014-06	ug/L												
Methylene Chloride	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5 J	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2015-03	ug/L	< 5.00	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00 J	< 5.00 J	< 5	< 5	< 5.00	< 5.00

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Methapyrilene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Methoxychlor	2008-08	ug/L	< 0.093	< 0.11									
Methoxychlor	2008-09	ug/L			< 0.016								
Methoxychlor	2009-03	ug/L	< 0.032	< 0.032	< 0.032								
Methoxychlor	2010-09	ug/L	< 0.0320	< 0.0320	< 0.0320								
Methoxychlor	2015-06	ug/L											
Methoxychlor	2015-09	ug/L	< 0.0344	< 0.0352	< 0.0352								
Methoxychlor	2015-10	ug/L				**0.00633 J**							
Methoxychlor	2016-03	ug/L			< 0.034	< 0.0356							
Methoxychlor	2016-06	ug/L											
Methoxychlor	2016-08	ug/L			< 0.0356	< 0.0327							
Methoxychlor	2018-11	ug/L											
Methoxychlor	2019-03	ug/L											
Methoxychlor	2020-08	ug/L	< 0.0376	< 0.039	< 0.039	< 0.0376							
Methyl Methacrylate	2008-08	ug/L	< 2	< 2	< 2								
Methyl Methacrylate	2009-03	ug/L	< 2	< 2	< 2								
Methyl Methacrylate	2009-07	ug/L	< 2	< 2									
Methyl Methacrylate	2009-09	ug/L	< 2.00	< 2.00	< 2.00								
Methyl Methacrylate	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Methyl Methacrylate	2010-09	ug/L	< 20.0	< 20.0	< 20.0								
Methyl Methacrylate	2011-03	ug/L	< 2.00	< 2.00	< 2.00								
Methyl Methacrylate	2012-09	ug/L											
Methyl Methacrylate	2015-06	ug/L											
Methyl Methacrylate	2015-09	ug/L	< 2	< 2	< 2								
Methyl Methacrylate	2015-10	ug/L				< 2							
Methyl Methacrylate	2016-03	ug/L			< 2	< 2							
Methyl Methacrylate	2016-06	ug/L											
Methyl Methacrylate	2016-08	ug/L			< 2	< 2							
Methyl Methacrylate	2018-11	ug/L											
Methyl Methacrylate	2019-03	ug/L											
Methyl Methacrylate	2020-08	ug/L	< 2	< 2	< 2	< 2							
Methyl Methanesulfonate	2008-08	ug/L	< 10	< 10	< 10								
Methyl Methanesulfonate	2009-03	ug/L	< 10	< 10	< 10								
Methyl Methanesulfonate	2009-07	ug/L	< 10	< 10	< 10.0								
Methyl Methanesulfonate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Methanesulfonate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Methanesulfonate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Methanesulfonate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Methanesulfonate	2012-03	ug/L			< 10.0								
Methyl Methanesulfonate	2012-09	ug/L			< 10.0								
Methyl Methanesulfonate	2013-03	ug/L			< 10.4								
Methyl Methanesulfonate	2015-06	ug/L											
Methyl Methanesulfonate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Methyl Methanesulfonate	2015-10	ug/L				< 10.6							
Methyl Methanesulfonate	2016-03	ug/L			< 10	< 10							
Methyl Methanesulfonate	2016-06	ug/L											
Methyl Methanesulfonate	2016-08	ug/L			< 11.1	< 11.5							
Methyl Methanesulfonate	2018-11	ug/L											
Methyl Methanesulfonate	2019-03	ug/L											
Methyl Methanesulfonate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Methyl Parathion	2008-08	ug/L	< 10	< 10	< 10								
Methyl Parathion	2009-03	ug/L	< 10	< 10	< 10								
Methyl Parathion	2009-07	ug/L	< 10	< 10	< 10.0								
Methyl Parathion	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Methyl Parathion	2011-09	ug/L			< 10.0								
Methyl Parathion	2012-03	ug/L			< 10.0								
Methyl Parathion	2012-09	ug/L			< 10.0								
Methyl Parathion	2013-03	ug/L			< 10.4								
Methyl Parathion	2013-09	ug/L											
Methyl Parathion	2015-06	ug/L											
Methyl Parathion	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Methyl Parathion	2015-10	ug/L				< 10.6							
Methyl Parathion	2016-03	ug/L			< 10	< 10							
Methyl Parathion	2016-06	ug/L											
Methyl Parathion	2016-08	ug/L			< 11.1	< 11.5							
Methyl Parathion	2018-11	ug/L											
Methyl Parathion	2019-03	ug/L											
Methyl Parathion	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Methylene Chloride	2008-08	ug/L	< 5	< 5	< 10								
Methylene Chloride	2009-03	ug/L	< 5	**7.56**	< 5								
Methylene Chloride	2009-07	ug/L	< 5	< 5									
Methylene Chloride	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2010-09	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2011-09	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2012-03	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2012-09	ug/L	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2013-03	ug/L	< 5	< 5	< 5.00								
Methylene Chloride	2013-09	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	**0.282 J**	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2013-11	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2014-03	ug/L	< 5.00 J	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2014-06	ug/L					< 5.00 J	< 5.00 J	< 5.00 J	< 5.00 J	< 5.00 J		
Methylene Chloride	2014-09	ug/L	< 5	< 5	< 5		**0.279 J**	< 5	< 5	< 5	< 5		
Methylene Chloride	2015-03	ug/L	< 5.00	< 5.00	< 5		< 5.00	< 5.00 J	< 5.00	< 5.00	< 5.00 J		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Methylene Chloride	2015-06	ug/L						< 5 J	< 5 J					
Methylene Chloride	2015-09	ug/L	< 5 J	< 5 J			< 5	< 5	< 5	< 5	< 5 J	< 5		
Methylene Chloride	2015-10	ug/L			< 5 J	< 5 J							< 5	< 5
Methylene Chloride	2016-03	ug/L	< 5	< 5	< 5	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	< 5	< 5	< 5	< 5
Methylene Chloride	2016-06	ug/L					< 5							
Methylene Chloride	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2017-11	ug/L												
Methylene Chloride	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2018-06	ug/L												
Methylene Chloride	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Methylene Chloride	2018-09	ug/L							< 5	< 5				
Methylene Chloride	2018-11	ug/L											< 5	
Methylene Chloride	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2019-04	ug/L												
Methylene Chloride	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methylene Chloride	2020-04	ug/L	< 5		< 5									
Methylene Chloride	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Methylene Chloride	2021-03	ug/L				< 5								
Methylene Chloride	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Methylene Chloride	2022-03	ug/L				< 5								
Methylene Chloride	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Methylene Chloride	2023-03	ug/L				< 5								
Methylene Chloride	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
Naphthalene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Naphthalene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Naphthalene	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
Naphthalene	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
Naphthalene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Naphthalene	2010-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00				< 5.00				
Naphthalene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00				< 5.00				
Naphthalene	2012-09	ug/L		< 5.00										
Naphthalene	2015-06	ug/L						< 5	< 5					
Naphthalene	2015-09	ug/L	< 5	< 5				< 5	< 5	< 5	< 5			
Naphthalene	2015-10	ug/L			< 5	< 5								
Naphthalene	2016-03	ug/L												
Naphthalene	2016-06	ug/L					< 5							
Naphthalene	2016-08	ug/L					< 5							
Naphthalene	2018-11	ug/L											< 5	
Naphthalene	2019-03	ug/L											< 5	
Naphthalene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			
Nickel	2008-08	mg/L	~~< 0.05~~	~~< 0.05~~	< 0.05	**~~0.105~~**	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	2009-03	mg/L	~~< 0.05~~	~~< 0.05~~	< 0.05	**~~0.131~~**	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	2009-07	mg/L	~~< 0.05~~	~~< 0.05~~	< 0.05	**~~0.092~~**		~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	2009-09	mg/L	~~< 0.0500~~	~~< 0.05~~		**~~0.114~~**		~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	< 0.05	< 0.05		
Nickel	2010-03	mg/L	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	**~~0.149~~**	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2010-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	**~~0.0789~~**	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2011-03	mg/L	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	**~~0.0615~~**	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2011-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	**~~0.0547~~**	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2012-03	mg/L	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	**~~0.0649~~**	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2012-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2013-03	mg/L	**~~0.0192 J~~**	**~~0.0222 J~~**	< 0.05	**~~0.115~~**	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~	**~~0.04 J~~**	< 0.0500	< 0.05	< 0.05	< 0.05
Nickel	2013-09	mg/L	**~~0.0235 J~~**	~~< 0.0500 J~~	< 0.0500	**~~0.0241 J~~**	**~~0.00769 J~~**	**~~0.0125 J~~**	**~~0.0124 J~~**	**~~0.0232 J~~**	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2013-11	mg/L												
Nickel	2014-03	mg/L	**~~0.0268 J~~**	**~~0.0293 J~~**	**0.00302 J**	**~~0.0253 J~~**	**~~0.00301 J~~**	**~~0.00909 J~~**	**~~0.00928 J~~**	**~~0.0397 J~~**	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Nickel	2014-06	mg/L												
Nickel	2014-09	mg/L	**0.0229**	**0.0112**	**0.00243 J**	**0.0369**	**0.00305 J**	**0.00832**	**0.0161**	**0.0291**	< 0.005	< 0.005	**0.000689 J**	< 0.005
Nickel	2015-03	mg/L	**0.0255**	**0.0285**	**0.00168 J**	**0.0577**	**0.00461 J**	**0.0119**	**0.00724**	**0.0268**	< 0.005	< 0.005	**0.00122 J**	< 0.00500
Nickel	2015-06	mg/L						**0.011**	**0.0075**					
Nickel	2015-09	mg/L	**0.027**	**0.0209**			**0.00688**	**0.0091**	**0.0074**	**0.0254**	< 0.005	< 0.005		
Nickel	2015-10	mg/L			**0.00394 J**	**0.0178**							**0.000672 J**	**0.00131 J**
Nickel	2016-03	mg/L	**0.0274**	**0.0294**	**0.00321 J**	**0.0156**	**0.00559**	**0.016**	**0.00738**	**0.0376**	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	2016-06	mg/L					**0.00626**							
Nickel	2016-08	mg/L	**0.0266**	**0.0201**	**0.00292 J**	**0.0186**	**0.00422 J**	**0.00815**	**0.00739**	**0.0247**	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	2017-03	mg/L	**0.0259**	**0.0175**	**0.00429 J**	**0.0156**	**0.00615**	**0.00946**	**0.00497 J**	**0.0405**	< 0.005	< 0.005	**0.00128 J**	< 0.005
Nickel	2017-08	mg/L	**0.0256**	**0.0182**	**0.00334 J**	**0.0152**	**0.00467 J**	**0.011**	**0.00732**	**0.0275**	< 0.005	< 0.005	**0.00128 J**	< 0.005
Nickel	2017-11	mg/L												
Nickel	2018-03	mg/L	**0.0276**	**0.029**	**0.00215 J**	**0.0158**	**0.00615**	**0.012**	**0.00884**	**0.0305**	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	2018-06	mg/L												
Nickel	2018-08	mg/L	**0.025**	**0.0208**	**0.0039 J**	**0.011**	**0.00754**	**0.0125**			< 0.005	< 0.005	**0.00133 J**	< 0.005
Nickel	2018-09	mg/L							**0.00907**	**0.0301**				
Nickel	2018-11	mg/L											**0.00123 J**	
Nickel	2019-03	mg/L	**0.0274**	**0.0169**	**0.00354 J**	**0.0255**	**0.00831**	**0.0119**	**0.0134**	**0.0447**	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	2019-04	mg/L												
Nickel	2019-08	mg/L	**0.029**	**0.0185**	**0.00404 J**	**0.0179**	**0.0066**	**0.0114**	**0.00942**	**0.0316**	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	2020-03	mg/L		**0.0283**		**0.0117**	< 0.02	**0.0102**	**0.0079 J**	**0.0435**	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	2020-04	mg/L	**0.0231**		**0.00302 J**									
Nickel	2020-08	mg/L	**0.0312**	**0.0177**	**0.00432 J**	**0.0129**	**0.00957**	**0.011**	**0.0109**	**0.036**	< 0.005			< 0.005
Nickel	2021-03	mg/L				**0.0114**								
Nickel	2021-08	mg/L	**0.027**	**0.0287**	**0.00429 J**	**0.0136**	**0.00901**	**0.00937**	**0.0105**	**0.0343**	< 0.005			< 0.005
Nickel	2022-03	mg/L				**0.024**								
Nickel	2022-08	mg/L	**0.0282**	**0.0159**	**0.0043 J**	**0.0134**	**0.0121**	**0.00815**	**0.0131**	**0.0301**	< 0.005			< 0.005
Nickel	2023-03	mg/L				**0.0156**								
Nickel	2023-08	mg/L	**0.0318**	**0.0217**	**0.00389 J**	**0.0171**	**0.0104**	**0.00671**	**0.015**	**0.0314**	< 0.005			< 0.005
Nitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Nitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Methylene Chloride	2015-06	ug/L											
Methylene Chloride	2015-09	ug/L	< 5 J	< 5	< 5								
Methylene Chloride	2015-10	ug/L				< 5	< 5	< 5		< 5 J	< 5		
Methylene Chloride	2016-03	ug/L	< 5	< 5	< 5	< 5 J	< 5 J	< 5		< 5	< 5		
Methylene Chloride	2016-06	ug/L											
Methylene Chloride	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Methylene Chloride	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Methylene Chloride	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
Methylene Chloride	2017-11	ug/L										**0.197 J**	< 5
Methylene Chloride	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Methylene Chloride	2018-06	ug/L										< 5	< 5
Methylene Chloride	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
Methylene Chloride	2018-09	ug/L									< 5	< 5	< 5
Methylene Chloride	2018-11	ug/L										< 5	< 5
Methylene Chloride	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
Methylene Chloride	2019-04	ug/L											< 5
Methylene Chloride	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Methylene Chloride	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
Methylene Chloride	2020-04	ug/L											
Methylene Chloride	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Methylene Chloride	2021-03	ug/L	< 5		< 5	< 5							< 5
Methylene Chloride	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Methylene Chloride	2022-03	ug/L	< 5		< 5	< 5							< 5
Methylene Chloride	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Methylene Chloride	2023-03	ug/L	< 5		< 5	< 5							< 5
Methylene Chloride	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
Naphthalene	2008-08	ug/L	< 5	< 5	< 5								
Naphthalene	2009-03	ug/L	< 5	< 5	< 5								
Naphthalene	2009-07	ug/L	< 5	< 5									
Naphthalene	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
Naphthalene	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
Naphthalene	2010-09	ug/L	< 5.00	< 5.00	< 5.00								
Naphthalene	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
Naphthalene	2012-09	ug/L											
Naphthalene	2015-06	ug/L											
Naphthalene	2015-09	ug/L	< 5	< 5	< 5								
Naphthalene	2015-10	ug/L				< 5							
Naphthalene	2016-03	ug/L			< 5	< 5							
Naphthalene	2016-06	ug/L											
Naphthalene	2016-08	ug/L			< 5	< 5							
Naphthalene	2018-11	ug/L											
Naphthalene	2019-03	ug/L											
Naphthalene	2020-08	ug/L	< 5	< 5	< 5	< 5							
Nickel	2008-08	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~								
Nickel	2009-03	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~								
Nickel	2009-07	mg/L	~~< 0.05~~	~~< 0.05~~	~~< 0.05~~								
Nickel	2009-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2010-03	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2010-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2011-03	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2011-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2012-03	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2012-09	mg/L	~~< 0.0500~~	~~< 0.0500~~	~~< 0.0500~~								
Nickel	2013-03	mg/L	~~< 0.05~~	**~~0.00233 J~~**	~~< 0.0500~~								
Nickel	2013-09	mg/L	~~< 0.0500 J~~	~~< 0.0500 J~~	~~< 0.0500~~	~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	**0.00225 J**	**0.00901 J**		
Nickel	2013-11	mg/L				**~~0.0128 J~~**	< 0.0500	< 0.0500	**0.00519 J**	**0.00978 J**	**0.0123 J**		
Nickel	2014-03	mg/L	**~~0.00519 J~~**	**~~0.00871 J~~**	~~< 0.0500 J~~	**~~0.00205 J~~**	< 0.0500 J	< 0.0500 J	< 0.0500	**0.0102 J**	< 0.0500 J		
Nickel	2014-06	mg/L				~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	**0.00918 J**	**0.00805 J**		
Nickel	2014-09	mg/L	**0.00447 J**	**0.00653**	**0.00377 J**	**~~0.00377 J~~**	**0.00187 J**	< 0.005	**0.00194 J**	**0.0104**	**0.0116**		
Nickel	2015-03	mg/L	**0.00663**	**0.00703**	**0.000748 J**	**~~0.00114 J~~**	**0.00248 J**	**0.00356 J**	**0.00345 J**	**0.0111**	**0.0104**		
Nickel	2015-06	mg/L											
Nickel	2015-09	mg/L	**0.0078**	**0.00904**	< 0.005 J								
Nickel	2015-10	mg/L				**0.00328 J**	**0.00253 J**	**0.00248 J**		**0.0119**	**0.0108**		
Nickel	2016-03	mg/L	**0.00725**	**0.00632**	< 0.005	**0.00259 J**	**0.00207 J**	**0.00361 J**		**0.0114**	**0.00946**		
Nickel	2016-06	mg/L											
Nickel	2016-08	mg/L	**0.0068**	**0.00693**	< 0.005	**0.00276 J**	**0.00207 J**	**0.00316 J**		**0.0107**	**0.0104**		
Nickel	2017-03	mg/L	**0.00647**	**0.00693**	< 0.005	**0.00735**	**0.00246 J**	**0.00633**		**0.0123**	**0.0155**		
Nickel	2017-08	mg/L	**0.00736**	**0.00881**	< 0.005	**0.00304 J**	**0.00185 J**	**0.00378 J**		**0.0108**	**0.0174**		
Nickel	2017-11	mg/L										**0.00632**	**0.0468**
Nickel	2018-03	mg/L	**0.0076**	**0.00726**	< 0.005	**0.00308 J**	**0.00207 J**	< 0.005		**0.0105**	**0.0128**	**0.00578**	**0.0394**
Nickel	2018-06	mg/L										**0.00849**	**0.0463**
Nickel	2018-08	mg/L	**0.00684**	**0.0106**	< 0.005	**0.00199 J**		**0.00429 J**		**0.0109**			
Nickel	2018-09	mg/L									**0.0124**	**0.00918**	**0.041**
Nickel	2018-11	mg/L										**0.0104**	**0.0369**
Nickel	2019-03	mg/L	**0.00916**	**0.0086**	< 0.005	**0.00389 J**		**0.00422 J**	**0.00208 J**	**0.0115**	**0.0116**	**0.0105**	
Nickel	2019-04	mg/L											**0.0324**
Nickel	2019-08	mg/L	**0.00806**	**0.0107**	< 0.005	**0.00253 J**	**0.00241 J**	**0.00462 J**		**0.0139**	**0.0206**	**0.00955**	**0.0347**
Nickel	2020-03	mg/L	**0.00818**	**0.0111**	< 0.005	**0.00247 J**	< 0.005	**0.00358 J**		**0.0117**	**0.0138**	**0.00893**	**0.0387**
Nickel	2020-04	mg/L											
Nickel	2020-08	mg/L	**0.00797**	**0.00987**	< 0.005	**0.00242 J**	**0.00213 J**			**0.016**	**0.0147**	**0.00623**	**0.0374**
Nickel	2021-03	mg/L	**0.0075**		< 0.005	< 0.005							**0.037**
Nickel	2021-08	mg/L	**0.0052**	**0.00744**	< 0.005	**0.00266 J**	**0.0026 J**			**0.0148**	**0.0314**	**0.00782**	**0.0357**
Nickel	2022-03	mg/L	**0.00547**		< 0.005	**0.00276 J**							**0.0328**
Nickel	2022-08	mg/L	**0.00588**	**0.0076**	< 0.005	**0.00206 J**	**0.00235 J**			**0.00983**	**0.0158**	**0.00903**	**0.0384**
Nickel	2023-03	mg/L	**0.00555**		< 0.005	**0.00305 J**							**0.0366**
Nickel	2023-08	mg/L	**0.00841**	**0.00711**	< 0.005	**0.00268 J**	**0.0024 J**			**0.0108**	**0.0126**	**0.00619**	**0.0347**
Nitrobenzene	2008-08	ug/L	< 10	< 10	< 10								
Nitrobenzene	2009-03	ug/L	< 10	< 10	< 10								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Nitrobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Nitrobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Nitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Nitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Nitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Nitrobenzene	2012-03	ug/L												
Nitrobenzene	2012-09	ug/L												
Nitrobenzene	2013-03	ug/L												
Nitrobenzene	2015-06	ug/L						< 10.5	< 11.1					
Nitrobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Nitrobenzene	2015-10	ug/L			< 10.3	< 10.5								
Nitrobenzene	2016-03	ug/L												
Nitrobenzene	2016-06	ug/L					< 11.4							
Nitrobenzene	2016-08	ug/L					< 11							
Nitrobenzene	2018-11	ug/L											< 11.6	
Nitrobenzene	2019-03	ug/L											< 12.2	
Nitrobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosodiethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiethylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosodiethylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosodiethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosodiethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodiethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodiethylamine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosodiethylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosodiethylamine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosodiethylamine	2016-03	ug/L												
N-Nitrosodiethylamine	2016-06	ug/L					< 11.4							
N-Nitrosodiethylamine	2016-08	ug/L					< 11							
N-Nitrosodiethylamine	2018-11	ug/L											< 11.6	
N-Nitrosodiethylamine	2019-03	ug/L											< 12.2	
N-Nitrosodiethylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosodimethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodimethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodimethylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosodimethylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosodimethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosodimethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodimethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodimethylamine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosodimethylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosodimethylamine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosodimethylamine	2016-03	ug/L												
N-Nitrosodimethylamine	2016-06	ug/L					< 11.4							
N-Nitrosodimethylamine	2016-08	ug/L					< 11							
N-Nitrosodimethylamine	2018-11	ug/L											< 11.6	
N-Nitrosodimethylamine	2019-03	ug/L											< 12.2	
N-Nitrosodimethylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosodi-n-butylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-butylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-butylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosodi-n-butylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosodi-n-butylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosodi-n-butylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodi-n-butylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodi-n-butylamine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosodi-n-butylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosodi-n-butylamine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosodi-n-butylamine	2016-03	ug/L												
N-Nitrosodi-n-butylamine	2016-06	ug/L					< 11.4							
N-Nitrosodi-n-butylamine	2016-08	ug/L					< 11							
N-Nitrosodi-n-butylamine	2018-11	ug/L											< 11.6	
N-Nitrosodi-n-butylamine	2019-03	ug/L											< 12.2	
N-Nitrosodi-n-butylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosodi-n-propylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-propylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodi-n-propylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosodi-n-propylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosodi-n-propylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosodi-n-propylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodi-n-propylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodi-n-propylamine	2012-03	ug/L												
N-Nitrosodi-n-propylamine	2012-09	ug/L												
N-Nitrosodi-n-propylamine	2013-03	ug/L												
N-Nitrosodi-n-propylamine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosodi-n-propylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosodi-n-propylamine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosodi-n-propylamine	2016-03	ug/L												
N-Nitrosodi-n-propylamine	2016-06	ug/L					< 11.4							
N-Nitrosodi-n-propylamine	2016-08	ug/L					< 11							
N-Nitrosodi-n-propylamine	2018-11	ug/L											< 11.6	
N-Nitrosodi-n-propylamine	2019-03	ug/L											< 12.2	
N-Nitrosodi-n-propylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosodiphenylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiphenylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosodiphenylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosodiphenylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Nitrobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
Nitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Nitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Nitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Nitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Nitrobenzene	2012-03	ug/L			< 10.0								
Nitrobenzene	2012-09	ug/L			< 10.0								
Nitrobenzene	2013-03	ug/L			< 10.4								
Nitrobenzene	2015-06	ug/L											
Nitrobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Nitrobenzene	2015-10	ug/L				< 10.6							
Nitrobenzene	2016-03	ug/L			< 10	< 10							
Nitrobenzene	2016-06	ug/L											
Nitrobenzene	2016-08	ug/L			< 11.1	< 11.5							
Nitrobenzene	2018-11	ug/L											
Nitrobenzene	2019-03	ug/L											
Nitrobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosodiethylamine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosodiethylamine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosodiethylamine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosodiethylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiethylamine	2015-06	ug/L											
N-Nitrosodiethylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosodiethylamine	2015-10	ug/L				< 10.6							
N-Nitrosodiethylamine	2016-03	ug/L			< 10	< 10							
N-Nitrosodiethylamine	2016-06	ug/L											
N-Nitrosodiethylamine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosodiethylamine	2018-11	ug/L											
N-Nitrosodiethylamine	2019-03	ug/L											
N-Nitrosodiethylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosodimethylamine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosodimethylamine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosodimethylamine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosodimethylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodimethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodimethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodimethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodimethylamine	2015-06	ug/L											
N-Nitrosodimethylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosodimethylamine	2015-10	ug/L				< 10.6							
N-Nitrosodimethylamine	2016-03	ug/L			< 10	< 10							
N-Nitrosodimethylamine	2016-06	ug/L											
N-Nitrosodimethylamine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosodimethylamine	2018-11	ug/L											
N-Nitrosodimethylamine	2019-03	ug/L											
N-Nitrosodimethylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosodi-n-butylamine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosodi-n-butylamine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosodi-n-butylamine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosodi-n-butylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-butylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-butylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-butylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-butylamine	2015-06	ug/L											
N-Nitrosodi-n-butylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosodi-n-butylamine	2015-10	ug/L				< 10.6							
N-Nitrosodi-n-butylamine	2016-03	ug/L			< 10	< 10							
N-Nitrosodi-n-butylamine	2016-06	ug/L											
N-Nitrosodi-n-butylamine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosodi-n-butylamine	2018-11	ug/L											
N-Nitrosodi-n-butylamine	2019-03	ug/L											
N-Nitrosodi-n-butylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosodi-n-propylamine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosodi-n-propylamine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosodi-n-propylamine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosodi-n-propylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-propylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-propylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-propylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodi-n-propylamine	2012-03	ug/L			< 10.0								
N-Nitrosodi-n-propylamine	2012-09	ug/L			< 10.0								
N-Nitrosodi-n-propylamine	2013-03	ug/L			< 10.4								
N-Nitrosodi-n-propylamine	2015-06	ug/L											
N-Nitrosodi-n-propylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosodi-n-propylamine	2015-10	ug/L				< 10.6							
N-Nitrosodi-n-propylamine	2016-03	ug/L			< 10	< 10							
N-Nitrosodi-n-propylamine	2016-06	ug/L											
N-Nitrosodi-n-propylamine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosodi-n-propylamine	2018-11	ug/L											
N-Nitrosodi-n-propylamine	2019-03	ug/L											
N-Nitrosodi-n-propylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosodiphenylamine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosodiphenylamine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosodiphenylamine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosodiphenylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
N-Nitrosodiphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosodiphenylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodiphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosodiphenylamine	2012-03	ug/L												
N-Nitrosodiphenylamine	2012-09	ug/L												
N-Nitrosodiphenylamine	2013-03	ug/L												
N-Nitrosodiphenylamine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosodiphenylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosodiphenylamine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosodiphenylamine	2016-03	ug/L												
N-Nitrosodiphenylamine	2016-06	ug/L					< 11.4							
N-Nitrosodiphenylamine	2016-08	ug/L					< 11							
N-Nitrosodiphenylamine	2018-11	ug/L											< 11.6	
N-Nitrosodiphenylamine	2019-03	ug/L											< 12.2	
N-Nitrosodiphenylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosomethylethylamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosomethylethylamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosomethylethylamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosomethylethylamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosomethylethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosomethylethylamine	2010-09	ug/L	< 10.0	< 10.0	**0.204 J**	< 10.0				< 10.0				
N-Nitrosomethylethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosomethylethylamine	2011-09	ug/L			< 10.0									
N-Nitrosomethylethylamine	2012-03	ug/L			< 10.0									
N-Nitrosomethylethylamine	2012-09	ug/L			< 10.0									
N-Nitrosomethylethylamine	2013-03	ug/L			< 10.6									
N-Nitrosomethylethylamine	2013-09	ug/L			< 10.8									
N-Nitrosomethylethylamine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosomethylethylamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosomethylethylamine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosomethylethylamine	2016-03	ug/L												
N-Nitrosomethylethylamine	2016-06	ug/L					< 11.4							
N-Nitrosomethylethylamine	2016-08	ug/L					< 11							
N-Nitrosomethylethylamine	2018-11	ug/L											< 11.6	
N-Nitrosomethylethylamine	2019-03	ug/L											< 12.2	
N-Nitrosomethylethylamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosopiperidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosopiperidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosopiperidine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosopiperidine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosopiperidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosopiperidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosopiperidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosopiperidine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosopiperidine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosopiperidine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosopiperidine	2016-03	ug/L												
N-Nitrosopiperidine	2016-06	ug/L					< 11.4							
N-Nitrosopiperidine	2016-08	ug/L					< 11							
N-Nitrosopiperidine	2018-11	ug/L											< 11.6	
N-Nitrosopiperidine	2019-03	ug/L											< 12.2	
N-Nitrosopiperidine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
N-Nitrosopyrrolidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosopyrrolidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
N-Nitrosopyrrolidine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
N-Nitrosopyrrolidine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
N-Nitrosopyrrolidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
N-Nitrosopyrrolidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosopyrrolidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
N-Nitrosopyrrolidine	2015-06	ug/L						< 10.5	< 11.1					
N-Nitrosopyrrolidine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
N-Nitrosopyrrolidine	2015-10	ug/L			< 10.3	< 10.5								
N-Nitrosopyrrolidine	2016-03	ug/L												
N-Nitrosopyrrolidine	2016-06	ug/L					< 11.4							
N-Nitrosopyrrolidine	2016-08	ug/L					< 11							
N-Nitrosopyrrolidine	2018-11	ug/L											< 11.6	
N-Nitrosopyrrolidine	2019-03	ug/L											< 12.2	
N-Nitrosopyrrolidine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
o,o,o-Triethylphosphorothioate	2008-08	ug/L	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30
o,o,o-Triethylphosphorothioate	2009-03	ug/L	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30
o,o,o-Triethylphosphorothioate	2009-07	ug/L	< 30	< 30	< 30	< 30	< 30	< 30	< 30.0	< 30.0	< 30	< 30	< 30	< 30.0
o,o,o-Triethylphosphorothioate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
o,o,o-Triethylphosphorothioate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
o,o,o-Triethylphosphorothioate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
o,o,o-Triethylphosphorothioate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
o,o,o-Triethylphosphorothioate	2015-06	ug/L						< 10.5	< 11.1					
o,o,o-Triethylphosphorothioate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
o,o,o-Triethylphosphorothioate	2015-10	ug/L			< 10.3	< 10.5								
o,o,o-Triethylphosphorothioate	2016-03	ug/L												
o,o,o-Triethylphosphorothioate	2016-06	ug/L					< 11.4							
o,o,o-Triethylphosphorothioate	2016-08	ug/L					< 11							
o,o,o-Triethylphosphorothioate	2018-11	ug/L											< 11.6	
o,o,o-Triethylphosphorothioate	2019-03	ug/L											< 12.2	
o,o,o-Triethylphosphorothioate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
o-Toluidine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
o-Toluidine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
o-Toluidine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
o-Toluidine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
N-Nitrosodiphenylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiphenylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiphenylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosodiphenylamine	2012-03	ug/L			< 10.0								
N-Nitrosodiphenylamine	2012-09	ug/L			< 10.0								
N-Nitrosodiphenylamine	2013-03	ug/L			< 10.4								
N-Nitrosodiphenylamine	2015-06	ug/L											
N-Nitrosodiphenylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosodiphenylamine	2015-10	ug/L				< 10.6							
N-Nitrosodiphenylamine	2016-03	ug/L			< 10	< 10							
N-Nitrosodiphenylamine	2016-06	ug/L											
N-Nitrosodiphenylamine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosodiphenylamine	2018-11	ug/L											
N-Nitrosodiphenylamine	2019-03	ug/L											
N-Nitrosodiphenylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosomethylethylamine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosomethylethylamine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosomethylethylamine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosomethylethylamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosomethylethylamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosomethylethylamine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosomethylethylamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosomethylethylamine	2011-09	ug/L			< 10.0								
N-Nitrosomethylethylamine	2012-03	ug/L			< 10.0								
N-Nitrosomethylethylamine	2012-09	ug/L			< 10.0								
N-Nitrosomethylethylamine	2013-03	ug/L			< 10.4								
N-Nitrosomethylethylamine	2013-09	ug/L											
N-Nitrosomethylethylamine	2015-06	ug/L											
N-Nitrosomethylethylamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosomethylethylamine	2015-10	ug/L				< 10.6							
N-Nitrosomethylethylamine	2016-03	ug/L			< 10	< 10							
N-Nitrosomethylethylamine	2016-06	ug/L											
N-Nitrosomethylethylamine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosomethylethylamine	2018-11	ug/L											
N-Nitrosomethylethylamine	2019-03	ug/L											
N-Nitrosomethylethylamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosopiperidine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosopiperidine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosopiperidine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosopiperidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopiperidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopiperidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopiperidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopiperidine	2015-06	ug/L											
N-Nitrosopiperidine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosopiperidine	2015-10	ug/L				< 10.6							
N-Nitrosopiperidine	2016-03	ug/L			< 10	< 10							
N-Nitrosopiperidine	2016-06	ug/L											
N-Nitrosopiperidine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosopiperidine	2018-11	ug/L											
N-Nitrosopiperidine	2019-03	ug/L											
N-Nitrosopiperidine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
N-Nitrosopyrrolidine	2008-08	ug/L	< 10	< 10	< 10								
N-Nitrosopyrrolidine	2009-03	ug/L	< 10	< 10	< 10								
N-Nitrosopyrrolidine	2009-07	ug/L	< 10	< 10	< 10.0								
N-Nitrosopyrrolidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopyrrolidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopyrrolidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopyrrolidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
N-Nitrosopyrrolidine	2015-06	ug/L											
N-Nitrosopyrrolidine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
N-Nitrosopyrrolidine	2015-10	ug/L				< 10.6							
N-Nitrosopyrrolidine	2016-03	ug/L			< 10	< 10							
N-Nitrosopyrrolidine	2016-06	ug/L											
N-Nitrosopyrrolidine	2016-08	ug/L			< 11.1	< 11.5							
N-Nitrosopyrrolidine	2018-11	ug/L											
N-Nitrosopyrrolidine	2019-03	ug/L											
N-Nitrosopyrrolidine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
o,o,o-Triethylphosphorothioate	2008-08	ug/L	< 30	< 30	< 30								
o,o,o-Triethylphosphorothioate	2009-03	ug/L	< 30	< 30	< 30								
o,o,o-Triethylphosphorothioate	2009-07	ug/L	< 30	< 30	< 30.0								
o,o,o-Triethylphosphorothioate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
o,o,o-Triethylphosphorothioate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
o,o,o-Triethylphosphorothioate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
o,o,o-Triethylphosphorothioate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
o,o,o-Triethylphosphorothioate	2015-06	ug/L											
o,o,o-Triethylphosphorothioate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
o,o,o-Triethylphosphorothioate	2015-10	ug/L				< 10.6							
o,o,o-Triethylphosphorothioate	2016-03	ug/L			< 10	< 10							
o,o,o-Triethylphosphorothioate	2016-06	ug/L											
o,o,o-Triethylphosphorothioate	2016-08	ug/L			< 11.1	< 11.5							
o,o,o-Triethylphosphorothioate	2018-11	ug/L											
o,o,o-Triethylphosphorothioate	2019-03	ug/L											
o,o,o-Triethylphosphorothioate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
o-Toluidine	2008-08	ug/L	< 10	< 10	< 10								
o-Toluidine	2009-03	ug/L	< 10	< 10	< 10								
o-Toluidine	2009-07	ug/L	< 10	< 10	< 10.0								
o-Toluidine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
o-Toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
o-Toluidine	2010-09	ug/L	< 10.0	**0.185 J**	< 10.0	< 10.0				< 10.0				
o-Toluidine	2011-03	ug/L	< 10.0	**0.204 J**	< 10.0	< 10.0				< 10.0				
o-Toluidine	2011-09	ug/L		**0.187 J**										
o-Toluidine	2012-03	ug/L		**0.222 J**										
o-Toluidine	2012-09	ug/L		< 10.0										
o-Toluidine	2013-03	ug/L		**0.369 J**										
o-Toluidine	2013-09	ug/L		< 11.0										
o-Toluidine	2015-06	ug/L						< 10.5	< 11.1					
o-Toluidine	2015-09	ug/L	< 11.1	**0.234 J**				< 11.1	< 10.2	< 11.2	< 11.1			
o-Toluidine	2015-10	ug/L			< 10.3	< 10.5								
o-Toluidine	2016-03	ug/L												
o-Toluidine	2016-06	ug/L					< 11.4							
o-Toluidine	2016-08	ug/L					< 11							
o-Toluidine	2018-11	ug/L											< 11.6	
o-Toluidine	2019-03	ug/L											< 12.2	
o-Toluidine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
p-(Dimethylamino)azobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
p-(Dimethylamino)azobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
p-(Dimethylamino)azobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
p-(Dimethylamino)azobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
p-(Dimethylamino)azobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
p-(Dimethylamino)azobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
p-(Dimethylamino)azobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
p-(Dimethylamino)azobenzene	2015-06	ug/L						< 10.5	< 11.1					
p-(Dimethylamino)azobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
p-(Dimethylamino)azobenzene	2015-10	ug/L			< 10.3	< 10.5								
p-(Dimethylamino)azobenzene	2016-03	ug/L												
p-(Dimethylamino)azobenzene	2016-06	ug/L					< 11.4							
p-(Dimethylamino)azobenzene	2016-08	ug/L					< 11							
p-(Dimethylamino)azobenzene	2018-11	ug/L											< 11.6	
p-(Dimethylamino)azobenzene	2019-03	ug/L											< 12.2	
p-(Dimethylamino)azobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Parathion	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Parathion	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Parathion	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Parathion	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Parathion	2010-09	ug/L	< 10.0	**0.182 J**	< 10.0	< 10.0				< 10.0				
Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Parathion	2011-09	ug/L		< 10.0										
Parathion	2012-03	ug/L		< 10.0										
Parathion	2012-09	ug/L		< 10.0										
Parathion	2013-03	ug/L		< 10.2										
Parathion	2013-09	ug/L		< 11.0										
Parathion	2015-06	ug/L						< 10.5	< 11.1					
Parathion	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Parathion	2015-10	ug/L			< 10.3	< 10.5								
Parathion	2016-03	ug/L												
Parathion	2016-06	ug/L					< 11.4							
Parathion	2016-08	ug/L					< 11							
Parathion	2018-11	ug/L											< 11.6	
Parathion	2019-03	ug/L											< 12.2	
Parathion	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
PCBs - Aroclor 1016	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1016	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1016	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1016	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1016	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1016	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1016	2016-03	ug/L												
PCBs - Aroclor 1016	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1016	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1016	2018-11	ug/L											< 0.92	
PCBs - Aroclor 1016	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1016	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
PCBs - Aroclor 1221	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1221	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1221	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1221	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1221	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1221	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1221	2016-03	ug/L												
PCBs - Aroclor 1221	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1221	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1221	2018-11	ug/L											< 0.92	
PCBs - Aroclor 1221	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1221	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
PCBs - Aroclor 1232	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1232	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1232	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1232	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1232	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1232	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1232	2016-03	ug/L												
PCBs - Aroclor 1232	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1232	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1232	2018-11	ug/L											< 0.92	

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
o-Toluidine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
o-Toluidine	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
o-Toluidine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
o-Toluidine	2011-09	ug/L			< 10.0								
o-Toluidine	2012-03	ug/L			< 10.0								
o-Toluidine	2012-09	ug/L	< 10.0		< 10.0								
o-Toluidine	2013-03	ug/L			< 10.4								
o-Toluidine	2013-09	ug/L											
o-Toluidine	2015-06	ug/L											
o-Toluidine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
o-Toluidine	2015-10	ug/L				< 10.6							
o-Toluidine	2016-03	ug/L			< 10	< 10							
o-Toluidine	2016-06	ug/L											
o-Toluidine	2016-08	ug/L			< 11.1	< 11.5							
o-Toluidine	2018-11	ug/L											
o-Toluidine	2019-03	ug/L											
o-Toluidine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
p-(Dimethylamino)azobenzene	2008-08	ug/L	< 10	< 10	< 10								
p-(Dimethylamino)azobenzene	2009-03	ug/L	< 10	< 10	< 10								
p-(Dimethylamino)azobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
p-(Dimethylamino)azobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
p-(Dimethylamino)azobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
p-(Dimethylamino)azobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
p-(Dimethylamino)azobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
p-(Dimethylamino)azobenzene	2015-06	ug/L											
p-(Dimethylamino)azobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
p-(Dimethylamino)azobenzene	2015-10	ug/L				< 10.6							
p-(Dimethylamino)azobenzene	2016-03	ug/L			< 10	< 10							
p-(Dimethylamino)azobenzene	2016-06	ug/L											
p-(Dimethylamino)azobenzene	2016-08	ug/L			< 11.1	< 11.5							
p-(Dimethylamino)azobenzene	2018-11	ug/L											
p-(Dimethylamino)azobenzene	2019-03	ug/L											
p-(Dimethylamino)azobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Parathion	2008-08	ug/L	< 10	< 10	< 10								
Parathion	2009-03	ug/L	< 10	< 10	< 10								
Parathion	2009-07	ug/L	< 10	< 10	< 10.0								
Parathion	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Parathion	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Parathion	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Parathion	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Parathion	2011-09	ug/L			< 10.0								
Parathion	2012-03	ug/L			< 10.0								
Parathion	2012-09	ug/L			< 10.0								
Parathion	2013-03	ug/L			< 10.4								
Parathion	2013-09	ug/L											
Parathion	2015-06	ug/L											
Parathion	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Parathion	2015-10	ug/L				< 10.6							
Parathion	2016-03	ug/L			< 10	< 10							
Parathion	2016-06	ug/L											
Parathion	2016-08	ug/L			< 11.1	< 11.5							
Parathion	2018-11	ug/L											
Parathion	2019-03	ug/L											
Parathion	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
PCBs - Aroclor 1016	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1016	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1016	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1016	2015-06	ug/L											
PCBs - Aroclor 1016	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1016	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1016	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1016	2016-06	ug/L											
PCBs - Aroclor 1016	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1016	2018-11	ug/L											
PCBs - Aroclor 1016	2019-03	ug/L											
PCBs - Aroclor 1016	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
PCBs - Aroclor 1221	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1221	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1221	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1221	2015-06	ug/L											
PCBs - Aroclor 1221	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1221	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1221	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1221	2016-06	ug/L											
PCBs - Aroclor 1221	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1221	2018-11	ug/L											
PCBs - Aroclor 1221	2019-03	ug/L											
PCBs - Aroclor 1221	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
PCBs - Aroclor 1232	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1232	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1232	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1232	2015-06	ug/L											
PCBs - Aroclor 1232	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1232	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1232	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1232	2016-06	ug/L											
PCBs - Aroclor 1232	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1232	2018-11	ug/L											

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
PCBs - Aroclor 1232	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1232	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
PCBs - Aroclor 1242	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1242	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1242	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1242	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1242	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1242	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1242	2016-03	ug/L												
PCBs - Aroclor 1242	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1242	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1242	2018-11	ug/L											< 0.92	
PCBs - Aroclor 1242	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1242	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
PCBs - Aroclor 1248	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1248	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1248	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1248	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1248	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1248	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1248	2016-03	ug/L												
PCBs - Aroclor 1248	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1248	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1248	2018-11	ug/L											< 0.92	
PCBs - Aroclor 1248	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1248	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
PCBs - Aroclor 1254	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1254	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1254	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1254	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1254	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1254	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1254	2016-03	ug/L												
PCBs - Aroclor 1254	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1254	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1254	2018-11	ug/L											< 0.92	
PCBs - Aroclor 1254	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1254	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
PCBs - Aroclor 1260	2008-08	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1260	2009-03	ug/L	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
PCBs - Aroclor 1260	2010-09	ug/L	< 0.800	< 0.800	< 0.800	< 0.800 UJ				< 0.800				
PCBs - Aroclor 1260	2015-06	ug/L						< 0.889	< 0.8					
PCBs - Aroclor 1260	2015-09	ug/L	< 0.879	< 0.808				< 0.808	< 0.889	< 0.889	< 0.879			
PCBs - Aroclor 1260	2015-10	ug/L			< 0.93	< 0.889								
PCBs - Aroclor 1260	2016-03	ug/L												
PCBs - Aroclor 1260	2016-06	ug/L					< 0.86							
PCBs - Aroclor 1260	2016-08	ug/L					< 0.842							
PCBs - Aroclor 1260	2018-11	ug/L											< 0.92	
PCBs - Aroclor 1260	2019-03	ug/L											< 0.941	
PCBs - Aroclor 1260	2020-08	ug/L	< 0.941	< 0.976	< 0.941	< 0.941	< 0.941	< 0.941	< 0.976	< 0.941	< 0.976			
Pentachlorobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachlorobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachlorobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Pentachlorobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Pentachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Pentachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pentachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pentachlorobenzene	2015-06	ug/L						< 10.5	< 11.1					
Pentachlorobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Pentachlorobenzene	2015-10	ug/L			< 10.3	< 10.5								
Pentachlorobenzene	2016-03	ug/L												
Pentachlorobenzene	2016-06	ug/L					< 11.4							
Pentachlorobenzene	2016-08	ug/L					< 11							
Pentachlorobenzene	2018-11	ug/L											< 11.6	
Pentachlorobenzene	2019-03	ug/L											< 12.2	
Pentachlorobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Pentachloronitrobenzene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachloronitrobenzene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachloronitrobenzene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Pentachloronitrobenzene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Pentachloronitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Pentachloronitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pentachloronitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pentachloronitrobenzene	2015-06	ug/L						< 10.5	< 11.1					
Pentachloronitrobenzene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Pentachloronitrobenzene	2015-10	ug/L			< 10.3	< 10.5								
Pentachloronitrobenzene	2016-03	ug/L												
Pentachloronitrobenzene	2016-06	ug/L					< 11.4							
Pentachloronitrobenzene	2016-08	ug/L					< 11							
Pentachloronitrobenzene	2018-11	ug/L											< 11.6	
Pentachloronitrobenzene	2019-03	ug/L											< 12.2	
Pentachloronitrobenzene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Pentachlorophenol	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachlorophenol	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pentachlorophenol	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Pentachlorophenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Pentachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Pentachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

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Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
PCBs - Aroclor 1232	2019-03	ug/L											
PCBs - Aroclor 1232	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
PCBs - Aroclor 1242	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1242	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1242	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1242	2015-06	ug/L											
PCBs - Aroclor 1242	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1242	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1242	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1242	2016-06	ug/L											
PCBs - Aroclor 1242	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1242	2018-11	ug/L											
PCBs - Aroclor 1242	2019-03	ug/L											
PCBs - Aroclor 1242	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
PCBs - Aroclor 1248	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1248	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1248	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1248	2015-06	ug/L											
PCBs - Aroclor 1248	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1248	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1248	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1248	2016-06	ug/L											
PCBs - Aroclor 1248	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1248	2018-11	ug/L											
PCBs - Aroclor 1248	2019-03	ug/L											
PCBs - Aroclor 1248	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
PCBs - Aroclor 1254	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1254	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1254	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1254	2015-06	ug/L											
PCBs - Aroclor 1254	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1254	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1254	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1254	2016-06	ug/L											
PCBs - Aroclor 1254	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1254	2018-11	ug/L											
PCBs - Aroclor 1254	2019-03	ug/L											
PCBs - Aroclor 1254	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
PCBs - Aroclor 1260	2008-08	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1260	2009-03	ug/L	< 0.8	< 0.8	< 0.8								
PCBs - Aroclor 1260	2010-09	ug/L	< 0.800	< 0.800	< 0.800								
PCBs - Aroclor 1260	2015-06	ug/L											
PCBs - Aroclor 1260	2015-09	ug/L	< 0.842	< 0.889	< 0.87								
PCBs - Aroclor 1260	2015-10	ug/L				< 0.909							
PCBs - Aroclor 1260	2016-03	ug/L			< 0.87	< 0.909							
PCBs - Aroclor 1260	2016-06	ug/L											
PCBs - Aroclor 1260	2016-08	ug/L			< 0.899	< 0.899							
PCBs - Aroclor 1260	2018-11	ug/L											
PCBs - Aroclor 1260	2019-03	ug/L											
PCBs - Aroclor 1260	2020-08	ug/L	< 0.941	< 0.976	< 0.976	< 0.941							
Pentachlorobenzene	2008-08	ug/L	< 10	< 10	< 10								
Pentachlorobenzene	2009-03	ug/L	< 10	< 10	< 10								
Pentachlorobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
Pentachlorobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorobenzene	2015-06	ug/L											
Pentachlorobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Pentachlorobenzene	2015-10	ug/L				< 10.6							
Pentachlorobenzene	2016-03	ug/L			< 10	< 10							
Pentachlorobenzene	2016-06	ug/L											
Pentachlorobenzene	2016-08	ug/L			< 11.1	< 11.5							
Pentachlorobenzene	2018-11	ug/L											
Pentachlorobenzene	2019-03	ug/L											
Pentachlorobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Pentachloronitrobenzene	2008-08	ug/L	< 10	< 10	< 10								
Pentachloronitrobenzene	2009-03	ug/L	< 10	< 10	< 10								
Pentachloronitrobenzene	2009-07	ug/L	< 10	< 10	< 10.0								
Pentachloronitrobenzene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Pentachloronitrobenzene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Pentachloronitrobenzene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Pentachloronitrobenzene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Pentachloronitrobenzene	2015-06	ug/L											
Pentachloronitrobenzene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Pentachloronitrobenzene	2015-10	ug/L				< 10.6							
Pentachloronitrobenzene	2016-03	ug/L			< 10	< 10							
Pentachloronitrobenzene	2016-06	ug/L											
Pentachloronitrobenzene	2016-08	ug/L			< 11.1	< 11.5							
Pentachloronitrobenzene	2018-11	ug/L											
Pentachloronitrobenzene	2019-03	ug/L											
Pentachloronitrobenzene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Pentachlorophenol	2008-08	ug/L	< 10	< 10	< 10								
Pentachlorophenol	2009-03	ug/L	< 10	< 10	< 10								
Pentachlorophenol	2009-07	ug/L	< 10	< 10	< 10.0								
Pentachlorophenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorophenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorophenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Pentachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pentachlorophenol	2012-03	ug/L												
Pentachlorophenol	2012-09	ug/L												
Pentachlorophenol	2013-03	ug/L												
Pentachlorophenol	2015-06	ug/L						< 10.5	< 11.1					
Pentachlorophenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Pentachlorophenol	2015-10	ug/L			< 10.3	< 10.5								
Pentachlorophenol	2016-03	ug/L												
Pentachlorophenol	2016-06	ug/L					< 11.4							
Pentachlorophenol	2016-08	ug/L					< 11							
Pentachlorophenol	2018-11	ug/L											< 11.6	
Pentachlorophenol	2019-03	ug/L											< 12.2	
Pentachlorophenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Phenacetin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenacetin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenacetin	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Phenacetin	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Phenacetin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Phenacetin	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phenacetin	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phenacetin	2015-06	ug/L						< 10.5	< 11.1					
Phenacetin	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Phenacetin	2015-10	ug/L			< 10.3	< 10.5								
Phenacetin	2016-03	ug/L												
Phenacetin	2016-06	ug/L					**0.798 J**							
Phenacetin	2016-08	ug/L					< 11							
Phenacetin	2018-11	ug/L											< 11.6	
Phenacetin	2019-03	ug/L											< 12.2	
Phenacetin	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Phenanthrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Phenanthrene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Phenanthrene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Phenanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Phenanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phenanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phenanthrene	2015-06	ug/L						< 10.5	< 11.1					
Phenanthrene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Phenanthrene	2015-10	ug/L			< 10.3	< 10.5								
Phenanthrene	2016-03	ug/L												
Phenanthrene	2016-06	ug/L					< 11.4							
Phenanthrene	2016-08	ug/L					< 11							
Phenanthrene	2018-11	ug/L											< 11.6	
Phenanthrene	2019-03	ug/L											< 12.2	
Phenanthrene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Phenol	2008-08	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Phenol	2009-03	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Phenol	2009-07	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20.0	< 20.0	< 20	< 20	< 20	< 20.0
Phenol	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Phenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Phenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phenol	2015-06	ug/L						< 10.5	< 11.1					
Phenol	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Phenol	2015-10	ug/L			< 10.3	< 10.5								
Phenol	2016-03	ug/L												
Phenol	2016-06	ug/L					< 11.4							
Phenol	2016-08	ug/L					< 11							
Phenol	2017-03	ug/L												
Phenol	2017-08	ug/L												
Phenol	2018-11	ug/L											< 11.6	
Phenol	2019-03	ug/L											< 12.2	
Phenol	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Phorate	2008-08	ug/L	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60
Phorate	2009-03	ug/L	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60	< 60
Phorate	2009-07	ug/L	< 60	< 60	< 60	< 60	< 60	< 60	< 60.0	< 60.0	< 60	< 60	< 60	< 60.0
Phorate	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Phorate	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Phorate	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phorate	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Phorate	2015-06	ug/L						< 10.5	< 11.1					
Phorate	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Phorate	2015-10	ug/L			< 10.3	< 10.5								
Phorate	2016-03	ug/L												
Phorate	2016-06	ug/L					< 11.4							
Phorate	2016-08	ug/L					< 11							
Phorate	2018-11	ug/L											< 11.6	
Phorate	2019-03	ug/L											< 12.2	
Phorate	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
p-Phenylenediamine	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
p-Phenylenediamine	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
p-Phenylenediamine	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
p-Phenylenediamine	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
p-Phenylenediamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
p-Phenylenediamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R	< 10.0 R				< 10.0 R				
p-Phenylenediamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
p-Phenylenediamine	2015-06	ug/L						< 10.5	< 11.1					
p-Phenylenediamine	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Pentachlorophenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Pentachlorophenol	2012-03	ug/L			< 10.0								
Pentachlorophenol	2012-09	ug/L			< 10.0								
Pentachlorophenol	2013-03	ug/L			< 10.4								
Pentachlorophenol	2015-06	ug/L											
Pentachlorophenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Pentachlorophenol	2015-10	ug/L				< 10.6							
Pentachlorophenol	2016-03	ug/L			< 10	< 10							
Pentachlorophenol	2016-06	ug/L											
Pentachlorophenol	2016-08	ug/L			< 11.1	< 11.5							
Pentachlorophenol	2018-11	ug/L											
Pentachlorophenol	2019-03	ug/L											
Pentachlorophenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Phenacetin	2008-08	ug/L	< 10	< 10	< 10								
Phenacetin	2009-03	ug/L	< 10	< 10	< 10								
Phenacetin	2009-07	ug/L	< 10	< 10	< 10.0								
Phenacetin	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Phenacetin	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Phenacetin	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Phenacetin	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Phenacetin	2015-06	ug/L											
Phenacetin	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Phenacetin	2015-10	ug/L				< 10.6							
Phenacetin	2016-03	ug/L			< 10	< 10							
Phenacetin	2016-06	ug/L											
Phenacetin	2016-08	ug/L			< 11.1	< 11.5							
Phenacetin	2018-11	ug/L											
Phenacetin	2019-03	ug/L											
Phenacetin	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Phenanthrene	2008-08	ug/L	< 10	< 10	< 10								
Phenanthrene	2009-03	ug/L	< 10	< 10	< 10								
Phenanthrene	2009-07	ug/L	< 10	< 10	< 10.0								
Phenanthrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Phenanthrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Phenanthrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Phenanthrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Phenanthrene	2015-06	ug/L											
Phenanthrene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Phenanthrene	2015-10	ug/L				< 10.6							
Phenanthrene	2016-03	ug/L			< 10	< 10							
Phenanthrene	2016-06	ug/L											
Phenanthrene	2016-08	ug/L			< 11.1	< 11.5							
Phenanthrene	2018-11	ug/L											
Phenanthrene	2019-03	ug/L											
Phenanthrene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Phenol	2008-08	ug/L	< 20	< 20	< 20								
Phenol	2009-03	ug/L	< 20	< 20	< 20								
Phenol	2009-07	ug/L	< 20	< 20	< 20.0								
Phenol	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Phenol	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Phenol	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Phenol	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Phenol	2015-06	ug/L											
Phenol	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Phenol	2015-10	ug/L				< 10.6							
Phenol	2016-03	ug/L			< 10	< 10							
Phenol	2016-06	ug/L											
Phenol	2016-08	ug/L			< 11.1	< 11.5							
Phenol	2017-03	ug/L			< 10.2	< 11.4							
Phenol	2017-08	ug/L			< 10.6	< 11.1							
Phenol	2018-11	ug/L											
Phenol	2019-03	ug/L											
Phenol	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Phorate	2008-08	ug/L	< 60	< 60	< 60								
Phorate	2009-03	ug/L	< 60	< 60	< 60								
Phorate	2009-07	ug/L	< 60	< 60	< 60.0								
Phorate	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Phorate	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Phorate	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Phorate	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Phorate	2015-06	ug/L											
Phorate	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Phorate	2015-10	ug/L				< 10.6							
Phorate	2016-03	ug/L			< 10	< 10							
Phorate	2016-06	ug/L											
Phorate	2016-08	ug/L			< 11.1	< 11.5							
Phorate	2018-11	ug/L											
Phorate	2019-03	ug/L											
Phorate	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
p-Phenylenediamine	2008-08	ug/L	< 10	< 10	< 10								
p-Phenylenediamine	2009-03	ug/L	< 10	< 10	< 10								
p-Phenylenediamine	2009-07	ug/L	< 10	< 10	< 10.0								
p-Phenylenediamine	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
p-Phenylenediamine	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
p-Phenylenediamine	2010-09	ug/L	< 10.0 R	< 10.0 R	< 10.0 R								
p-Phenylenediamine	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
p-Phenylenediamine	2015-06	ug/L											
p-Phenylenediamine	2015-09	ug/L	< 10.9	< 10.5	< 11.2								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
p-Phenylenediamine	2015-10	ug/L			< 10.3	< 10.5								
p-Phenylenediamine	2016-03	ug/L												
p-Phenylenediamine	2016-06	ug/L					< 11.4							
p-Phenylenediamine	2016-08	ug/L					< 11							
p-Phenylenediamine	2018-11	ug/L											< 11.6	
p-Phenylenediamine	2019-03	ug/L											< 12.2	
p-Phenylenediamine	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Pronamide	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pronamide	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pronamide	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Pronamide	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Pronamide	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Pronamide	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pronamide	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pronamide	2015-06	ug/L						< 10.5	< 11.1					
Pronamide	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Pronamide	2015-10	ug/L			< 10.3	< 10.5								
Pronamide	2016-03	ug/L												
Pronamide	2016-06	ug/L					< 11.4							
Pronamide	2016-08	ug/L					< 11							
Pronamide	2018-11	ug/L											< 11.6	
Pronamide	2019-03	ug/L											< 12.2	
Pronamide	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Propionitrile	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Propionitrile	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Propionitrile	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
Propionitrile	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
Propionitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Propionitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Propionitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Propionitrile	2012-09	ug/L		< 10.0										
Propionitrile	2015-06	ug/L						< 10	< 10					
Propionitrile	2015-09	ug/L	< 10	< 10				< 10	< 10	< 10	< 10			
Propionitrile	2015-10	ug/L			< 10	< 10								
Propionitrile	2016-03	ug/L												
Propionitrile	2016-06	ug/L					< 10							
Propionitrile	2016-08	ug/L					< 10							
Propionitrile	2018-11	ug/L											< 10	
Propionitrile	2019-03	ug/L											< 10	
Propionitrile	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			
Pyrene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pyrene	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Pyrene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Pyrene	2012-03	ug/L												
Pyrene	2012-09	ug/L												
Pyrene	2013-03	ug/L												
Pyrene	2015-06	ug/L						< 10.5	< 11.1					
Pyrene	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Pyrene	2015-10	ug/L			< 10.3	< 10.5								
Pyrene	2016-03	ug/L												
Pyrene	2016-06	ug/L					< 11.4							
Pyrene	2016-08	ug/L					< 11							
Pyrene	2018-11	ug/L											< 11.6	
Pyrene	2019-03	ug/L											< 12.2	
Pyrene	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Safrole	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Safrole	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Safrole	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Safrole	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Safrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Safrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Safrole	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Safrole	2015-06	ug/L						< 10.5	< 11.1					
Safrole	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Safrole	2015-10	ug/L			< 10.3	< 10.5								
Safrole	2016-03	ug/L												
Safrole	2016-06	ug/L					< 11.4							
Safrole	2016-08	ug/L					< 11							
Safrole	2018-11	ug/L											< 11.6	
Safrole	2019-03	ug/L											< 12.2	
Safrole	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Selenium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium	2009-09	mg/L	< 0.00500	< 0.005		< 0.00500		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Selenium	2010-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2010-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2011-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2011-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2012-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2012-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2013-03	mg/L	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00500	< 0.005	< 0.005	< 0.005
Selenium	2013-09	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2013-11	mg/L												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
p-Phenylenediamine	2015-10	ug/L				< 10.6							
p-Phenylenediamine	2016-03	ug/L			< 10	< 10							
p-Phenylenediamine	2016-06	ug/L											
p-Phenylenediamine	2016-08	ug/L			< 11.1	< 11.5							
p-Phenylenediamine	2018-11	ug/L											
p-Phenylenediamine	2019-03	ug/L											
p-Phenylenediamine	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Pronamide	2008-08	ug/L	< 10	< 10	< 10								
Pronamide	2009-03	ug/L	< 10	< 10	< 10								
Pronamide	2009-07	ug/L	< 10	< 10	< 10.0								
Pronamide	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Pronamide	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Pronamide	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Pronamide	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Pronamide	2015-06	ug/L											
Pronamide	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Pronamide	2015-10	ug/L				< 10.6							
Pronamide	2016-03	ug/L			< 10	< 10							
Pronamide	2016-06	ug/L											
Pronamide	2016-08	ug/L			< 11.1	< 11.5							
Pronamide	2018-11	ug/L											
Pronamide	2019-03	ug/L											
Pronamide	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Propionitrile	2008-08	ug/L	< 10	< 10	< 10								
Propionitrile	2009-03	ug/L	< 10	< 10	< 10								
Propionitrile	2009-07	ug/L	< 10	< 10									
Propionitrile	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Propionitrile	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Propionitrile	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Propionitrile	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Propionitrile	2012-09	ug/L											
Propionitrile	2015-06	ug/L											
Propionitrile	2015-09	ug/L	< 10	< 10	< 10								
Propionitrile	2015-10	ug/L				< 10							
Propionitrile	2016-03	ug/L			< 10	< 10							
Propionitrile	2016-06	ug/L											
Propionitrile	2016-08	ug/L			< 10	< 10							
Propionitrile	2018-11	ug/L											
Propionitrile	2019-03	ug/L											
Propionitrile	2020-08	ug/L	< 10	< 10	< 10	< 10							
Pyrene	2008-08	ug/L	< 10	< 10	< 10								
Pyrene	2009-03	ug/L	< 10	< 10	< 10								
Pyrene	2009-07	ug/L	< 10	< 10	< 10.0								
Pyrene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Pyrene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Pyrene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Pyrene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Pyrene	2012-03	ug/L			< 10.0								
Pyrene	2012-09	ug/L			< 10.0								
Pyrene	2013-03	ug/L			< 10.4								
Pyrene	2015-06	ug/L											
Pyrene	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Pyrene	2015-10	ug/L				< 10.6							
Pyrene	2016-03	ug/L			< 10	< 10							
Pyrene	2016-06	ug/L											
Pyrene	2016-08	ug/L			< 11.1	< 11.5							
Pyrene	2018-11	ug/L											
Pyrene	2019-03	ug/L											
Pyrene	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Safrole	2008-08	ug/L	< 10	< 10	< 10								
Safrole	2009-03	ug/L	< 10	< 10	< 10								
Safrole	2009-07	ug/L	< 10	< 10	< 10.0								
Safrole	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Safrole	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Safrole	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Safrole	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Safrole	2015-06	ug/L											
Safrole	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Safrole	2015-10	ug/L				< 10.6							
Safrole	2016-03	ug/L			< 10	< 10							
Safrole	2016-06	ug/L											
Safrole	2016-08	ug/L			< 11.1	< 11.5							
Safrole	2018-11	ug/L											
Safrole	2019-03	ug/L											
Safrole	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Selenium	2008-08	mg/L	< 0.05	< 0.05	< 0.05								
Selenium	2009-03	mg/L	< 0.05	< 0.05	< 0.05								
Selenium	2009-07	mg/L	< 0.05	< 0.05	< 0.05								
Selenium	2009-09	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2010-03	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2010-09	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2011-03	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2011-09	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2012-03	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2012-09	mg/L	< 0.00500	< 0.00500	< 0.00500								
Selenium	2013-03	mg/L	< 0.005	< 0.005	< 0.00500								
Selenium	2013-09	mg/L	< 0.00500	< 0.00500	< 0.00500	~~< 0.00500~~	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500		
Selenium	2013-11	mg/L				**~~0.000569~~ J**	< 0.00500	< 0.00500	< 0.00500	**0.000619 J**	< 0.00500		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Selenium	2014-03	mg/L	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Selenium	2014-06	mg/L												
Selenium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2015-03	mg/L	< 0.00500	< 0.005	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.00500	< 0.00500	< 0.005	< 0.005	< 0.00500	< 0.00500
Selenium	2015-06	mg/L						< 0.005	< 0.005					
Selenium	2015-09	mg/L	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Selenium	2015-10	mg/L			< 0.005	< 0.005							< 0.005	< 0.005
Selenium	2016-03	mg/L	< 0.005	**0.000884 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2016-06	mg/L					< 0.005							
Selenium	2016-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.000948 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2017-11	mg/L												
Selenium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2018-06	mg/L												
Selenium	2018-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2018-09	mg/L							< 0.005	< 0.005				
Selenium	2018-11	mg/L											< 0.005	
Selenium	2019-03	mg/L	**0.00103 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2019-04	mg/L												
Selenium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2020-03	mg/L		< 0.005		< 0.005	< 0.02	< 0.005	< 0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2020-04	mg/L	< 0.005		< 0.005									
Selenium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Selenium	2021-03	mg/L				< 0.005								
Selenium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00108 J**	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Selenium	2022-03	mg/L				< 0.005								
Selenium	2022-08	mg/L	< 0.005	**0.00171 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Selenium	2023-03	mg/L				**0.00163 J**								
Selenium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Silver	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	2009-09	mg/L	< 0.0200	< 0.02		< 0.0200		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Silver	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2013-03	mg/L	< 0.0200	< 0.0400	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.0200	< 0.02	< 0.02	< 0.02
Silver	2013-09	mg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2013-11	mg/L												
Silver	2014-03	mg/L	< 0.0200	< 0.0400	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0400	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Silver	2014-06	mg/L												
Silver	2014-09	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2015-03	mg/L	< 0.00100	< 0.001	**0.0000780 J**	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100
Silver	2015-06	mg/L						**0.000071 J**	**0.000086 J**					
Silver	2015-09	mg/L	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001 J	< 0.001	< 0.001 J		
Silver	2015-10	mg/L			< 0.001 J	< 0.001							< 0.001	< 0.001
Silver	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000189 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2016-06	mg/L					< 0.001							
Silver	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2017-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000154 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2017-11	mg/L												
Silver	2018-03	mg/L	**0.000345 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.000234 J**	< 0.001	< 0.001
Silver	2018-06	mg/L												
Silver	2018-08	mg/L	**0.000313 J**	**0.000356 J**	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Silver	2018-09	mg/L							< 0.001	< 0.001				
Silver	2018-11	mg/L											< 0.001	
Silver	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2019-04	mg/L												
Silver	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-03	mg/L		< 0.001		< 0.001	< 0.004	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-04	mg/L	< 0.001		< 0.001									
Silver	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Silver	2021-03	mg/L				< 0.001								
Silver	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.00131**	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Silver	2022-03	mg/L				< 0.001								
Silver	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Silver	2023-03	mg/L				**0.00164**								
Silver	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00086 J**	**0.000911 J**			< 0.001
Styrene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Styrene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Styrene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00
Styrene	2010-09	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 1.00	< 1.00	< 1.00	< 4.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Styrene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2013-11	ug/L												
Styrene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2014-06	ug/L												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Selenium	2014-03	mg/L	< 0.00500	< 0.00500	< 0.00500	~~0.000681 J~~	< 0.00500	< 0.00500	< 0.00500	< 0.00500	**0.000767 J**		
Selenium	2014-06	mg/L				~~< 0.00500 J~~	< 0.00500 J	< 0.00500 J	< 0.00500 J	< 0.00500 J	< 0.00500 J		
Selenium	2014-09	mg/L	< 0.005	< 0.005	< 0.005	~~< 0.005~~	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		
Selenium	2015-03	mg/L	< 0.00500	< 0.00500	< 0.005	~~< 0.00500~~	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500		
Selenium	2015-06	mg/L											
Selenium	2015-09	mg/L	< 0.005	< 0.005	< 0.005								
Selenium	2015-10	mg/L				< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Selenium	2016-03	mg/L	< 0.005	< 0.005	< 0.005	**0.00101 J**	< 0.005	**0.000736 J**		< 0.005	< 0.005		
Selenium	2016-06	mg/L											
Selenium	2016-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00133 J**	< 0.005	**0.000653 J**		< 0.005	< 0.005		
Selenium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	**0.00125 J**	< 0.005	**0.00317 J**		< 0.005	< 0.005		
Selenium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00152 J**	< 0.005	**0.00118 J**		< 0.005	< 0.005		
Selenium	2017-11	mg/L										**0.000996 J**	< 0.005
Selenium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	**0.00169 J**	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2018-06	mg/L										< 0.005	< 0.005
Selenium	2018-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00139 J**		**0.00166 J**		< 0.005			
Selenium	2018-09	mg/L									< 0.005	< 0.005	< 0.005
Selenium	2018-11	mg/L										< 0.005	< 0.005
Selenium	2019-03	mg/L	< 0.005	< 0.005	< 0.005	**0.00163 J**		**0.00181 J**	< 0.005	< 0.005	< 0.005	< 0.005	
Selenium	2019-04	mg/L											< 0.005
Selenium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00179 J**	< 0.005	**0.00151 J**		< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2020-03	mg/L	< 0.005	< 0.005	< 0.005	**0.0014 J**	< 0.005	**0.0014 J**		< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2020-04	mg/L											
Selenium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00174 J**	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2021-03	mg/L	< 0.005		< 0.005	**0.00218 J**							< 0.005
Selenium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00155 J**	< 0.005			**0.00593**	< 0.005	< 0.005	< 0.005
Selenium	2022-03	mg/L	< 0.005		< 0.005	**0.00132 J**							< 0.005
Selenium	2022-08	mg/L	< 0.005	< 0.005	< 0.005	**0.00193 J**	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Selenium	2023-03	mg/L	< 0.005		< 0.005	**0.00236 J**							< 0.005
Selenium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	**0.0022 J**	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Silver	2008-08	mg/L	< 0.05	< 0.05	< 0.05								
Silver	2009-03	mg/L	< 0.05	< 0.05	< 0.05								
Silver	2009-07	mg/L	< 0.05	< 0.05	< 0.05								
Silver	2009-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2010-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2010-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2011-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Silver	2013-03	mg/L	< 0.02	< 0.02	< 0.0200								
Silver	2013-09	mg/L	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2013-11	mg/L				~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2014-03	mg/L	< 0.0200	< 0.0200	< 0.0200	~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2014-06	mg/L				~~< 0.0200~~	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200		
Silver	2014-09	mg/L	< 0.001	< 0.001	< 0.001	~~< 0.001~~	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Silver	2015-03	mg/L	**0.0000930 J**	< 0.00100	< 0.001	~~**0.0000660 J**~~	< 0.00100	< 0.00100	< 0.00100	< 0.00100	**0.0000590 J**		
Silver	2015-06	mg/L											
Silver	2015-09	mg/L	< 0.001	< 0.001	**0.000111 J**								
Silver	2015-10	mg/L				< 0.001	< 0.001	< 0.001 J		< 0.001	< 0.001		
Silver	2016-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Silver	2016-06	mg/L											
Silver	2016-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Silver	2017-03	mg/L	**0.000197 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Silver	2017-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001		
Silver	2017-11	mg/L										< 0.001	< 0.001
Silver	2018-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	**0.000231 J**	< 0.001		< 0.001	< 0.001	**0.000183 J**	< 0.001
Silver	2018-06	mg/L										< 0.001	< 0.001
Silver	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		**0.000301 J**		< 0.001			
Silver	2018-09	mg/L									< 0.001	< 0.001	< 0.001
Silver	2018-11	mg/L										< 0.001	< 0.001
Silver	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Silver	2019-04	mg/L											< 0.001
Silver	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Silver	2020-04	mg/L											
Silver	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Silver	2021-03	mg/L	< 0.001		< 0.001	< 0.001							< 0.001
Silver	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			**0.00122**	< 0.001	< 0.001	< 0.001
Silver	2022-03	mg/L	< 0.001		< 0.001	< 0.001							< 0.001
Silver	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Silver	2023-03	mg/L	< 0.001		< 0.001	< 0.001							< 0.001
Silver	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Styrene	2008-08	ug/L	< 1	< 1	< 1								
Styrene	2009-03	ug/L	< 1	< 1	< 1								
Styrene	2009-07	ug/L	< 1	< 1									
Styrene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Styrene	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Styrene	2010-09	ug/L	< 4.00	< 4.00	< 4.00								
Styrene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Styrene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Styrene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Styrene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Styrene	2013-03	ug/L	< 1	< 1	< 1.00								
Styrene	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Styrene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2015-03	ug/L	< 1.00	< 1	**0.173 J**	**0.182 J**	< 1	< 1	< 1.00	< 1.00	< 1	**0.211 J**	**0.191 J**	< 1.00
Styrene	2015-06	ug/L						< 1	< 1					
Styrene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Styrene	2015-10	ug/L			< 1	< 1							< 1	< 1
Styrene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2016-06	ug/L					< 1							
Styrene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2017-11	ug/L												
Styrene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2018-06	ug/L												
Styrene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Styrene	2018-09	ug/L							< 1	< 1				
Styrene	2018-11	ug/L											< 1	
Styrene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2019-04	ug/L												
Styrene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2020-04	ug/L	< 1		< 1									
Styrene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Styrene	2021-03	ug/L				< 1								
Styrene	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Styrene	2022-03	ug/L				< 1								
Styrene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Styrene	2023-03	ug/L				< 1								
Styrene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Sulfide	2008-08	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sulfide	2009-03	mg/L										< 5		< 5
Sulfide	2010-09	mg/L	< 1.0	< 1.0 U	< 1.0	< 1.0				< 1.7 U				
Sulfide	2015-06	mg/L						< 1	< 1					
Sulfide	2015-09	mg/L	< 1	**0.366 J**				< 1	< 1	< 1	< 1			
Sulfide	2015-10	mg/L			< 1	< 1								
Sulfide	2016-03	mg/L												
Sulfide	2016-06	mg/L					< 1							
Sulfide	2016-08	mg/L					< 1							
Sulfide	2018-11	mg/L											< 1	
Sulfide	2019-03	mg/L											< 1	
Sulfide	2020-08	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			
Technical Chlordane	2008-09	ug/L										< 2		< 2
Technical Chlordane	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Technical Chlordane	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00				< 2.00				
Technical Chlordane	2015-06	ug/L						< 2.17	< 2					
Technical Chlordane	2015-09	ug/L	< 2.22	< 2.22				< 2.25	< 2.04	< 2.22	< 2.2			
Technical Chlordane	2015-10	ug/L			< 2.33	< 2.27								
Technical Chlordane	2016-03	ug/L												
Technical Chlordane	2016-06	ug/L					< 2.27							
Technical Chlordane	2016-08	ug/L					< 2.11							
Technical Chlordane	2018-11	ug/L											< 2.25	
Technical Chlordane	2019-03	ug/L											< 2.33	
Technical Chlordane	2020-08	ug/L	< 2.35	< 2.44	< 2.35	< 2.35	< 2.35	< 2.35	< 2.44	< 2.35	< 2.44			
Tetrachloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Tetrachloroethene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Tetrachloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Tetrachloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2013-11	ug/L												
Tetrachloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2014-06	ug/L												
Tetrachloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
Tetrachloroethene	2015-06	ug/L						< 1	< 1					
Tetrachloroethene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Tetrachloroethene	2015-10	ug/L			< 1	< 1							< 1	< 1
Tetrachloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2016-06	ug/L					< 1							
Tetrachloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2017-11	ug/L												
Tetrachloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2018-06	ug/L												
Tetrachloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Tetrachloroethene	2018-09	ug/L							< 1	< 1				
Tetrachloroethene	2018-11	ug/L											< 1	
Tetrachloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2019-04	ug/L												
Tetrachloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	2020-04	ug/L	< 1		< 1									

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Styrene	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Styrene	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2015-06	ug/L											
Styrene	2015-09	ug/L	< 1	< 1	< 1								
Styrene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Styrene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Styrene	2016-06	ug/L											
Styrene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Styrene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Styrene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Styrene	2017-11	ug/L										< 1	< 1
Styrene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Styrene	2018-06	ug/L										< 1	< 1
Styrene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Styrene	2018-09	ug/L									< 1	< 1	< 1
Styrene	2018-11	ug/L										< 1	< 1
Styrene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Styrene	2019-04	ug/L											< 1
Styrene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Styrene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Styrene	2020-04	ug/L											
Styrene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Styrene	2021-03	ug/L	< 1		< 1	< 1							< 1
Styrene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Styrene	2022-03	ug/L	< 1		< 1	< 1							< 1
Styrene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Styrene	2023-03	ug/L	< 1		< 1	< 1							< 1
Styrene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Sulfide	2008-08	mg/L	< 5	< 5	< 5								
Sulfide	2009-03	mg/L			< 5								
Sulfide	2010-09	mg/L	< 1.0	< 1.0	< 1.0								
Sulfide	2015-06	mg/L											
Sulfide	2015-09	mg/L	< 1	< 1	< 1								
Sulfide	2015-10	mg/L				< 1							
Sulfide	2016-03	mg/L			< 1	< 1							
Sulfide	2016-06	mg/L											
Sulfide	2016-08	mg/L			< 1	< 1							
Sulfide	2018-11	mg/L											
Sulfide	2019-03	mg/L											
Sulfide	2020-08	mg/L	< 10	< 10	< 10	< 10							
Technical Chlordane	2008-09	ug/L			< 2								
Technical Chlordane	2009-03	ug/L	< 2	< 2	< 2								
Technical Chlordane	2010-09	ug/L	< 2.00	< 2.00	< 2.00								
Technical Chlordane	2015-06	ug/L											
Technical Chlordane	2015-09	ug/L	< 2.15	< 2.2	< 2.2								
Technical Chlordane	2015-10	ug/L				< 2.27							
Technical Chlordane	2016-03	ug/L			< 2.13	< 2.22							
Technical Chlordane	2016-06	ug/L											
Technical Chlordane	2016-08	ug/L			< 2.22	< 2.04							
Technical Chlordane	2018-11	ug/L											
Technical Chlordane	2019-03	ug/L											
Technical Chlordane	2020-08	ug/L	< 2.35	< 2.44	< 2.44	< 2.35							
Tetrachloroethene	2008-08	ug/L	< 1	< 1	< 1								
Tetrachloroethene	2009-03	ug/L	< 1	< 1	< 1								
Tetrachloroethene	2009-07	ug/L	< 1	< 1									
Tetrachloroethene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Tetrachloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Tetrachloroethene	2013-03	ug/L	< 1	< 1	< 1.00								
Tetrachloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2014-09	ug/L	< 1	< 1	< 1		< 1	**0.183 J**	< 1	< 1	< 1		
Tetrachloroethene	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2015-06	ug/L											
Tetrachloroethene	2015-09	ug/L	< 1	< 1	< 1								
Tetrachloroethene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Tetrachloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Tetrachloroethene	2016-06	ug/L											
Tetrachloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Tetrachloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Tetrachloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Tetrachloroethene	2017-11	ug/L										< 1	< 1
Tetrachloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Tetrachloroethene	2018-06	ug/L										< 1	< 1
Tetrachloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Tetrachloroethene	2018-09	ug/L									< 1	< 1	< 1
Tetrachloroethene	2018-11	ug/L										< 1	< 1
Tetrachloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Tetrachloroethene	2019-04	ug/L											< 1
Tetrachloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Tetrachloroethene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Tetrachloroethene	2020-04	ug/L											

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Tetrachloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			**0.68 J**
Tetrachloroethene	2021-03	ug/L				< 1								
Tetrachloroethene	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Tetrachloroethene	2022-03	ug/L				< 1								
Tetrachloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Tetrachloroethene	2023-03	ug/L				< 1								
Tetrachloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Thallium	2008-08	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium	2009-03	mg/L	< 0.002	< 0.004	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002
Thallium	2009-07	mg/L												
Thallium	2009-09	mg/L	< 0.00200	< 0.006		< 0.00200		< 0.002	< 0.002	< 0.01	< 0.002			
Thallium	2010-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2010-09	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2011-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2011-09	mg/L	< 0.00200	< 0.00300	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00400	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2012-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2012-09	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2013-03	mg/L	< 0.00200	< 0.00200	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00200	< 0.002	< 0.002	< 0.002
Thallium	2013-09	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2013-11	mg/L												
Thallium	2014-03	mg/L	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200
Thallium	2014-06	mg/L												
Thallium	2014-09	mg/L	**0.000073 J**	< 0.001	**0.000169 J**	**0.000033 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2015-03	mg/L	**0.0000580 J**	< 0.001	**0.0000860 J**	**0.0000590 J**	**0.000036 J**	< 0.001	< 0.00100	< 0.00100	< 0.001	< 0.001	< 0.00100	< 0.00100
Thallium	2015-06	mg/L						< 0.001	< 0.001					
Thallium	2015-09	mg/L	**0.000082 J**	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Thallium	2015-10	mg/L			**0.000125 J**	< 0.001							< 0.001	< 0.001
Thallium	2016-03	mg/L	**0.000059 J**	< 0.001	**0.000089 J**	< 0.001	**0.000031 J**	< 0.001	< 0.001	< 0.001	< 0.001	**0.000033 J**	< 0.001	< 0.001
Thallium	2016-06	mg/L					< 0.001							
Thallium	2016-08	mg/L	< 0.001	< 0.001	**0.000081 J**	**0.000029 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2017-03	mg/L	**0.000094 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2017-08	mg/L	< 0.001	< 0.001	**0.000095 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2017-11	mg/L												
Thallium	2018-03	mg/L	**0.000085 J**	< 0.001	**0.000078 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2018-06	mg/L												
Thallium	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2018-09	mg/L							< 0.001	< 0.001				
Thallium	2018-11	mg/L											< 0.001	
Thallium	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2019-04	mg/L												
Thallium	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2020-03	mg/L		< 0.001		< 0.001	< 0.004	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Thallium	2020-04	mg/L	< 0.001		< 0.001									
Thallium	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Thallium	2021-03	mg/L				< 0.001								
Thallium	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Thallium	2022-03	mg/L				< 0.001								
Thallium	2022-08	mg/L	< 0.001	**0.000527 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001
Thallium	2023-03	mg/L				**0.000975 J**								
Thallium	2023-08	mg/L	**0.000504 J**	< 0.001	**0.00039 J**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00241**	**0.00307**			< 0.001
Thionazin	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Thionazin	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Thionazin	2009-07	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10	< 10.0
Thionazin	2009-09	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0
Thionazin	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Thionazin	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Thionazin	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0				< 10.0				
Thionazin	2012-03	ug/L												
Thionazin	2012-09	ug/L												
Thionazin	2013-03	ug/L												
Thionazin	2015-06	ug/L						< 10.5	< 11.1					
Thionazin	2015-09	ug/L	< 11.1	< 11.2				< 11.1	< 10.2	< 11.2	< 11.1			
Thionazin	2015-10	ug/L			< 10.3	< 10.5								
Thionazin	2016-03	ug/L												
Thionazin	2016-06	ug/L					< 11.4							
Thionazin	2016-08	ug/L					< 11							
Thionazin	2018-11	ug/L											< 11.6	
Thionazin	2019-03	ug/L											< 12.2	
Thionazin	2020-08	ug/L	< 11.8	< 12.2	< 10.8	< 10.9	< 11.4	< 11.4	< 11.2	< 11.8	< 11.9			
Tin	2008-08	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tin	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin	2009-09	mg/L	< 0.100	< 0.1		< 0.100		< 0.1	< 0.1	< 0.1	**0.104**	< 0.1		
Tin	2010-03	mg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Tin	2010-09	mg/L	< 0.100	< 0.100	< 0.100	< 0.100				< 0.100				
Tin	2011-03	mg/L	**0.210**	**0.143**	**0.171**	< 0.100				**0.134**				
Tin	2011-09	mg/L	< 0.100	< 0.100	< 0.100					< 0.100				
Tin	2012-03	mg/L	< 0.100	< 0.100	< 0.100					< 0.100	< 0.100			
Tin	2012-09	mg/L	< 0.100	< 0.100	< 0.100					< 0.100	< 0.100			
Tin	2013-03	mg/L	< 0.100	< 0.200	< 0.1					< 0.1	< 0.100			
Tin	2013-09	mg/L	< 0.100	< 0.100	< 0.100					< 0.100	< 0.100			
Tin	2013-11	mg/L												
Tin	2014-03	mg/L	< 0.100	< 0.200	< 0.100					< 0.200	< 0.100			
Tin	2014-06	mg/L												
Tin	2014-09	mg/L	**0.126**	**0.111**	**0.104**					**0.113**	**0.0975 J**			
Tin	2015-03	mg/L	< 0.100	< 0.3	< 0.100					< 0.100	< 0.1			
Tin	2015-06	mg/L						< 0.005	< 0.005					
Tin	2015-09	mg/L	< 0.005	< 0.005				< 0.005	< 0.005	< 0.005	< 0.005			

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Tetrachloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Tetrachloroethene	2021-03	ug/L	< 1		< 1	< 1							< 1
Tetrachloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Tetrachloroethene	2022-03	ug/L	< 1		< 1	< 1							< 1
Tetrachloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Tetrachloroethene	2023-03	ug/L	< 1		< 1	< 1							< 1
Tetrachloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Thallium	2008-08	mg/L	< 0.002	< 0.002	< 0.002								
Thallium	2009-03	mg/L	< 0.002	< 0.002	< 0.002								
Thallium	2009-07	mg/L			< 0.00200								
Thallium	2009-09	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2010-03	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2010-09	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2011-03	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2011-09	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2012-03	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2012-09	mg/L	< 0.00200	< 0.00200	< 0.00200								
Thallium	2013-03	mg/L	< 0.002	< 0.002	< 0.00200								
Thallium	2013-09	mg/L	< 0.00200	< 0.00200	< 0.00200	~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00250**		
Thallium	2013-11	mg/L				~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200		
Thallium	2014-03	mg/L	< 0.00200	< 0.00200	< 0.00200	~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.00105 J**		
Thallium	2014-06	mg/L				~~< 0.00200~~	< 0.00200	< 0.00200	< 0.00200	< 0.00200	**0.000767 J**		
Thallium	2014-09	mg/L	**0.000084 J**	< 0.001	**0.000033 J**	~~**0.000097 J**~~	**0.000036 J**	**0.000052 J**	< 0.001	< 0.001	**0.00237**		
Thallium	2015-03	mg/L	**0.000107 J**	**0.0000330 J**	< 0.001	~~< 0.00100~~	**0.0000490 J**	**0.0000770 J**	**0.000139 J**	< 0.00100	**0.00186**		
Thallium	2015-06	mg/L											
Thallium	2015-09	mg/L	**0.000124 J**	< 0.001	**0.000037 J**								
Thallium	2015-10	mg/L				**0.000087 J**	**0.000052 J**	**0.000068 J**		< 0.001	**0.00166**		
Thallium	2016-03	mg/L	**0.000091 J**	< 0.001	**0.000033 J**	**0.000034 J**	< 0.001	**0.000032 J**		< 0.001	**0.00132**		
Thallium	2016-06	mg/L											
Thallium	2016-08	mg/L	**0.000101 J**	**0.000066 J**	< 0.001	< 0.001	**0.000041 J**	**0.000047 J**		< 0.001	**0.00128**		
Thallium	2017-03	mg/L	**0.000124 J**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	**0.00309**		
Thallium	2017-08	mg/L	**0.000123 J**	< 0.001	< 0.001	**0.00008 J**	< 0.001	< 0.001		< 0.001	**0.0037**		
Thallium	2017-11	mg/L										< 0.001	**0.00463**
Thallium	2018-03	mg/L	**0.000116 J**	< 0.001	< 0.001	**0.000065 J**	< 0.001	< 0.001		< 0.001	**0.003**	< 0.001	**0.0052**
Thallium	2018-06	mg/L										< 0.001	**0.00513**
Thallium	2018-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001		< 0.001			
Thallium	2018-09	mg/L									**0.00289**	< 0.001	**0.00531**
Thallium	2018-11	mg/L										< 0.001	**0.00453**
Thallium	2019-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	**0.00328**	< 0.001	
Thallium	2019-04	mg/L											**0.00464**
Thallium	2019-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	**0.00425**	< 0.001	**0.00482**
Thallium	2020-03	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	**0.00341**	< 0.001	**0.00557**
Thallium	2020-04	mg/L											
Thallium	2020-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	**0.00286**	< 0.001	**0.00446**
Thallium	2021-03	mg/L	< 0.001		< 0.001	< 0.001							**0.00525**
Thallium	2021-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			**0.00445**	**0.0053**	< 0.001	**0.00475**
Thallium	2022-03	mg/L	< 0.001		< 0.001	< 0.001							**0.00456**
Thallium	2022-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	**0.00406**	< 0.001	**0.00557**
Thallium	2023-03	mg/L	< 0.001		< 0.001	< 0.001							**0.00515**
Thallium	2023-08	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001			< 0.001	**0.002**	< 0.001	**0.00342**
Thionazin	2008-08	ug/L	< 10	< 10	< 10								
Thionazin	2009-03	ug/L	< 10	< 10	< 10								
Thionazin	2009-07	ug/L	< 10	< 10	< 10.0								
Thionazin	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
Thionazin	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
Thionazin	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
Thionazin	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
Thionazin	2012-03	ug/L			< 10.0								
Thionazin	2012-09	ug/L			< 10.0								
Thionazin	2013-03	ug/L			< 10.4								
Thionazin	2015-06	ug/L											
Thionazin	2015-09	ug/L	< 10.9	< 10.5	< 11.2								
Thionazin	2015-10	ug/L				< 10.6							
Thionazin	2016-03	ug/L			< 10	< 10							
Thionazin	2016-06	ug/L											
Thionazin	2016-08	ug/L			< 11.1	< 11.5							
Thionazin	2018-11	ug/L											
Thionazin	2019-03	ug/L											
Thionazin	2020-08	ug/L	< 11.8	< 11	< 11.8	< 11.8							
Tin	2008-08	mg/L	< 0.1	< 0.1	< 0.1								
Tin	2009-03	mg/L	< 0.05	< 0.05	< 0.05								
Tin	2009-07	mg/L	< 0.05	< 0.05	< 0.05								
Tin	2009-09	mg/L	< 0.100	< 0.100	< 0.100								
Tin	2010-03	mg/L	< 0.100	< 0.100	< 0.100								
Tin	2010-09	mg/L	< 0.100	< 0.100	< 0.100								
Tin	2011-03	mg/L	**0.128**	**0.173 J**	**0.109**								
Tin	2011-09	mg/L	< 0.100	< 0.100	< 0.100								
Tin	2012-03	mg/L	< 0.100	< 0.100	< 0.100								
Tin	2012-09	mg/L	< 0.100	< 0.100	< 0.100								
Tin	2013-03	mg/L	< 0.1	< 0.1	< 0.100								
Tin	2013-09	mg/L	< 0.100	< 0.100	< 0.100	~~< 0.100~~							
Tin	2013-11	mg/L				~~**0.591**~~							
Tin	2014-03	mg/L	< 0.100	< 0.100	< 0.100	~~< 0.100~~							
Tin	2014-06	mg/L				~~< 0.100~~							
Tin	2014-09	mg/L	**0.0954 J**	**0.12**	**0.0592 J**	~~**0.105**~~							
Tin	2015-03	mg/L	< 0.100	< 0.100	< 0.1	~~< 0.100~~							
Tin	2015-06	mg/L											
Tin	2015-09	mg/L	< 0.005	< 0.005	< 0.005								

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Tin	2015-10	mg/L			< 0.005	< 0.005								
Tin	2016-03	mg/L	< 0.005	**0.00133 J**	< 0.005					< 0.005	< 0.005			
Tin	2016-06	mg/L					< 0.005							
Tin	2016-08	mg/L	< 0.005	**0.00127 J**	< 0.005		< 0.005			< 0.005	< 0.005			
Tin	2017-03	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005			
Tin	2017-08	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005			
Tin	2018-03	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005			
Tin	2018-08	mg/L	< 0.005	**0.000982 J**	**0.000942 J**						**0.0011 J**			
Tin	2018-09	mg/L								< 0.005				
Tin	2018-11	mg/L											< 0.005	
Tin	2019-03	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005		< 0.005	
Tin	2019-08	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	**0.00205 J**			
Tin	2020-03	mg/L		< 0.005						< 0.005	< 0.005			
Tin	2020-04	mg/L	< 0.005		< 0.005									
Tin	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			
Tin	2021-03	mg/L												
Tin	2021-08	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005			
Tin	2022-03	mg/L												
Tin	2022-08	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005			
Tin	2023-03	mg/L												
Tin	2023-08	mg/L	< 0.005	< 0.005	< 0.005					< 0.005	< 0.005			
Toluene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	< 1.00	< 1			
Toluene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Toluene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2013-03	ug/L	< 1.00	< 1.00	< 1	< 1	< 1	< 1	< 1	< 1	< 1.00	< 1	< 1	< 1
Toluene	2013-09	ug/L	< 1.00	< 1.00 J	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2013-11	ug/L												
Toluene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2014-06	ug/L												
Toluene	2014-09	ug/L	< 1	< 1	< 1	**0.166 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	**0.177 J**	< 1	< 1	< 1.00	< 1.00
Toluene	2015-06	ug/L						< 1	< 1					
Toluene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Toluene	2015-10	ug/L			< 1	< 1							< 1	< 1
Toluene	2016-03	ug/L	< 1	< 1	< 1	< 1 J	< 1	< 1	< 1	< 1 J	< 1	< 1	< 1	< 1
Toluene	2016-06	ug/L					**0.214 J**							
Toluene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.08**	< 1	< 1	< 1	< 1
Toluene	2017-03	ug/L	< 1	**1.19**	< 1	< 1	< 1	< 1	< 1	< 1	**0.177 J**	< 1	< 1	**0.168 J**
Toluene	2017-08	ug/L	< 1	**0.456 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.154 J**	**0.39 J**	**0.3 J**	< 1
Toluene	2017-11	ug/L												
Toluene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.185 J**	< 1	**0.332 J**	< 1
Toluene	2018-06	ug/L												
Toluene	2018-08	ug/L	< 1	< 1	< 1	**0.572 J**	< 1	< 1			< 1	**0.438 J**	< 1	< 1
Toluene	2018-09	ug/L							< 1	< 1				
Toluene	2018-11	ug/L											< 1	
Toluene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2019-04	ug/L												
Toluene	2019-08	ug/L	< 1	**0.445 J**	< 1	**1.14**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	2020-04	ug/L	< 1		< 1									
Toluene	2020-08	ug/L	< 1	< 1	< 1	**0.681 J**	< 1	< 1	< 1	< 1	< 1			< 1
Toluene	2021-03	ug/L				< 1								
Toluene	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Toluene	2022-03	ug/L				< 1								
Toluene	2022-08	ug/L	< 1	< 1	< 1	**0.475 J**	< 1	< 1	< 1	< 1	< 1			< 1
Toluene	2023-03	ug/L				< 1								
Toluene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Total Suspended Solids	2014-09	mg/L	**2.25**	**36**	**6.38**	**69**	**1.63 J**	**2.88**	**5.14**	**48.8**	**4.13**	**1.88**	< 1.88	**1.75 J**
Total Suspended Solids	2015-03	mg/L	**1.76**	**50.7**	**3.00**	**54.7**	**3**	**5.17**	**4.20**	**49.0**	**3.83**	**10.8**	< 2.50	**5.83**
Total Suspended Solids	2015-06	mg/L						**6.87**	**4.38**					
Total Suspended Solids	2015-09	mg/L	< 1.88	**30.5**			**2.63**	**5**	**3.87**	**42.1**	**3**	**3.13**		
Total Suspended Solids	2015-10	mg/L			**2.13**	**58.7**							< 1.88	**6.2**
Total Suspended Solids	2016-03	mg/L	**1.63 J**	**34.7**	< 1.88	**138**	**2.5**	< 16.1 J	< 10.8 J	**51.3**	**1.88**	**1.5 J**	**1.25 J**	**3.75**
Total Suspended Solids	2016-06	mg/L					**2.75**							
Total Suspended Solids	2016-08	mg/L	**6.63**	**44**	**7.25**	**100**	**2.63**	**5.13**	**6.25**	**49.6**	**3**	**2.38**	**2.25**	**4.25**
Total Suspended Solids	2017-03	mg/L	< 1.88	**24.1**	**0.75 J**	**112**	**1.63 J**	**4.2**	**7.38**	**49.2**	**2.13**	**2.25**	< 1.88	**3.63**
Total Suspended Solids	2017-08	mg/L	< 1.88	**21.9**	**2**	**108**	**2.13**	**4.5**	**3.25**	**54**	**2.63**	**4.25**	**0.875 J**	**5.25**
Total Suspended Solids	2017-11	mg/L												
Total Suspended Solids	2018-03	mg/L	< 1.88	**28**	**2.13**	**81.5**	**0.75 J**	**5.25**	**14.9**	**41.2**	**4.25**	**2**	**3**	**6**
Total Suspended Solids	2018-06	mg/L												
Total Suspended Solids	2018-08	mg/L	**1.75 J**	**28.7**	**1.75 J**	**63**	**2.88**	**4.75**			**5**	**3.63**	**0.875 J**	**9.38**
Total Suspended Solids	2018-09	mg/L							**8.63**	**32.5**				
Total Suspended Solids	2018-11	mg/L											**0.875 J**	
Total Suspended Solids	2019-03	mg/L	**4.5**	**27**	**3.63**	**111**	**3.75**	**4.88**	**5.63**	**38.7**	**4.88**	**2.38**	< 1.88	**6**
Total Suspended Solids	2019-04	mg/L												
Total Suspended Solids	2019-08	mg/L	< 1.88	**20.5**	< 1.88	**82.7**	**2.5**	**4.62**	**3.75**	**47**	**4.5**	< 1.88	**1.63 J**	**5.12**
Total Suspended Solids	2020-03	mg/L		**36**		**88**	**1.13 J**	**2.88**	**2.75**	**45**	**2.5**	< 1.88	**1.5 J**	**3.5 J**
Total Suspended Solids	2020-04	mg/L	< 1.88		**1.5 J**									
Total Suspended Solids	2020-08	mg/L	**0.75 J**	**19**	**1.75 J**	**58.7**	**2**	**1.38 J**	**5.37**	**39.1**	**2.63**			**4.13**
Total Suspended Solids	2021-03	mg/L				**64**								
Total Suspended Solids	2021-08	mg/L	**2.75**	**23.5**	< 1.88	**93**	**2.88**	**3.63**	**5.5**	**45.8**	**2.38**			**2**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Tin	2015-10	mg/L				< 0.005							
Tin	2016-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2016-06	mg/L											
Tin	2016-08	mg/L	< 0.005	**0.00166 J**	< 0.005	< 0.005							
Tin	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2018-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2018-09	mg/L											
Tin	2018-11	mg/L											
Tin	2019-03	mg/L	**0.00491 J**	< 0.005	< 0.005	< 0.005							
Tin	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2020-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2020-04	mg/L											
Tin	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005				< 0.005	< 0.005		< 0.005
Tin	2021-03	mg/L	< 0.005		< 0.005	< 0.005							
Tin	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2022-03	mg/L	< 0.005		< 0.005	< 0.005							
Tin	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Tin	2023-03	mg/L	< 0.005		< 0.005	< 0.005							
Tin	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005							
Toluene	2008-08	ug/L	< 1	< 1	< 1								
Toluene	2009-03	ug/L	< 1	< 1	< 1								
Toluene	2009-07	ug/L	< 1	< 1									
Toluene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Toluene	2013-03	ug/L	< 1	< 1	< 1.00								
Toluene	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Toluene	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2015-06	ug/L											
Toluene	2015-09	ug/L	< 1	< 1	< 1								
Toluene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Toluene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Toluene	2016-06	ug/L											
Toluene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Toluene	2017-03	ug/L	**0.216 J**	< 1	**0.315 J**	< 1	< 1	< 1		< 1	< 1		
Toluene	2017-08	ug/L	< 1	< 1	**0.325 J**	< 1	< 1	< 1		< 1	< 1		
Toluene	2017-11	ug/L										< 1	< 1
Toluene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	**0.617 J**	**0.281 J**
Toluene	2018-06	ug/L										< 1	< 1
Toluene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Toluene	2018-09	ug/L									< 1	< 1	< 1
Toluene	2018-11	ug/L										< 1	< 1
Toluene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Toluene	2019-04	ug/L											< 1
Toluene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Toluene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Toluene	2020-04	ug/L											
Toluene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	**1.01**	< 1	< 1
Toluene	2021-03	ug/L	< 1		< 1	< 1							< 1
Toluene	2021-08	ug/L	< 1	**0.555 J**	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Toluene	2022-03	ug/L	< 1		< 1	< 1							< 1
Toluene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Toluene	2023-03	ug/L	< 1		< 1	< 1							< 1
Toluene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Total Suspended Solids	2014-09	mg/L	**10.7**	**22**	**2.5**	**165**	**13.8**	**4.13**	**30**	**13.2**	**7.67**		
Total Suspended Solids	2015-03	mg/L	**11.5**	**28.5**	< 2.5	**9.88**	**66.2**	**15.3**	**10.2**	**1.76**	**2.47**		
Total Suspended Solids	2015-06	mg/L											
Total Suspended Solids	2015-09	mg/L	**15**	**31.1**	< 1.88								
Total Suspended Solids	2015-10	mg/L				< 1.88	< 1.88	< 1.88	**17.3**	< 1.88	< 1.88		
Total Suspended Solids	2016-03	mg/L	**12.4**	**31**	< 1.88	< 1.76	< 1.76	< 1.88	**4.38**	**1.92**	< 1.88		
Total Suspended Solids	2016-06	mg/L											
Total Suspended Solids	2016-08	mg/L	**11.6**	**34.4**	**0.875 J**	< 1.88	**0.75 J**	< 1.88	**10.6**	**6.12**	**1 J**		
Total Suspended Solids	2017-03	mg/L	**11.9**	**27.1**	< 1.88	< 1.88	< 1.88	< 1.88	**5**	< 1.88	**0.875 J**		
Total Suspended Solids	2017-08	mg/L	**13.5**	**35**	< 1.88	< 1.88	< 1.88	< 1.88	**4.5**	< 1.88	**0.625 J**		
Total Suspended Solids	2017-11	mg/L										< 1.88	**12.8**
Total Suspended Solids	2018-03	mg/L	**14.3**	**28**	< 1.88	< 1.88	**1 J**	< 1.88	**7.75**	< 1.88	**0.625 J**	**1.63 J**	**9**
Total Suspended Solids	2018-06	mg/L										**1 J**	**9.75**
Total Suspended Solids	2018-08	mg/L	**10.4**	**35.5**	**0.75 J**	< 1.88		< 1.88	**4.62**	**0.75 J**			
Total Suspended Solids	2018-09	mg/L									< 1.88	**0.75 J**	**10.1**
Total Suspended Solids	2018-11	mg/L										**1 J**	**15.8**
Total Suspended Solids	2019-03	mg/L	**19**	**27.6**	**34.9**	< 1.88		< 1.88	**6.25**	**2.13**	**1.63 J**	**1.88**	
Total Suspended Solids	2019-04	mg/L											**12**
Total Suspended Solids	2019-08	mg/L	**13.3**	**31**	**0.75 J**	< 1.88	**5.13**	< 1.88	**14.6**	**2.25**	< 1.88	**1 J**	**10.9**
Total Suspended Solids	2020-03	mg/L	**14**	**26**	**1.75 J**	< 1.88	**4.62**	< 1.88	**2.38**	**1.5 J**	**3.13**	**1 J**	**13**
Total Suspended Solids	2020-04	mg/L											
Total Suspended Solids	2020-08	mg/L	**9.5**	**30**	< 1.88	**5.5**	**1.38 J**		**4.5**	**2.38**	< 1.88	< 1.88	**10.5**
Total Suspended Solids	2021-03	mg/L	**17.7**		< 1.88	< 1.88							**11**
Total Suspended Solids	2021-08	mg/L	**9.88**	**31.5**	< 1.88	< 1.88	**0.75 J**		**2.63**	**1.63 J**	< 1.88	**8.25**	**10.9**

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Total Suspended Solids	2022-03	mg/L				**38.5**								
Total Suspended Solids	2022-08	mg/L	**1.25 J**	**19**	**1.75 J**	**48**	**3**	**5.5**	**7.88**	**41**	**2.5**			**3.5**
Total Suspended Solids	2023-03	mg/L				**33**								
Total Suspended Solids	2023-08	mg/L	< 1.88	**22.7**	**2.88**	**53**	**2.63**	**3.87**	**3.13**	**41.8**	**3.13**			**3**
Toxaphene	2008-08	ug/L	< 0.54	< 0.53	< 0.47	< 0.47	< 0.52	< 0.53	< 0.54	< 0.56	< 0.53		< 0.53	
Toxaphene	2008-09	ug/L										< 2		< 2
Toxaphene	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Toxaphene	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00				< 2.00				
Toxaphene	2015-06	ug/L						< 2.17	< 2					
Toxaphene	2015-09	ug/L	< 2.22	< 2.22				< 2.25	< 2.04	< 2.22	< 2.2			
Toxaphene	2015-10	ug/L			< 2.33	< 2.27								
Toxaphene	2016-03	ug/L												
Toxaphene	2016-06	ug/L					< 2.27							
Toxaphene	2016-08	ug/L					< 2.11							
Toxaphene	2018-11	ug/L											< 2.25	
Toxaphene	2019-03	ug/L											< 2.33	
Toxaphene	2020-08	ug/L	< 2.35	< 2.44	< 2.35	< 2.35	< 2.35	< 2.35	< 2.44	< 2.35	< 2.44			
trans-1,2-Dichloroethene	2008-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2009-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2009-07	ug/L	< 1	< 1	< 1	< 1		< 1	< 1.00	**1.09**	< 1			
trans-1,2-Dichloroethene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
trans-1,2-Dichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.26**	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2013-03	ug/L	< 1.00	**0.280 J**	< 1	**0.438 J**	< 1	< 1	< 1	**0.86 J**	< 1.00	< 1	< 1	< 1
trans-1,2-Dichloroethene	2013-09	ug/L	< 1.00	**0.444 J**	< 1.00	**0.213 J**	< 1.00	< 1.00	< 1.00	**0.513 J**	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2013-11	ug/L												
trans-1,2-Dichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2014-06	ug/L												
trans-1,2-Dichloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	**0.313 J**	< 1	< 1	< 1.00	< 1.00
trans-1,2-Dichloroethene	2015-06	ug/L						< 1	< 1					
trans-1,2-Dichloroethene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2015-10	ug/L			< 1	< 1							< 1	< 1
trans-1,2-Dichloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.03**	**0.352 J**	< 1	< 1	< 1
trans-1,2-Dichloroethene	2016-06	ug/L					< 1							
trans-1,2-Dichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.569 J**	**0.243 J**	< 1	< 1	< 1
trans-1,2-Dichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.329 J**	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2017-08	ug/L	< 1	< 1	< 1	**0.212 J**	< 1	< 1	< 1	**0.361 J**	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2017-11	ug/L												
trans-1,2-Dichloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.368 J**	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2018-06	ug/L												
trans-1,2-Dichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2018-09	ug/L							< 1	< 1				
trans-1,2-Dichloroethene	2018-11	ug/L											< 1	
trans-1,2-Dichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.306 J**	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2019-04	ug/L												
trans-1,2-Dichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.474 J**	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	**0.598 J**	**0.277 J**	< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-04	ug/L	< 1		< 1									
trans-1,2-Dichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.471 J**	< 1			< 1
trans-1,2-Dichloroethene	2021-03	ug/L				< 1								
trans-1,2-Dichloroethene	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	**0.359 J**	**0.412 J**			< 1
trans-1,2-Dichloroethene	2022-03	ug/L				< 1								
trans-1,2-Dichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
trans-1,2-Dichloroethene	2023-03	ug/L				< 1								
trans-1,2-Dichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
trans-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2009-07	ug/L	< 5	< 5	< 5	< 5		< 5	< 5.00	< 5.00	< 5			
trans-1,3-Dichloropropene	2009-09	ug/L	< 5.00	< 5	< 5.00	< 25.0		< 5	< 5	< 5	< 5			
trans-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 5.00	< 5.00	< 5.00	< 10.0	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2013-03	ug/L	< 5.00	< 5.00	< 5	< 5	< 5	< 5	< 5	< 5	< 5.00	< 5	< 5	< 5
trans-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2013-11	ug/L												
trans-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2014-06	ug/L												
trans-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2015-03	ug/L	< 5.00	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00	< 5	< 5	< 5.00	< 5.00
trans-1,3-Dichloropropene	2015-06	ug/L						< 5	< 5					
trans-1,3-Dichloropropene	2015-09	ug/L	< 5	< 5			< 5	< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2015-10	ug/L			< 5	< 5							< 5	< 5
trans-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2016-06	ug/L					< 5							
trans-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2017-11	ug/L												
trans-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-06	ug/L												

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Total Suspended Solids	2022-03	mg/L	**8.63**		**0.875 J**	< 1.88							**10.4**
Total Suspended Solids	2022-08	mg/L	**9.67**	**28**	< 1.88	< 1.88	< 1.88		**2.63**	< 1.88	< 1.88	**1.38 J**	**12**
Total Suspended Solids	2023-03	mg/L	**9**		< 1.88	< 1.88							**11**
Total Suspended Solids	2023-08	mg/L	**13.5**	**17.3**	< 1.88	< 1.88	< 1.88		**2.25**	**0.75 J**	**0.875 J**	**1.38 J**	**11.3**
Toxaphene	2008-08	ug/L	< 0.47	< 0.53									
Toxaphene	2008-09	ug/L			< 2								
Toxaphene	2009-03	ug/L	< 2	< 2	< 2								
Toxaphene	2010-09	ug/L	< 2.00	< 2.00	< 2.00								
Toxaphene	2015-06	ug/L											
Toxaphene	2015-09	ug/L	< 2.15	< 2.2	< 2.2								
Toxaphene	2015-10	ug/L				< 2.27							
Toxaphene	2016-03	ug/L			< 2.13	< 2.22							
Toxaphene	2016-06	ug/L											
Toxaphene	2016-08	ug/L			< 2.22	< 2.04							
Toxaphene	2018-11	ug/L											
Toxaphene	2019-03	ug/L											
Toxaphene	2020-08	ug/L	< 2.35	< 2.44	< 2.44	< 2.35							
trans-1,2-Dichloroethene	2008-08	ug/L	< 1	< 1	< 1								
trans-1,2-Dichloroethene	2009-03	ug/L	< 1	< 1	< 1								
trans-1,2-Dichloroethene	2009-07	ug/L	< 1	< 1									
trans-1,2-Dichloroethene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2013-03	ug/L	< 1	< 1	< 1.00								
trans-1,2-Dichloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
trans-1,2-Dichloroethene	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2015-06	ug/L											
trans-1,2-Dichloroethene	2015-09	ug/L	< 1	< 1	< 1								
trans-1,2-Dichloroethene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
trans-1,2-Dichloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
trans-1,2-Dichloroethene	2016-06	ug/L											
trans-1,2-Dichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
trans-1,2-Dichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
trans-1,2-Dichloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
trans-1,2-Dichloroethene	2017-11	ug/L										< 1	< 1
trans-1,2-Dichloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2018-06	ug/L										< 1	< 1
trans-1,2-Dichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
trans-1,2-Dichloroethene	2018-09	ug/L									< 1	< 1	< 1
trans-1,2-Dichloroethene	2018-11	ug/L										< 1	< 1
trans-1,2-Dichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
trans-1,2-Dichloroethene	2019-04	ug/L											< 1
trans-1,2-Dichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2020-04	ug/L											
trans-1,2-Dichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2021-03	ug/L	< 1		< 1	< 1							< 1
trans-1,2-Dichloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2022-03	ug/L	< 1		< 1	< 1							< 1
trans-1,2-Dichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	2023-03	ug/L	< 1		< 1	< 1							< 1
trans-1,2-Dichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	2008-08	ug/L	< 5	< 5	< 5								
trans-1,3-Dichloropropene	2009-03	ug/L	< 5	< 5	< 5								
trans-1,3-Dichloropropene	2009-07	ug/L	< 5	< 5									
trans-1,3-Dichloropropene	2009-09	ug/L	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2010-03	ug/L	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,3-Dichloropropene	2011-03	ug/L	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2011-09	ug/L	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2012-03	ug/L	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2012-09	ug/L	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2013-03	ug/L	< 5	< 5	< 5.00								
trans-1,3-Dichloropropene	2013-09	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2013-11	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2014-03	ug/L	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2014-06	ug/L					< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2014-09	ug/L	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5		
trans-1,3-Dichloropropene	2015-03	ug/L	< 5.00	< 5.00	< 5		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2015-06	ug/L											
trans-1,3-Dichloropropene	2015-09	ug/L	< 5	< 5	< 5								
trans-1,3-Dichloropropene	2015-10	ug/L				< 5	< 5	< 5		< 5	< 5		
trans-1,3-Dichloropropene	2016-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
trans-1,3-Dichloropropene	2016-06	ug/L											
trans-1,3-Dichloropropene	2016-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
trans-1,3-Dichloropropene	2017-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
trans-1,3-Dichloropropene	2017-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5		
trans-1,3-Dichloropropene	2017-11	ug/L										< 5	< 5
trans-1,3-Dichloropropene	2018-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-06	ug/L										< 5	< 5

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
trans-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-09	ug/L							< 5	< 5				
trans-1,3-Dichloropropene	2018-11	ug/L											< 5	
trans-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2019-04	ug/L												
trans-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-03	ug/L		< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-04	ug/L	< 5		< 5									
trans-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
trans-1,3-Dichloropropene	2021-03	ug/L				< 5								
trans-1,3-Dichloropropene	2021-08	ug/L	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
trans-1,3-Dichloropropene	2022-03	ug/L				< 5								
trans-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
trans-1,3-Dichloropropene	2023-03	ug/L				< 5								
trans-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5			< 5
trans-1,4-Dichloro-2-butene	2008-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2009-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2009-07	ug/L	< 10	< 10	< 10	< 10		< 10	< 10.0	< 10.0	< 10			
trans-1,4-Dichloro-2-butene	2009-09	ug/L	< 10.0	< 10	< 10.0	< 50.0		< 10	< 10	< 10	< 10			
trans-1,4-Dichloro-2-butene	2010-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2010-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2011-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2011-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2012-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2012-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2013-03	ug/L	< 10.0	< 10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10.0	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2013-09	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2013-11	ug/L												
trans-1,4-Dichloro-2-butene	2014-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2014-06	ug/L												
trans-1,4-Dichloro-2-butene	2014-09	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2015-06	ug/L						< 10	< 10					
trans-1,4-Dichloro-2-butene	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2015-10	ug/L			< 10	< 10							< 10	< 10
trans-1,4-Dichloro-2-butene	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**8.06 J**	< 10	< 10
trans-1,4-Dichloro-2-butene	2016-06	ug/L					< 10							
trans-1,4-Dichloro-2-butene	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2017-11	ug/L												
trans-1,4-Dichloro-2-butene	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-06	ug/L												
trans-1,4-Dichloro-2-butene	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-09	ug/L							< 10	< 10				
trans-1,4-Dichloro-2-butene	2018-11	ug/L											< 10	
trans-1,4-Dichloro-2-butene	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2019-04	ug/L												
trans-1,4-Dichloro-2-butene	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-03	ug/L		< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-04	ug/L	< 10		< 10									
trans-1,4-Dichloro-2-butene	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
trans-1,4-Dichloro-2-butene	2021-03	ug/L				< 10								
trans-1,4-Dichloro-2-butene	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
trans-1,4-Dichloro-2-butene	2022-03	ug/L				< 10								
trans-1,4-Dichloro-2-butene	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
trans-1,4-Dichloro-2-butene	2023-03	ug/L				< 10								
trans-1,4-Dichloro-2-butene	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Trichloroethene	2008-08	ug/L	< 1	< 1	< 1	**1.97**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2009-03	ug/L	< 1	< 1	< 1	**1.73**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2009-07	ug/L	< 1	< 1	< 1	**1.7**		< 1	< 1.00	< 1.00	< 1			
Trichloroethene	2009-09	ug/L	< 1.00	< 1	< 1.00	< 5.00		< 1	< 1	< 1	< 1			
Trichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2013-03	ug/L	< 1.00	< 1.00	< 1	**0.704 J**	< 1	< 1	< 1	**0.369 J**	< 1.00	< 1	< 1	< 1
Trichloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00	**0.249 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2013-11	ug/L												
Trichloroethene	2014-03	ug/L	< 1.00	**0.383 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2014-06	ug/L												
Trichloroethene	2014-09	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2015-03	ug/L	< 1.00	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00	< 1	< 1	< 1.00	< 1.00
Trichloroethene	2015-06	ug/L						< 1	< 1					
Trichloroethene	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Trichloroethene	2015-10	ug/L			< 1	< 1							< 1	< 1
Trichloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2016-06	ug/L					< 1							
Trichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2017-11	ug/L												
Trichloroethene	2018-03	ug/L	< 1	< 1	< 1	**0.225 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2018-06	ug/L												
Trichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Trichloroethene	2018-09	ug/L							< 1	< 1				

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
trans-1,3-Dichloropropene	2018-08	ug/L	< 5	< 5	< 5	< 5		< 5		< 5			
trans-1,3-Dichloropropene	2018-09	ug/L									< 5	< 5	< 5
trans-1,3-Dichloropropene	2018-11	ug/L										< 5	< 5
trans-1,3-Dichloropropene	2019-03	ug/L	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	2019-04	ug/L											< 5
trans-1,3-Dichloropropene	2019-08	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-03	ug/L	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2020-04	ug/L											
trans-1,3-Dichloropropene	2020-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2021-03	ug/L	< 5		< 5	< 5							< 5
trans-1,3-Dichloropropene	2021-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2022-03	ug/L	< 5		< 5	< 5							< 5
trans-1,3-Dichloropropene	2022-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	2023-03	ug/L	< 5		< 5	< 5							< 5
trans-1,3-Dichloropropene	2023-08	ug/L	< 5	< 5	< 5	< 5	< 5			< 5	< 5	< 5	< 5
trans-1,4-Dichloro-2-butene	2008-08	ug/L	< 10	< 10	< 10								
trans-1,4-Dichloro-2-butene	2009-03	ug/L	< 10	< 10	< 10								
trans-1,4-Dichloro-2-butene	2009-07	ug/L	< 10	< 10									
trans-1,4-Dichloro-2-butene	2009-09	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2010-03	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2010-09	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2011-03	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2011-09	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2012-03	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2012-09	ug/L	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2013-03	ug/L	< 10	< 10	< 10.0								
trans-1,4-Dichloro-2-butene	2013-09	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2013-11	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2014-03	ug/L	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2014-06	ug/L					< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2014-09	ug/L	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10		
trans-1,4-Dichloro-2-butene	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2015-06	ug/L											
trans-1,4-Dichloro-2-butene	2015-09	ug/L	< 10	< 10	< 10								
trans-1,4-Dichloro-2-butene	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
trans-1,4-Dichloro-2-butene	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
trans-1,4-Dichloro-2-butene	2016-06	ug/L											
trans-1,4-Dichloro-2-butene	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
trans-1,4-Dichloro-2-butene	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
trans-1,4-Dichloro-2-butene	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
trans-1,4-Dichloro-2-butene	2017-11	ug/L										< 10	< 10
trans-1,4-Dichloro-2-butene	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-06	ug/L										< 10	< 10
trans-1,4-Dichloro-2-butene	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
trans-1,4-Dichloro-2-butene	2018-09	ug/L									< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2018-11	ug/L										< 10	< 10
trans-1,4-Dichloro-2-butene	2019-03	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	
trans-1,4-Dichloro-2-butene	2019-04	ug/L											< 10
trans-1,4-Dichloro-2-butene	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2020-04	ug/L											
trans-1,4-Dichloro-2-butene	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2021-03	ug/L	< 10		< 10	< 10							< 10
trans-1,4-Dichloro-2-butene	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2022-03	ug/L	< 10		< 10	< 10							< 10
trans-1,4-Dichloro-2-butene	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
trans-1,4-Dichloro-2-butene	2023-03	ug/L	< 10		< 10	< 10							< 10
trans-1,4-Dichloro-2-butene	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Trichloroethene	2008-08	ug/L	< 1	< 1	< 1								
Trichloroethene	2009-03	ug/L	< 1	< 1	< 1								
Trichloroethene	2009-07	ug/L	< 1	< 1									
Trichloroethene	2009-09	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2010-03	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2010-09	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2011-09	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2012-03	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2012-09	ug/L	< 1.00	< 1.00	< 1.00								
Trichloroethene	2013-03	ug/L	< 1	< 1	< 1.00								
Trichloroethene	2013-09	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2014-06	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2014-09	ug/L	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1		
Trichloroethene	2015-03	ug/L	< 1.00	< 1.00	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2015-06	ug/L											
Trichloroethene	2015-09	ug/L	< 1	< 1	< 1								
Trichloroethene	2015-10	ug/L				< 1	< 1	< 1		< 1	< 1		
Trichloroethene	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Trichloroethene	2016-06	ug/L											
Trichloroethene	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Trichloroethene	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Trichloroethene	2017-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Trichloroethene	2017-11	ug/L										< 1	< 1
Trichloroethene	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Trichloroethene	2018-06	ug/L										< 1	< 1
Trichloroethene	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Trichloroethene	2018-09	ug/L									< 1	< 1	< 1

Table 14
Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Trichloroethene	2018-11	ug/L											< 1	
Trichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.611 J**	< 1
Trichloroethene	2019-04	ug/L												
Trichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	2020-04	ug/L	< 1		< 1									
Trichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Trichloroethene	2021-03	ug/L				< 1								
Trichloroethene	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Trichloroethene	2022-03	ug/L				< 1								
Trichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Trichloroethene	2023-03	ug/L				< 1								
Trichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Vanadium	2008-08	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2009-03	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2009-07	mg/L	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Vanadium	2009-09	mg/L	< 0.0500	< 0.05		< 0.0500		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		
Vanadium	2010-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2010-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2011-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2011-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2012-03	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2012-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2013-03	mg/L	< 0.0500	**0.00627 J**	< 0.05	**0.00318 J**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.0500	< 0.05	< 0.05	< 0.05
Vanadium	2013-09	mg/L	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2013-11	mg/L												
Vanadium	2014-03	mg/L	< 0.0500	< 0.100	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.100	< 0.0500	< 0.0500	< 0.0500	< 0.0500
Vanadium	2014-06	mg/L												
Vanadium	2014-09	mg/L	**0.000813 J**	**0.000995 J**	< 0.005	**0.000599 J**	< 0.005	**0.000564 J**	**0.000585 J**	**0.00161 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2015-03	mg/L	**0.000636 J**	**0.00193 J**	< 0.00500	**0.000467 J**	< 0.005	**0.000753 J**	**0.000653 J**	**0.00160 J**	< 0.005	< 0.005	< 0.00500	< 0.00500
Vanadium	2015-06	mg/L						**0.000656 J**	< 0.005					
Vanadium	2015-09	mg/L	**0.000604 J**	**0.00143 J**			< 0.005	**0.000554 J**	< 0.005	**0.00103 J**	< 0.005	< 0.005		
Vanadium	2015-10	mg/L			< 0.005	**0.000846 J**							< 0.005	< 0.005
Vanadium	2016-03	mg/L	**0.000467 J**	**0.00181 J**	< 0.005	**0.000884 J**	< 0.005	**0.000877 J**	< 0.005	**0.00126 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2016-06	mg/L					< 0.005							
Vanadium	2016-08	mg/L	**0.000708 J**	**0.00137 J**	**0.000267 J**	**0.00169 J**	< 0.005	**0.00043 J**	**0.000274 J**	**0.00107 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2017-03	mg/L	< 0.005	**0.0014 J**	< 0.005	**0.00157 J**	< 0.005	< 0.005	< 0.005	**0.00154 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2017-08	mg/L	< 0.005	**0.00104 J**	< 0.005	**0.000881 J**	< 0.005	< 0.005	< 0.005	**0.00122 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2017-11	mg/L												
Vanadium	2018-03	mg/L	< 0.005	**0.00192 J**	< 0.005	< 0.005	< 0.005	**0.00108 J**	< 0.005	**0.00146 J**	< 0.005	< 0.005	**0.000971 J**	< 0.005
Vanadium	2018-06	mg/L												
Vanadium	2018-08	mg/L	**0.000534 J**	**0.00153 J**	< 0.005	**0.000974 J**	< 0.005	**0.000854 J**			< 0.005	< 0.005	**0.000558 J**	< 0.005
Vanadium	2018-09	mg/L							< 0.005	**0.00111 J**				
Vanadium	2018-11	mg/L											< 0.005	
Vanadium	2019-03	mg/L	< 0.005	**0.00136 J**	< 0.005	**0.00105 J**	< 0.005	**0.00087 J**	< 0.005	**0.00133 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2019-04	mg/L												
Vanadium	2019-08	mg/L	< 0.005	**0.00113 J**	< 0.005	**0.00159 J**	< 0.005	< 0.005	< 0.005	**0.00141 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2020-03	mg/L		**0.00245 J**		**0.00135 J**	< 0.02	< 0.005	< 0.02	**0.00147 J**	< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2020-04	mg/L	< 0.005		< 0.005									
Vanadium	2020-08	mg/L	< 0.005	**0.000966 J**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005
Vanadium	2021-03	mg/L				**0.00129 J**								
Vanadium	2021-08	mg/L	< 0.005	**0.00183 J**	< 0.005	**0.00137 J**	< 0.005	< 0.005	< 0.005	**0.0015 J**	< 0.005			< 0.005
Vanadium	2022-03	mg/L				< 0.005								
Vanadium	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00122 J**	< 0.005			< 0.005
Vanadium	2023-03	mg/L				< 0.005								
Vanadium	2023-08	mg/L	< 0.005	**0.00183 J**	< 0.005	< 0.005	< 0.005	**0.00116 J**	< 0.005	**0.00164 J**	< 0.005			< 0.005
Vinyl Acetate	2008-08	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl Acetate	2009-03	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl Acetate	2009-07	ug/L	< 2	< 2	< 2	< 2		< 2	< 2.00	< 2.00	< 2			
Vinyl Acetate	2009-09	ug/L	< 2.00	< 2	< 2.00	< 10.0		< 2	< 2	< 2	< 2			
Vinyl Acetate	2010-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2010-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2011-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2011-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2012-03	ug/L	< 2.00	< 2.00	< 10.0	< 10.0	< 2.00	< 2.00	< 10.0	< 10.0	< 2.00	< 2.00	< 10.0	< 10.0
Vinyl Acetate	2012-09	ug/L	< 4.00	< 4.00	< 10.0	< 10.0	< 10.0	< 4.00	< 10.0	< 10.0	< 4.00	< 4.00	< 4.00	< 4.00
Vinyl Acetate	2013-03	ug/L	< 2.00	< 2.00	< 2	< 2	< 2	< 2	< 2	< 2	< 2.00	< 2	< 2	< 2
Vinyl Acetate	2013-09	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2013-11	ug/L												
Vinyl Acetate	2014-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Vinyl Acetate	2014-06	ug/L												
Vinyl Acetate	2014-09	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl Acetate	2015-03	ug/L	< 10.0	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0	< 10	< 10	< 10.0	< 10.0
Vinyl Acetate	2015-06	ug/L						< 10	< 10					
Vinyl Acetate	2015-09	ug/L	< 10	< 10			< 10	< 10	< 10	< 10	< 10	< 10		
Vinyl Acetate	2015-10	ug/L			< 10	< 10							< 10	< 10
Vinyl Acetate	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2016-06	ug/L					< 10							
Vinyl Acetate	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2017-11	ug/L												
Vinyl Acetate	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2018-06	ug/L												
Vinyl Acetate	2018-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Vinyl Acetate	2018-09	ug/L							< 10	< 10				
Vinyl Acetate	2018-11	ug/L											< 10	
Vinyl Acetate	2019-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Trichloroethene	2018-11	ug/L										< 1	< 1
Trichloroethene	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Trichloroethene	2019-04	ug/L											< 1
Trichloroethene	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Trichloroethene	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1
Trichloroethene	2020-04	ug/L											
Trichloroethene	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Trichloroethene	2021-03	ug/L	< 1		< 1	< 1							< 1
Trichloroethene	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Trichloroethene	2022-03	ug/L	< 1		< 1	< 1							< 1
Trichloroethene	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Trichloroethene	2023-03	ug/L	< 1		< 1	< 1							< 1
Trichloroethene	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Vanadium	2008-08	mg/L	< 0.05	< 0.05	< 0.05								
Vanadium	2009-03	mg/L	< 0.05	< 0.05	< 0.05								
Vanadium	2009-07	mg/L	< 0.05	< 0.05	< 0.05								
Vanadium	2009-09	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2010-03	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2010-09	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2011-03	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2011-09	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2012-03	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2012-09	mg/L	< 0.0500	< 0.0500	< 0.0500								
Vanadium	2013-03	mg/L	< 0.05	< 0.05	< 0.0500								
Vanadium	2013-09	mg/L	< 0.0500	< 0.0500	< 0.0500	~~**0.00473 J**~~	**0.00468 J**	< 0.0500	**0.00301 J**	**0.00284 J**	< 0.0500		
Vanadium	2013-11	mg/L				~~**0.00558 J**~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500		
Vanadium	2014-03	mg/L	< 0.0500	< 0.0500	< 0.0500	~~**0.00343 J**~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500		
Vanadium	2014-06	mg/L				~~< 0.0500~~	< 0.0500	< 0.0500	< 0.0500	< 0.0500	< 0.0500		
Vanadium	2014-09	mg/L	< 0.005	**0.000544 J**	**0.000489 J**	~~**0.00284 J**~~	**0.000976 J**	**0.000514 J**	**0.00047 J**	**0.000954 J**	**0.000518 J**		
Vanadium	2015-03	mg/L	< 0.00500	< 0.00500	< 0.005	~~**0.00237 J**~~	**0.00293 J**	**0.00104 J**	< 0.00500	**0.000987 J**	< 0.00500		
Vanadium	2015-06	mg/L											
Vanadium	2015-09	mg/L	**0.000473 J**	< 0.005	< 0.005								
Vanadium	2015-10	mg/L				< 0.005	**0.000859 J**	**0.000462 J**		**0.000961 J**	< 0.005		
Vanadium	2016-03	mg/L	**0.000313 J**	**0.000293 J**	< 0.005	< 0.005	**0.000487 J**	**0.000421 J**		**0.000773 J**	< 0.005		
Vanadium	2016-06	mg/L											
Vanadium	2016-08	mg/L	< 0.005	**0.000522 J**	< 0.005	< 0.005	**0.000556 J**	**0.000528 J**		**0.00068 J**	< 0.005		
Vanadium	2017-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		**0.000959 J**	< 0.005		
Vanadium	2017-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		
Vanadium	2017-11	mg/L										< 0.005	< 0.005
Vanadium	2018-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.000955 J**		**0.00102 J**	< 0.005	< 0.005	< 0.005
Vanadium	2018-06	mg/L										< 0.005	< 0.005
Vanadium	2018-08	mg/L	< 0.005	**0.000818 J**	< 0.005	< 0.005		**0.000646 J**		**0.000728 J**			
Vanadium	2018-09	mg/L									< 0.005	< 0.005	< 0.005
Vanadium	2018-11	mg/L										< 0.005	< 0.005
Vanadium	2019-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
Vanadium	2019-04	mg/L											< 0.005
Vanadium	2019-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2020-03	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00129 J**	**0.000829 J**		**0.00102 J**	< 0.005	< 0.005	< 0.005
Vanadium	2020-04	mg/L											
Vanadium	2020-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	**0.00109 J**			< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2021-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Vanadium	2021-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.00176 J**	< 0.005	< 0.005	< 0.005
Vanadium	2022-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Vanadium	2022-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005
Vanadium	2023-03	mg/L	< 0.005		< 0.005	< 0.005							< 0.005
Vanadium	2023-08	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005			**0.00122 J**	< 0.005	< 0.005	< 0.005
Vinyl Acetate	2008-08	ug/L	< 2	< 2	< 2								
Vinyl Acetate	2009-03	ug/L	< 2	< 2	< 2								
Vinyl Acetate	2009-07	ug/L	< 2	< 2									
Vinyl Acetate	2009-09	ug/L	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2010-03	ug/L	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2010-09	ug/L	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2011-03	ug/L	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2011-09	ug/L	< 2.00	< 2.00	< 2.00								
Vinyl Acetate	2012-03	ug/L	< 2.00	< 10.0	< 10.0								
Vinyl Acetate	2012-09	ug/L	< 4.00	< 4.00	< 10.0								
Vinyl Acetate	2013-03	ug/L	< 2	< 2	< 2.00								
Vinyl Acetate	2013-09	ug/L	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2013-11	ug/L					< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2014-03	ug/L	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2014-06	ug/L					< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Vinyl Acetate	2014-09	ug/L	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2		
Vinyl Acetate	2015-03	ug/L	< 10.0	< 10.0	< 10		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2015-06	ug/L											
Vinyl Acetate	2015-09	ug/L	< 10	< 10	< 10								
Vinyl Acetate	2015-10	ug/L				< 10	< 10	< 10		< 10	< 10		
Vinyl Acetate	2016-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Vinyl Acetate	2016-06	ug/L											
Vinyl Acetate	2016-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Vinyl Acetate	2017-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Vinyl Acetate	2017-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10		
Vinyl Acetate	2017-11	ug/L										< 10	< 10
Vinyl Acetate	2018-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Vinyl Acetate	2018-06	ug/L										< 10	< 10
Vinyl Acetate	2018-08	ug/L	< 10	< 10	< 10	< 10		< 10		< 10			
Vinyl Acetate	2018-09	ug/L									< 10	< 10	< 10
Vinyl Acetate	2018-11	ug/L										< 10	< 10
Vinyl Acetate	2019-03	ug/L	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10	< 10	

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Vinyl Acetate	2019-04	ug/L												
Vinyl Acetate	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2020-03	ug/L		< 10		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Acetate	2020-04	ug/L	< 10		< 10									
Vinyl Acetate	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Vinyl Acetate	2021-03	ug/L				< 10								
Vinyl Acetate	2021-08	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Vinyl Acetate	2022-03	ug/L				< 10								
Vinyl Acetate	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Vinyl Acetate	2023-03	ug/L				< 10								
Vinyl Acetate	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10			< 10
Vinyl Chloride	2008-08	ug/L	< 1	< 1	< 1	4.36	< 1	< 1	< 1	< 1	1.58	< 1	< 1	< 1
Vinyl Chloride	2009-03	ug/L	< 1	0.84 J	< 1	4.92	< 1	0.39 J	< 0.26	0.6 J	0.67 J	< 0.26	< 0.26	< 0.26
Vinyl Chloride	2009-07	ug/L	< 0.26	0.76 J	< 0.26	< 0.26		< 0.26	< 0.260	0.600 J	< 0.26			
Vinyl Chloride	2009-09	ug/L	< 1.00	0.75 J	< 1.00	< 5.00		< 0.24	< 0.24	0.84 J	0.53 J			
Vinyl Chloride	2010-03	ug/L	0.330 J	0.650 J	< 0.240	3.26	< 0.240	0.240 J	< 0.240	0.560 J	0.660 J	< 0.240	< 0.240	< 0.240
Vinyl Chloride	2010-09	ug/L	< 0.240	0.580 J	< 0.240	2.02	< 1.00	< 1.00	< 1.00	0.790 J	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2011-03	ug/L	< 1.00	< 1.00	< 1.00	2.49	< 0.100	0.230 J	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2011-09	ug/L	< 0.100	0.740 J	< 0.100	1.23	< 0.100	0.120 J	< 0.100	0.270 J	0.200 J	< 0.100	< 0.100	< 0.100
Vinyl Chloride	2012-03	ug/L	< 0.100	0.620	< 0.100	1.47	< 0.100	< 0.100	< 0.100	0.360	< 0.100	< 0.100	< 0.100	< 0.100
Vinyl Chloride	2012-09	ug/L	< 0.100	< 1.00	< 0.100	1.86	< 0.100	0.240	0.130	0.250	< 0.100	< 0.100	< 0.100	< 0.100
Vinyl Chloride	2013-03	ug/L	< 1.00	0.216 J	< 1	1.54	< 1	< 1	0.119 J	0.481 J	< 1.00	< 1	< 1	< 1
Vinyl Chloride	2013-09	ug/L	< 1.00	0.562 J	< 1.00	1.28	< 1.00	0.214 J	0.139 J	0.448 J	0.333 J	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2013-11	ug/L												
Vinyl Chloride	2014-03	ug/L	< 1.00	0.544 J	< 1.00	< 1.00	< 1.00	0.152 J	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2014-06	ug/L												
Vinyl Chloride	2014-09	ug/L	< 1	< 1	< 1	0.831 J	< 1	0.195 J	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2015-03	ug/L	< 1.00	< 1	< 1.00	0.604 J	< 1	< 1	< 1.00	< 1.00	0.352 J	< 1	< 1.00	< 1.00
Vinyl Chloride	2015-06	ug/L						< 1	< 1					
Vinyl Chloride	2015-09	ug/L	< 1	< 1			< 1	< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2015-10	ug/L			< 1	0.699 J							< 1	< 1
Vinyl Chloride	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.443 J	1.04	< 1	< 1	< 1
Vinyl Chloride	2016-06	ug/L					< 1							
Vinyl Chloride	2016-08	ug/L	< 1	< 1	< 1	0.691 J	< 1	< 1	< 1	< 1	0.746 J	< 1	< 1	< 1
Vinyl Chloride	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.783 J	< 1	< 1	< 1	< 1
Vinyl Chloride	2017-08	ug/L	< 1	< 1	< 1	0.401 J	< 1	< 1	< 1	0.262 J	0.396 J	< 1	< 1	< 1
Vinyl Chloride	2017-11	ug/L												
Vinyl Chloride	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	0.12 J	< 1	0.249 J	0.759 J	< 1	< 1	< 1
Vinyl Chloride	2018-06	ug/L												
Vinyl Chloride	2018-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	< 1
Vinyl Chloride	2018-09	ug/L							< 1	< 1				
Vinyl Chloride	2018-11	ug/L											< 1	
Vinyl Chloride	2019-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride	2019-04	ug/L												
Vinyl Chloride	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.451 J	< 1	< 1	< 1	< 1
Vinyl Chloride	2020-03	ug/L		< 1		< 1	< 1	< 1	< 1	0.494 J	0.779 J	< 1	< 1	< 1
Vinyl Chloride	2020-04	ug/L	< 1		< 1									
Vinyl Chloride	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.411 J	0.44 J			< 1
Vinyl Chloride	2021-03	ug/L				< 1								
Vinyl Chloride	2021-08	ug/L	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	0.583 J			< 1
Vinyl Chloride	2022-03	ug/L				< 1								
Vinyl Chloride	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.368 J			< 1
Vinyl Chloride	2023-03	ug/L				0.19 J								
Vinyl Chloride	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
Xylenes, Total	2008-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2009-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2009-07	ug/L	< 3	< 3	< 3	< 3		< 3	< 3.00	< 3.00	< 3			
Xylenes, Total	2009-09	ug/L	< 3.00	< 3	< 3.00	< 15.0		< 3	< 3	< 3	< 3			
Xylenes, Total	2010-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2010-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2011-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2011-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2012-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2012-09	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2013-03	ug/L	< 3.00	< 3.00	< 3	< 3	< 3	< 3	< 3	< 3	< 3.00	< 3	< 3	< 3
Xylenes, Total	2013-09	ug/L	< 3.00	< 3.00	< 3.00	0.189 J	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2013-11	ug/L												
Xylenes, Total	2014-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2014-06	ug/L												
Xylenes, Total	2014-09	ug/L	< 3	< 3	< 3	< 3 J	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2015-03	ug/L	< 3.00	< 3	0.204 J	0.339 J	< 3	< 3	< 3.00	< 3.00	< 3	< 3	< 3.00	< 3.00
Xylenes, Total	2015-06	ug/L						< 3	< 3					
Xylenes, Total	2015-09	ug/L	< 3	< 3			< 3	< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2015-10	ug/L			< 3	< 3							< 3	< 3
Xylenes, Total	2016-03	ug/L	< 3	< 3	< 3	0.139 J	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2016-06	ug/L					0.231 J							
Xylenes, Total	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0.169 J	< 3	< 3	< 3
Xylenes, Total	2017-03	ug/L	< 3	1.82 J	< 3	0.18 J	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2017-08	ug/L	< 3	0.801 J	< 3	0.282 J	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2017-11	ug/L												
Xylenes, Total	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2018-06	ug/L												
Xylenes, Total	2018-08	ug/L	< 3	< 3	< 3	1.02 J	< 3	< 3			< 3	0.463 J	< 3	< 3
Xylenes, Total	2018-09	ug/L							< 3	< 3				
Xylenes, Total	2018-11	ug/L											< 3	
Xylenes, Total	2019-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2019-04	ug/L												
Xylenes, Total	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Vinyl Acetate	2019-04	ug/L											< 10
Vinyl Acetate	2019-08	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Vinyl Acetate	2020-03	ug/L	< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10
Vinyl Acetate	2020-04	ug/L											
Vinyl Acetate	2020-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Vinyl Acetate	2021-03	ug/L	< 10		< 10	< 10							< 10
Vinyl Acetate	2021-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Vinyl Acetate	2022-03	ug/L	< 10		< 10	< 10							< 10
Vinyl Acetate	2022-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Vinyl Acetate	2023-03	ug/L	< 10		< 10	< 10							< 10
Vinyl Acetate	2023-08	ug/L	< 10	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10
Vinyl Chloride	2008-08	ug/L	< 1	3.28	< 1								
Vinyl Chloride	2009-03	ug/L	< 1	2.91	< 0.26								
Vinyl Chloride	2009-07	ug/L	< 0.26	< 0.26									
Vinyl Chloride	2009-09	ug/L	< 1.00	1.79	< 0.240								
Vinyl Chloride	2010-03	ug/L	< 0.240	1.18	< 0.240								
Vinyl Chloride	2010-09	ug/L	< 0.240	0.910 J	< 0.240								
Vinyl Chloride	2011-03	ug/L	< 1.00	< 1.00	< 1.00								
Vinyl Chloride	2011-09	ug/L	< 0.100	0.640 J	< 0.100								
Vinyl Chloride	2012-03	ug/L	< 0.100	0.690	< 0.100								
Vinyl Chloride	2012-09	ug/L	< 0.100	0.520 J	< 0.100								
Vinyl Chloride	2013-03	ug/L	< 1	0.372 J	< 1.00								
Vinyl Chloride	2013-09	ug/L	< 1.00	0.343 J	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2013-11	ug/L					< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2014-03	ug/L	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2014-06	ug/L					< 1.00	< 1.00	< 1.00	0.164 J	< 1.00		
Vinyl Chloride	2014-09	ug/L	< 1	0.22 J	< 1		< 1	< 1	< 1	< 1	< 1		
Vinyl Chloride	2015-03	ug/L	< 1.00	0.163 J	< 1		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2015-06	ug/L											
Vinyl Chloride	2015-09	ug/L	< 1	< 1	< 1								
Vinyl Chloride	2015-10	ug/L				< 1	< 1	< 1		0.407 J	< 1		
Vinyl Chloride	2016-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Vinyl Chloride	2016-06	ug/L											
Vinyl Chloride	2016-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Vinyl Chloride	2017-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1		
Vinyl Chloride	2017-08	ug/L	< 1	0.157 J	< 1	< 1	< 1	< 1		0.195 J	< 1		
Vinyl Chloride	2017-11	ug/L										< 1	0.557 J
Vinyl Chloride	2018-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		0.139 J	< 1	< 1	0.709 J
Vinyl Chloride	2018-06	ug/L										< 1	< 1
Vinyl Chloride	2018-08	ug/L	< 1	< 1	< 1	< 1		< 1		< 1			
Vinyl Chloride	2018-09	ug/L									< 1	< 1	< 1
Vinyl Chloride	2018-11	ug/L										< 1	< 1
Vinyl Chloride	2019-03	ug/L	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	
Vinyl Chloride	2019-04	ug/L											< 1
Vinyl Chloride	2019-08	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		0.299 J	< 1	< 1	0.497 J
Vinyl Chloride	2020-03	ug/L	< 1	< 1	< 1	< 1	< 1	< 1		0.402 J	< 1	< 1	0.39 J
Vinyl Chloride	2020-04	ug/L											
Vinyl Chloride	2020-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	0.353 J
Vinyl Chloride	2021-03	ug/L	< 1		< 1	< 1							0.382 J
Vinyl Chloride	2021-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	0.384 J
Vinyl Chloride	2022-03	ug/L	< 1		< 1	< 1							0.437 J
Vinyl Chloride	2022-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	0.314 J
Vinyl Chloride	2023-03	ug/L	< 1		< 1	< 1							0.267 J
Vinyl Chloride	2023-08	ug/L	< 1	< 1	< 1	< 1	< 1			< 1	< 1	< 1	0.687 J
Xylenes, Total	2008-08	ug/L	< 3	< 3	< 3								
Xylenes, Total	2009-03	ug/L	< 3	< 3	< 3								
Xylenes, Total	2009-07	ug/L	< 3	< 3									
Xylenes, Total	2009-09	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2010-03	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2010-09	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2011-03	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2011-09	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2012-03	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2012-09	ug/L	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2013-03	ug/L	< 3	< 3	< 3.00								
Xylenes, Total	2013-09	ug/L	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2013-11	ug/L					< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2014-03	ug/L	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2014-06	ug/L					< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2014-09	ug/L	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3		
Xylenes, Total	2015-03	ug/L	< 3.00	< 3.00	< 3		0.170 J	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2015-06	ug/L											
Xylenes, Total	2015-09	ug/L	< 3	< 3	< 3								
Xylenes, Total	2015-10	ug/L				< 3	< 3	< 3		< 3	< 3		
Xylenes, Total	2016-03	ug/L	< 3	< 3	0.155 J	< 3	< 3	< 3		< 3	< 3		
Xylenes, Total	2016-06	ug/L											
Xylenes, Total	2016-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3		
Xylenes, Total	2017-03	ug/L	< 3	< 3	1.18 J	< 3	< 3	< 3		< 3	0.245 J		
Xylenes, Total	2017-08	ug/L	< 3	0.313 J	0.639 J	< 3	< 3	< 3		< 3	0.146 J		
Xylenes, Total	2017-11	ug/L										0.133 J	< 3
Xylenes, Total	2018-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Xylenes, Total	2018-06	ug/L										< 3	< 3
Xylenes, Total	2018-08	ug/L	< 3	< 3	< 3	< 3		< 3		< 3			
Xylenes, Total	2018-09	ug/L									< 3	< 3	< 3
Xylenes, Total	2018-11	ug/L										< 3	< 3
Xylenes, Total	2019-03	ug/L	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3	< 3	
Xylenes, Total	2019-04	ug/L											< 3
Xylenes, Total	2019-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**

Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	AW-6 (DwnGrad)	CRL-9 (DwnGrad)	MW-11 (DwnGrad)	MW-14 (DwnGrad)	MW-15 (DwnGrad)	MW-18 (DwnGrad)	MW-19 (DwnGrad)	MW-22 (DwnGrad)	MW-25 (DwnGrad)	MW-27 (DwnGrad)	MW-29 (DwnGrad)	MW-31 (DwnGrad)
Xylenes, Total	2020-03	ug/L		< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Xylenes, Total	2020-04	ug/L	< 3		< 3									
Xylenes, Total	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Xylenes, Total	2021-03	ug/L				< 3								
Xylenes, Total	2021-08	ug/L	< 3	< 30	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Xylenes, Total	2022-03	ug/L				< 3								
Xylenes, Total	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Xylenes, Total	2023-03	ug/L				< 3								
Xylenes, Total	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3			< 3
Zinc	2008-08	mg/L	< 0.05	< 0.05	< 0.05	0.096	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Zinc	2009-03	mg/L	< 0.05	< 0.05	< 0.05	0.321	0.121	0.479	0.332	0.257	0.081	< 0.05	< 0.05	< 0.05
Zinc	2009-07	mg/L	< 0.05	< 0.05	< 0.05	0.077		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Zinc	2009-09	mg/L	0.0780	< 0.1		0.169		0.111	0.0834	< 0.06	0.0311	< 0.02		
Zinc	2010-03	mg/L	0.104	< 0.100	0.0694	0.150	0.101	0.120	0.102	< 0.100	0.0354	0.0220	< 0.0200	0.0321
Zinc	2010-09	mg/L	0.0530	< 0.0200	0.0476	0.0408	0.0698	0.0697	0.0662	< 0.0600	0.0213	< 0.0200	< 0.0200	< 0.0200
Zinc	2011-03	mg/L	< 0.0200	< 0.100	0.0557	0.0329	0.0803	0.0819	< 0.0200	< 0.100	< 0.0200	< 0.0200	< 0.0200	0.0293
Zinc	2011-09	mg/L	< 0.0200	< 0.0600	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0600	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Zinc	2012-03	mg/L	< 0.0200	< 0.0600	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0600	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Zinc	2012-09	mg/L	< 0.0200	< 0.0600	< 0.0200	0.0669	< 0.0200	< 0.0200	< 0.0200	< 0.0600	< 0.0200	0.0205	< 0.0200	< 0.0200
Zinc	2013-03	mg/L	0.0489	0.0238 J	0.0292	0.0443	0.0374	0.0424	0.0604	0.038	< 0.0200 J	< 0.02 J	< 0.02 J	0.0275
Zinc	2013-09	mg/L	0.112	0.0540	0.101	0.0254	< 0.0200	7.88	0.00771 J	0.0228	0.0187 J	0.0128 J	0.0112 J	0.0299
Zinc	2013-11	mg/L												
Zinc	2014-03	mg/L	< 0.0200	< 0.0400 J	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0400	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Zinc	2014-06	mg/L												
Zinc	2014-09	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	2015-03	mg/L	< 0.0100	0.0144	< 0.0100	< 0.0100	< 0.01	< 0.01	< 0.0100	0.00776 J	< 0.01	< 0.01	< 0.0100	< 0.0100
Zinc	2015-06	mg/L						< 0.01	< 0.01					
Zinc	2015-09	mg/L	< 0.01	0.0112			< 0.01	0.00835 J	< 0.01	< 0.01	< 0.01	< 0.01		
Zinc	2015-10	mg/L			< 0.01	< 0.01							0.0154	< 0.01
Zinc	2016-03	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0125	< 0.01	< 0.01
Zinc	2016-06	mg/L					< 0.01							
Zinc	2016-08	mg/L	0.0151	0.0155	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Zinc	2017-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0219
Zinc	2017-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2017-11	mg/L												
Zinc	2018-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2018-06	mg/L												
Zinc	2018-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2018-09	mg/L							< 0.02	0.0113 J				
Zinc	2018-11	mg/L											< 0.02	
Zinc	2019-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0101 J	< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2019-04	mg/L												
Zinc	2019-08	mg/L	< 0.02	0.0101 J	0.0107 J	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2020-03	mg/L		0.0117 J		< 0.02	< 0.08	< 0.02	< 0.08	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2020-04	mg/L	< 0.02		< 0.02									
Zinc	2020-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02
Zinc	2021-03	mg/L				< 0.02								
Zinc	2021-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02
Zinc	2022-03	mg/L				< 0.02								
Zinc	2022-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	0.0105 J	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02
Zinc	2023-03	mg/L				< 0.02								
Zinc	2023-08	mg/L	< 0.02	**0.0245**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.00661 J**	< 0.02			< 0.02

Table 14

Cedar Rapids Linn County Solid Waste Agency Site 1 **Analytical Data Summary - Deeper Bedrock Appendix II**
Permit No. 57-SDP-03-75C **2023 Annual Water Quality Report**

Constituent	Date	Units	MW-33 (DwnGrad)	MW-36 (DwnGrad)	MW-38 (Bkgrnd)	MW-101B (Bkgrnd)	MW-102B (Delin)	MW-103C (Delin)	MW-104B (Delin)	MW-105B (Delin)	MW-107B (Delin)	MW-108B (Delin)	MW-109B (Delin)
Xylenes, Total	2020-03	ug/L	< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3	< 3	< 3
Xylenes, Total	2020-04	ug/L											
Xylenes, Total	2020-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Xylenes, Total	2021-03	ug/L	< 3		< 3	< 3							< 3
Xylenes, Total	2021-08	ug/L	< 3	0.414 J	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Xylenes, Total	2022-03	ug/L	< 3		< 3	< 3							< 3
Xylenes, Total	2022-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Xylenes, Total	2023-03	ug/L	< 3		< 3	< 3							< 3
Xylenes, Total	2023-08	ug/L	< 3	< 3	< 3	< 3	< 3			< 3	< 3	< 3	< 3
Zinc	2008-08	mg/L	< 0.05	< 0.05	< 0.05								
Zinc	2009-03	mg/L	< 0.05	< 0.05	< 0.05								
Zinc	2009-07	mg/L	< 0.05	< 0.05	< 0.05								
Zinc	2009-09	mg/L	< 0.0200	0.0380	0.0238								
Zinc	2010-03	mg/L	< 0.0200	0.0342	0.0217								
Zinc	2010-09	mg/L	< 0.0200	< 0.0200	0.0216								
Zinc	2011-03	mg/L	0.0443	< 0.0200	< 0.0200								
Zinc	2011-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Zinc	2012-03	mg/L	< 0.0200	< 0.0200	< 0.0200								
Zinc	2012-09	mg/L	< 0.0200	< 0.0200	< 0.0200								
Zinc	2013-03	mg/L	< 0.0219	0.0317	< 0.0200								
Zinc	2013-09	mg/L	0.0562	0.0882	0.0366	~~< 0.0200~~	< 0.0200	0.0216	< 0.0200	< 0.0200	0.0424		
Zinc	2013-11	mg/L				~~0.270~~	0.109	0.117	0.110	0.140	0.124		
Zinc	2014-03	mg/L	< 0.0200	< 0.0200 J	0.00850 J	~~< 0.0200~~	0.0143 J	0.0131 J	< 0.0200	< 0.0200	< 0.0200		
Zinc	2014-06	mg/L				~~< 0.0600~~	< 0.0600	< 0.0600	< 0.0600	< 0.120	< 0.0600		
Zinc	2014-09	mg/L	< 0.01	< 0.01	< 0.01	~~< 0.01~~	< 0.01	< 0.01	< 0.01	< 0.01	0.0156		
Zinc	2015-03	mg/L	< 0.0100	< 0.0100	< 0.01	~~< 0.0100~~	< 0.0100	< 0.0100	< 0.0100	0.0133	0.0105		
Zinc	2015-06	mg/L											
Zinc	2015-09	mg/L	< 0.01	< 0.01	< 0.01								
Zinc	2015-10	mg/L				< 0.01	< 0.01	< 0.01		< 0.01	0.0114		
Zinc	2016-03	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		0.00998 J	0.00995 J		
Zinc	2016-06	mg/L											
Zinc	2016-08	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	0.00977 J		
Zinc	2017-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02		
Zinc	2017-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	0.0128 J		
Zinc	2017-11	mg/L										< 0.02	< 0.02
Zinc	2018-03	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02
Zinc	2018-06	mg/L										< 0.02	0.0135 J
Zinc	2018-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02		< 0.02			
Zinc	2018-09	mg/L									0.0116 J	< 0.02	0.014 J
Zinc	2018-11	mg/L										< 0.02	0.0109 J
Zinc	2019-03	mg/L	0.0893	< 0.02	< 0.02	< 0.02		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	
Zinc	2019-04	mg/L											0.0125 J
Zinc	2019-08	mg/L	0.015 J	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		< 0.02	0.0169 J	< 0.02	0.0145 J
Zinc	2020-03	mg/L	0.0189 J	< 0.02	< 0.02	< 0.02	< 0.02	0.0148 J		< 0.02	0.0126 J	< 0.02	0.0135 J
Zinc	2020-04	mg/L											
Zinc	2020-08	mg/L	0.0138 J	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	0.0101 J	< 0.02	< 0.02
Zinc	2021-03	mg/L	0.033		< 0.02	< 0.02							0.0133 J
Zinc	2021-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	0.0188 J	0.0362	0.0108 J
Zinc	2022-03	mg/L	0.0159 J		< 0.02	< 0.02							0.0109 J
Zinc	2022-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	0.0101 J	< 0.02	0.0117 J
Zinc	2023-03	mg/L	< 0.02		< 0.02	< 0.02							< 0.02
Zinc	2023-08	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02			< 0.02	**0.0102 J**	< 0.02	< 0.02

Figures



NOTES:

1. Aerial imagery was flown in Spring 2023 and provided by Linn County, Iowa.

LEGEND

- MW-38 — Deeper Bedrock Background Well
- MW-27 — Deeper Bedrock Monitoring Well
- MW-37 — Upper Bedrock Background Well
- MW-26 — Upper Bedrock Monitoring Well
- Parcels

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

N

0 250 500 Feet

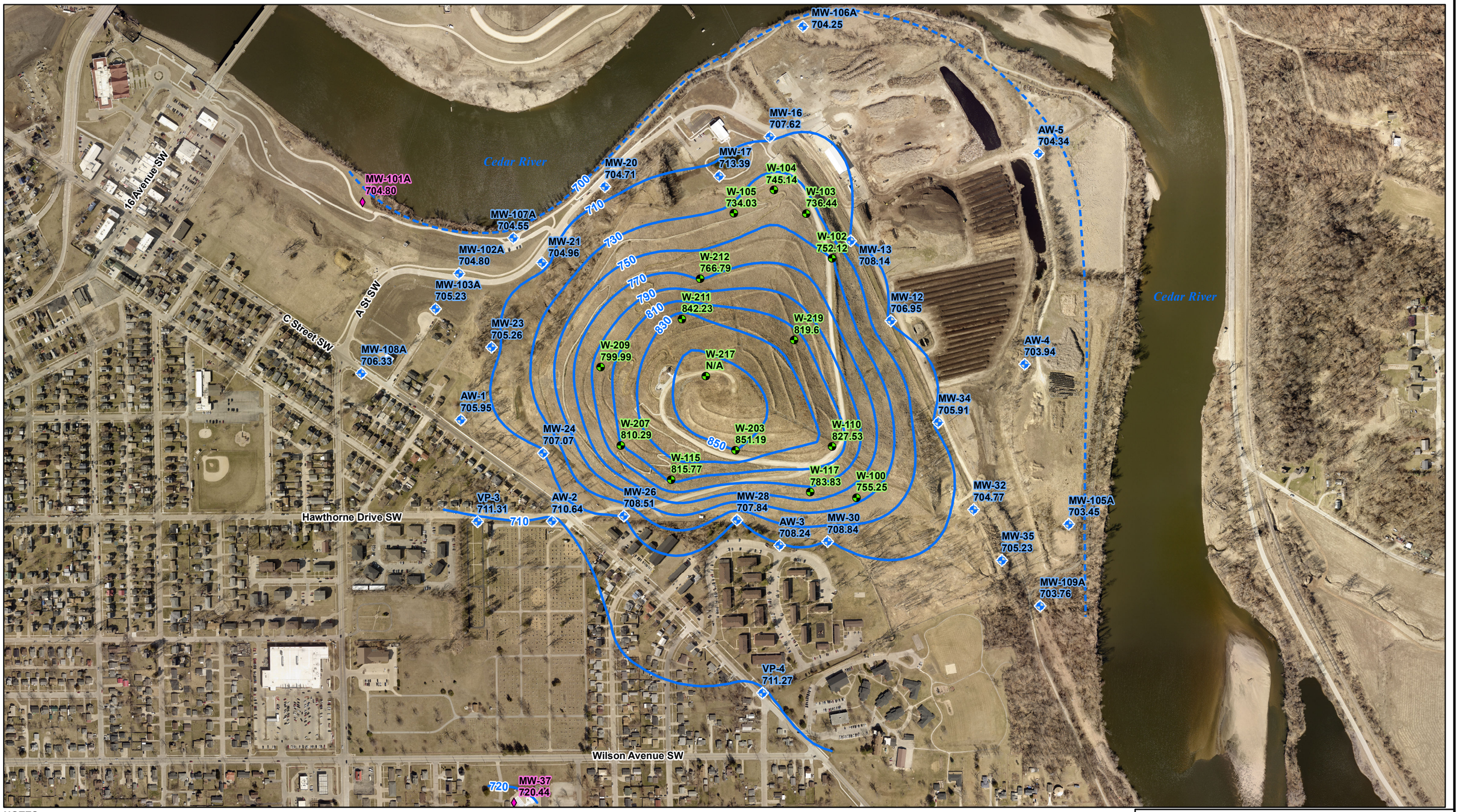
Cedar Rapids Linn County Solid Waste Agency

FIGURE 1

HMSP MONITORING NETWORK

Date: NOVEMBER 2023	Revision Date:	
Drawn By: DAT	Checked By: GMN	Project: 23C071.00

Path: Q:\Cedar Rapids Linn Co SWA IA\23C071.00\GIS\mxd\2023 AWQR\Figure 1 - HMSP Monitoring Network.mxd Date: 11/28/2023



NOTES:

1. Aerial imagery was flown in Spring 2023 and provided by Linn County, Iowa.

LEGEND

- Leachate Piezometer
- Upper Bedrock Background Well
- Upper Bedrock Monitoring Well
- Water Table Contours (March 2023)
- Inferred Water Table Contours (March 2023)

Foth

N

0 250 500 Feet

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

Cedar Rapids Linn County Solid Waste Agency

FIGURE 2

Water Table Contour Map – March 2023

Date: JANUARY 2024	Revision Date:	
Drawn By: DAT	Checked By: GMN	Project: 23C071.00

Path: Q:\Cedar Rapids Linn Co SWA IA\23C071.00\GIS\mxd\2023 AWQR\Figure 2 - Water Table Contour 0323.mxd Date: 1/15/2024



NOTES:

1. Aerial imagery was flown in Spring 2023 and provided by Linn County, Iowa.
2. AW-7 was inadvertently removed during pavement removal activities for the Compost Facility Maintenance Shop project. Therefore, AW-7 was not monitored in Aug. 2022.

LEGEND

- Leachate Piezometer
- Upper Bedrock Background Well
- Upper Bedrock Monitoring Well
- Water Table Contours (August 2023)
- Inferred Water Table Contours (August 2023)

Foth

N

0 250 500 Feet

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

Cedar Rapids Linn County Solid Waste Agency

FIGURE 3

Water Table Contour Map – August 2023

Date: JANUARY 2024	Revision Date:	
Drawn By: DAT	Checked By: GMN	Project: 23C071.00

Path: Q:\Cedar Rapids Linn Co SWA IA\23C071.00\GIS\mxd\2023 AWQR\Figure 3 - Water Table Contour 0823.mxd Date: 1/15/2024



NOTES:

1. Aerial imagery was flown in Spring 2023 and provided by Linn County, Iowa.
2. Due to a restriction at W-217, leachate levels could not be measured in 2023.

LEGEND

- Proposed Leachate Piezometer
- Leachate Piezometer

Foth

N

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

0 150 300 Feet

Cedar Rapids Linn County Solid Waste Agency

FIGURE 4

LEACHATE MONITORING LOCATION MAP

Date: JANUARY 2024	Revision Date:	
Drawn By: DAT	Checked By: GMN	Project: 23C071.00

Path: Q:\Cedar Rapids Linn Co SWA IA\23C071.00\GIS\mxd\2023 AWQR\Figure 4 - Leachate Monitoring Location Map.mxd Date: 1/15/2024



NOTES:

1. Aerial imagery was flown in Spring 2023 and provided by Linn County, Iowa.

LEGEND

Methane Monitoring Locations

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

0 150 300 Feet

N

Cedar Rapids Linn County Solid Waste Agency

FIGURE 5

METHANE MONITORING NETWORK

Date: JANUARY 2024	Revision Date:	
Drawn By: DAT	Checked By: GMN	Project: 23C071.00

Path: Q:\Cedar Rapids Linn Co SWA IA\23C071.00\GIS\mxd\2023 AWQR\Figure 5 - Gas Monitoring Report.mxd Date: 1/15/2024

Appendix A

Reporting Period Monitoring Documentation

January, March, and August 2023

IDNR Forms
Laboratory Analytical Reports (with Chain of Custody)
Data Validation Reports

January 2023 Sampling Event

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-26	Weather:	Cloudy, 32°F, SW winds @ 10-20 mph
Date:	1/27/2023	Personnel:	O.A. Technical Services: Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	807.70
Top of screen (ft. MSL):	716.70	Materials:	PVC	Top of Casing elevation (ft. MSL):	811.58
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	103.56	103.56	106.09
Water elevation (ft. MSL)	708.02	708.02	705.49

3 Well Volumes (gal): 3.09 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	109.88	111.35	1.47

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 20283 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	703.58	Flow Rate (mL/min):	150	Volume removed (gal):	1.6
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	5.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-26_23_02	USEPA 8260D - Appendix II VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8015C - Acetonitrile & Isobutanol	(3) VOA Vial 40 mL - Unpreserved	
	USEPA 8270E - Appendix II SVOCs	(6) Amber Glass 250 mL - Unpreserved	No
	USEPA 8081B - Appendix II Pesticides		
	USEPA 8082A - Appendix II PCBs		
	USEPA 8151A - Appendix II Herbicides	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix II Total Metals	(1) Plastic 250 mL - HNO_3	No
	USEPA 7470A - Mercury		
	USEPA 9012B - Cyanide	(1) Plastic 250 mL - NaOH	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-26	Weather:	Cloudy, 32°F, SW winds @ 10-20 mph
Date:	1/27/2023	Personnel:	O.A. Technical Services: Tyler Merritt

Field Analysis

			Final Reading
Time	10:23	10:28	10:33
Temp (°C)	14.95	14.94	15.40
Sp. Cond (umhos/cm)	1204.8	1202.8	1203.1
pH	6.85	6.86	6.86
DO (mg/l)	1.06	1.01	1.03
ORP (mV)	-170.9	-174.1	-180.7
Turbidity (NTU)	0.21	0.03	0.00

Comments: In accordance with 567 IAC 113.10(6), baseline assessment monitoring for the full Appendix II list was reinitiated at MW-26 in January 2023.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

Generated 2/12/2023 10:54:01 AM

JOB DESCRIPTION

CRLCSWA_1
SDG NUMBER 22C061_23_02

JOB NUMBER

310-248830-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

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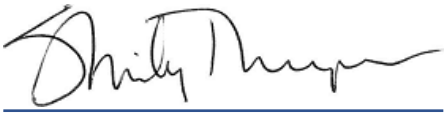
Authorization



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2/12/2023 10:54:01 AM

Authorized for release by
Shirley Thompson, Client Service Manager
Shirley.Thompson@et.eurofinsus.com
(319)277-2401

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Job ID: 310-248830-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-248830-1

Comments
No additional comments.

Receipt
The samples were received on 1/27/2023 12:40 PM. 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 was 3.7º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) associated with batch 310-377973 recovered above the upper control limit for Di-n-octyl phthalate (24.1%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-377951 and analytical batch 310-378204 recovered outside control limits for the following analyte(s): 2,4-Dinitrophenol and p-Phenylene diamine. 2,4-Dinitrophenol and p-Phenylene diamine have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-377951 and analytical batch 310-378204 recovered outside control limits for the following analyte(s): 3,3'-Dichlorobenzidine and p-Phenylene diamine. 3,3'-Dichlorobenzidine and p-Phenylene diamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-377951 and analytical batch 310-378204 recovered outside control limits for multiple analytes.

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

GC Semi VOA
Method 8081B: The continuing calibration verification (CCV) associated with batch 310-378700 recovered above the upper control limit for 4,4'-DDE (24.7 %D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

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

Organic Prep
Methods 3510C, 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-377951.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Methods 3510C, 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-377959.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Job ID: 310-248830-1 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

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

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

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-248830-1	MW-26_23_02	Water	01/27/23 10:35	01/27/23 12:40
310-248830-2	TB-1_23_02	Water	01/27/23 00:00	01/27/23 12:40

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Client Sample ID: MW-26_23_02 — Lab Sample ID: 310-248830-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.139		0.00200	0.000880	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.00		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: TB-1_23_02 — Lab Sample ID: 310-248830-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Client Sample ID: MW-26_23_02
Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			01/31/23 22:26	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			01/31/23 22:26	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			01/31/23 22:26	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			01/31/23 22:26	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			01/31/23 22:26	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			01/31/23 22:26	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			01/31/23 22:26	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			01/31/23 22:26	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			01/31/23 22:26	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			01/31/23 22:26	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			01/31/23 22:26	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			01/31/23 22:26	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			01/31/23 22:26	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			01/31/23 22:26	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			01/31/23 22:26	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/23 22:26	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			01/31/23 22:26	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			01/31/23 22:26	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			01/31/23 22:26	1
2-Hexanone	<2.00		10.0	2.00	ug/L			01/31/23 22:26	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/23 22:26	1
Acetone	<3.10		10.0	3.10	ug/L			01/31/23 22:26	1
Acrolein	<3.60		10.0	3.60	ug/L			01/31/23 22:26	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			01/31/23 22:26	1
Allyl chloride	<0.700		2.00	0.700	ug/L			01/31/23 22:26	1
Benzene	<0.220		0.500	0.220	ug/L			01/31/23 22:26	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			01/31/23 22:26	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			01/31/23 22:26	1
Bromoform	<0.780		5.00	0.780	ug/L			01/31/23 22:26	1
Bromomethane	<1.10		4.00	1.10	ug/L			01/31/23 22:26	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			01/31/23 22:26	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			01/31/23 22:26	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			01/31/23 22:26	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			01/31/23 22:26	1
Chloroethane	<0.790		4.00	0.790	ug/L			01/31/23 22:26	1
Chloroform	<1.30		3.00	1.30	ug/L			01/31/23 22:26	1
Chloromethane	<0.610		3.00	0.610	ug/L			01/31/23 22:26	1
Chloroprene	<0.230		1.00	0.230	ug/L			01/31/23 22:26	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			01/31/23 22:26	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			01/31/23 22:26	1
Dibromomethane	<0.330		1.00	0.330	ug/L			01/31/23 22:26	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			01/31/23 22:26	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			01/31/23 22:26	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			01/31/23 22:26	1
Iodomethane	<7.00		10.0	7.00	ug/L			01/31/23 22:26	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			01/31/23 22:26	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			01/31/23 22:26	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			01/31/23 22:26	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			01/31/23 22:26	1

Client Sample ID: MW-26_23_02
Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			01/31/23 22:26	1
o-Xylene	<0.400		1.00	0.400	ug/L			01/31/23 22:26	1
Propionitrile	<3.40		10.0	3.40	ug/L			01/31/23 22:26	1
Styrene	<0.370		1.00	0.370	ug/L			01/31/23 22:26	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			01/31/23 22:26	1
Toluene	<0.430		1.00	0.430	ug/L			01/31/23 22:26	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			01/31/23 22:26	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			01/31/23 22:26	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			01/31/23 22:26	1
Trichloroethene	<0.430		1.00	0.430	ug/L			01/31/23 22:26	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			01/31/23 22:26	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			01/31/23 22:26	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			01/31/23 22:26	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			01/31/23 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*80 - 128*		*01/31/23 22:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/31/23 22:26*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*01/31/23 22:26*	*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	<0.587		10.9	0.587	ug/L		01/30/23 07:11	01/30/23 21:00	1
1,3,5-Trinitrobenzene	<2.50		10.9	2.50	ug/L		01/30/23 07:11	02/01/23 19:02	1
1,3-Dinitrobenzene	<3.48		10.9	3.48	ug/L		01/30/23 07:11	01/30/23 21:00	1
1,4-Naphthoquinone	<3.91		10.9	3.91	ug/L		01/30/23 07:11	02/01/23 19:02	1
1,4-phenylenediamine	<2.07	*-	10.9	2.07	ug/L		01/30/23 07:11	02/01/23 19:02	1
1-Naphthylamine	<2.72		10.9	2.72	ug/L		01/30/23 07:11	02/01/23 19:02	1
2,3,4,6-Tetrachlorophenol	<5.76		10.9	5.76	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,4,5-Trichlorophenol	<5.76		10.9	5.76	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,4,6-Trichlorophenol	<5.43		10.9	5.43	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,4-Dichlorophenol	<0.924		10.9	0.924	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,4-Dimethylphenol	<0.630		10.9	0.630	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,4-Dinitrophenol	<14.1		21.7	14.1	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,4-Dinitrotoluene	<6.96		10.9	6.96	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,6-Dichlorophenol	<0.750		10.9	0.750	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,6-Dinitrotoluene	<0.565		10.9	0.565	ug/L		01/30/23 07:11	01/30/23 21:00	1
2-Acetylaminofluorene	<2.93		10.9	2.93	ug/L		01/30/23 07:11	02/01/23 19:02	1
2-Chloronaphthalene	<0.696		10.9	0.696	ug/L		01/30/23 07:11	01/30/23 21:00	1
2-Chlorophenol	<0.587		10.9	0.587	ug/L		01/30/23 07:11	01/30/23 21:00	1
2-Methylnaphthalene	<0.641		10.9	0.641	ug/L		01/30/23 07:11	01/30/23 21:00	1
2-Methylphenol	<0.707		10.9	0.707	ug/L		01/30/23 07:11	01/30/23 21:00	1
2-Naphthylamine	<2.28	*1	10.9	2.28	ug/L		01/30/23 07:11	02/01/23 19:02	1
2-Nitroaniline	<6.41		10.9	6.41	ug/L		01/30/23 07:11	01/30/23 21:00	1
2-Nitrophenol	<7.39		10.9	7.39	ug/L		01/30/23 07:11	01/30/23 21:00	1
3,3'-Dichlorobenzidine	<1.52		10.9	1.52	ug/L		01/30/23 07:11	01/30/23 21:00	1
3,3'-Dimethylbenzidine	<1.63	*- *1	10.9	1.63	ug/L		01/30/23 07:11	02/01/23 19:02	1
3-Methylcholanthrene	<0.348		10.9	0.348	ug/L		01/30/23 07:11	02/01/23 19:02	1
3-Nitroaniline	<2.93		10.9	2.93	ug/L		01/30/23 07:11	01/30/23 21:00	1
4,6-Dinitro-2-methylphenol	<7.50		10.9	7.50	ug/L		01/30/23 07:11	01/30/23 21:00	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Client Sample ID: MW-26_23_02
Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.39	*1	10.9	2.39	ug/L		01/30/23 07:11	02/01/23 19:02	1
4-Bromophenyl phenyl ether	<0.761		10.9	0.761	ug/L		01/30/23 07:11	01/30/23 21:00	1
4-Chloro-3-methylphenol	<0.913		10.9	0.913	ug/L		01/30/23 07:11	01/30/23 21:00	1
4-Chloroaniline	<0.674		10.9	0.674	ug/L		01/30/23 07:11	01/30/23 21:00	1
4-Chlorophenyl phenyl ether	<0.750		10.9	0.750	ug/L		01/30/23 07:11	01/30/23 21:00	1
Methylphenol, 3 & 4	<0.761		10.9	0.761	ug/L		01/30/23 07:11	01/30/23 21:00	1
4-Nitroaniline	<1.41		10.9	1.41	ug/L		01/30/23 07:11	01/30/23 21:00	1
4-Nitrophenol	<8.26		10.9	8.26	ug/L		01/30/23 07:11	01/30/23 21:00	1
5-Nitro-o-toluidine	<3.04		10.9	3.04	ug/L		01/30/23 07:11	02/01/23 19:02	1
7,12-Dimethylbenz(a)anthracene	<2.07		10.9	2.07	ug/L		01/30/23 07:11	02/01/23 19:02	1
Acenaphthene	<0.696		10.9	0.696	ug/L		01/30/23 07:11	01/30/23 21:00	1
Acenaphthylene	<0.783		10.9	0.783	ug/L		01/30/23 07:11	01/30/23 21:00	1
Acetophenone	<0.750		10.9	0.750	ug/L		01/30/23 07:11	01/30/23 21:00	1
Anthracene	<0.946		10.9	0.946	ug/L		01/30/23 07:11	01/30/23 21:00	1
Benzo[a]anthracene	<0.924		10.9	0.924	ug/L		01/30/23 07:11	01/30/23 21:00	1
Benzo[a]pyrene	<8.80		10.9	8.80	ug/L		01/30/23 07:11	01/30/23 21:00	1
Benzo[b]fluoranthene	<5.33		10.9	5.33	ug/L		01/30/23 07:11	01/30/23 21:00	1
Benzo[g,h,i]perylene	<6.85		10.9	6.85	ug/L		01/30/23 07:11	01/30/23 21:00	1
Benzo[k]fluoranthene	<2.39		10.9	2.39	ug/L		01/30/23 07:11	01/30/23 21:00	1
Benzyl alcohol	<1.41		10.9	1.41	ug/L		01/30/23 07:11	01/30/23 21:00	1
Bis(2-chloroethoxy)methane	<0.826		10.9	0.826	ug/L		01/30/23 07:11	01/30/23 21:00	1
Bis(2-chloroethyl)ether	<0.891		10.9	0.891	ug/L		01/30/23 07:11	01/30/23 21:00	1
2,2'-oxybis[1-chloropropane]	<0.587		10.9	0.587	ug/L		01/30/23 07:11	01/30/23 21:00	1
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		01/30/23 07:11	01/30/23 21:00	1
Butyl benzyl phthalate	<5.87		10.9	5.87	ug/L		01/30/23 07:11	01/30/23 21:00	1
Chlorobenzilate	<3.91		10.9	3.91	ug/L		01/30/23 07:11	02/01/23 19:02	1
Chrysene	<0.946		10.9	0.946	ug/L		01/30/23 07:11	01/30/23 21:00	1
Diallate	<4.35		10.9	4.35	ug/L		01/30/23 07:11	02/01/23 19:02	1
Dibenzo(a,h)anthracene	<4.24		10.9	4.24	ug/L		01/30/23 07:11	01/30/23 21:00	1
Dibenzofuran	<0.804		10.9	0.804	ug/L		01/30/23 07:11	01/30/23 21:00	1
Diethyl phthalate	<1.85		10.9	1.85	ug/L		01/30/23 07:11	01/30/23 21:00	1
Dimethoate	<3.91		10.9	3.91	ug/L		01/30/23 07:11	02/01/23 19:02	1
Dimethyl phthalate	<1.09		10.9	1.09	ug/L		01/30/23 07:11	01/30/23 21:00	1
Di-n-butyl phthalate	<6.09		10.9	6.09	ug/L		01/30/23 07:11	01/30/23 21:00	1
Di-n-octyl phthalate	<7.61		21.7	7.61	ug/L		01/30/23 07:11	01/30/23 21:00	1
Dinoseb	<2.61	*1 *-	10.9	2.61	ug/L		01/30/23 07:11	02/01/23 19:02	1
Diphenylamine	<6.52		10.9	6.52	ug/L		01/30/23 07:11	01/30/23 21:00	1
Disulfoton	<2.61		10.9	2.61	ug/L		01/30/23 07:11	02/01/23 19:02	1
Ethyl methanesulfonate	<3.91		10.9	3.91	ug/L		01/30/23 07:11	02/01/23 19:02	1
Ethyl Parathion	<2.39		10.9	2.39	ug/L		01/30/23 07:11	02/01/23 19:02	1
Famphur	<4.13		10.9	4.13	ug/L		01/30/23 07:11	02/01/23 19:02	1
Fluoranthene	<1.85		10.9	1.85	ug/L		01/30/23 07:11	01/30/23 21:00	1
Fluorene	<0.859		10.9	0.859	ug/L		01/30/23 07:11	01/30/23 21:00	1
Hexachlorobenzene	<0.761		10.9	0.761	ug/L		01/30/23 07:11	01/30/23 21:00	1
Hexachlorobutadiene	<0.935		10.9	0.935	ug/L		01/30/23 07:11	01/30/23 21:00	1
Hexachlorocyclopentadiene	<5.54		10.9	5.54	ug/L		01/30/23 07:11	01/30/23 21:00	1
Hexachloroethane	<1.05		10.9	1.05	ug/L		01/30/23 07:11	01/30/23 21:00	1
Hexachloropropene	<2.83	*1 *-	10.9	2.83	ug/L		01/30/23 07:11	02/01/23 19:02	1
Indeno[1,2,3-cd]pyrene	<4.57		10.9	4.57	ug/L		01/30/23 07:11	01/30/23 21:00	1

Client Sample ID: MW-26_23_02
Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<5.11		10.9	5.11	ug/L		01/30/23 07:11	02/01/23 19:02	1
Isophorone	<1.01		10.9	1.01	ug/L		01/30/23 07:11	01/30/23 21:00	1
Isosafrole	<2.50		10.9	2.50	ug/L		01/30/23 07:11	02/01/23 19:02	1
Kepone	<1.09		10.9	1.09	ug/L		01/30/23 07:11	02/01/23 19:02	1
Methapyrilene	<0.826		10.9	0.826	ug/L		01/30/23 07:11	02/01/23 19:02	1
Methyl methanesulfonate	<3.59		10.9	3.59	ug/L		01/30/23 07:11	02/01/23 19:02	1
Methyl parathion	<2.50		10.9	2.50	ug/L		01/30/23 07:11	02/01/23 19:02	1
Nitrobenzene	<0.870		10.9	0.870	ug/L		01/30/23 07:11	01/30/23 21:00	1
N-Nitrosodiethylamine	<3.70		10.9	3.70	ug/L		01/30/23 07:11	02/01/23 19:02	1
N-Nitrosodimethylamine	<0.783		10.9	0.783	ug/L		01/30/23 07:11	01/30/23 21:00	1
N-Nitrosodi-n-butylamine	<4.24		10.9	4.24	ug/L		01/30/23 07:11	02/01/23 19:02	1
N-Nitrosodi-n-propylamine	<1.00		10.9	1.00	ug/L		01/30/23 07:11	01/30/23 21:00	1
N-Nitrosodiphenylamine	<0.815		10.9	0.815	ug/L		01/30/23 07:11	01/30/23 21:00	1
N-Nitrosomethylethylamine	<5.33		10.9	5.33	ug/L		01/30/23 07:11	02/01/23 19:02	1
N-Nitrosopiperidine	<2.93		10.9	2.93	ug/L		01/30/23 07:11	02/01/23 19:02	1
N-Nitrosopyrrolidine	<3.91		10.9	3.91	ug/L		01/30/23 07:11	02/01/23 19:02	1
o,o',o''-Triethylphosphorothioate	<3.48		10.9	3.48	ug/L		01/30/23 07:11	02/01/23 19:02	1
o-Toluidine	<3.15		10.9	3.15	ug/L		01/30/23 07:11	02/01/23 19:02	1
p-Dimethylamino azobenzene	<2.39		10.9	2.39	ug/L		01/30/23 07:11	02/01/23 19:02	1
Pentachlorobenzene	<3.04		10.9	3.04	ug/L		01/30/23 07:11	02/01/23 19:02	1
Pentachloronitrobenzene	<6.30		10.9	6.30	ug/L		01/30/23 07:11	02/01/23 19:02	1
Pentachlorophenol	<10.4		10.9	10.4	ug/L		01/30/23 07:11	01/30/23 21:00	1
Phenacetin	<2.07		10.9	2.07	ug/L		01/30/23 07:11	02/01/23 19:02	1
Phenanthrene	<0.859		10.9	0.859	ug/L		01/30/23 07:11	01/30/23 21:00	1
Phenol	<1.20		10.9	1.20	ug/L		01/30/23 07:11	01/30/23 21:00	1
Phorate	<3.48		10.9	3.48	ug/L		01/30/23 07:11	02/01/23 19:02	1
Pronamide	<2.93		10.9	2.93	ug/L		01/30/23 07:11	02/01/23 19:02	1
Pyrene	<0.859		10.9	0.859	ug/L		01/30/23 07:11	01/30/23 21:00	1
Safrole	<3.04		10.9	3.04	ug/L		01/30/23 07:11	02/01/23 19:02	1
Thionazin	<3.80		10.9	3.80	ug/L		01/30/23 07:11	02/01/23 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*61*		*13 - 110*	*01/30/23 07:11*	*01/30/23 21:00*	*1*
Phenol-d5 (Surr)	*47*		*12 - 110*	*01/30/23 07:11*	*01/30/23 21:00*	*1*
Nitrobenzene-d5 (Surr)	*82*		*27 - 115*	*01/30/23 07:11*	*01/30/23 21:00*	*1*
2-Fluorobiphenyl (Surr)	*80*		*28 - 110*	*01/30/23 07:11*	*01/30/23 21:00*	*1*
2,4,6-Tribromophenol (Surr)	*52*		*15 - 121*	*01/30/23 07:11*	*01/30/23 21:00*	*1*
Terphenyl-d14 (Surr)	*93*		*10 - 125*	*01/30/23 07:11*	*01/30/23 21:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.404		10.0	0.404	mg/L			01/30/23 10:10	1
Isobutanol	<0.553		10.0	0.553	mg/L			01/30/23 10:10	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0307		0.0727	0.0307	ug/L		01/30/23 07:55	02/08/23 14:00	1
4,4'-DDE	<0.0307		0.0727	0.0307	ug/L		01/30/23 07:55	02/08/23 14:00	1
4,4'-DDT	<0.0477		0.0727	0.0477	ug/L		01/30/23 07:55	02/08/23 14:00	1
Aldrin	<0.0364		0.0727	0.0364	ug/L		01/30/23 07:55	02/08/23 14:00	1

Client Sample ID: MW-26_23_02
Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0330		0.0727	0.0330	ug/L		01/30/23 07:55	02/08/23 14:00	1
beta-BHC	<0.0420		0.0727	0.0420	ug/L		01/30/23 07:55	02/08/23 14:00	1
Chlordane (technical)	<0.920		2.27	0.920	ug/L		01/30/23 07:55	02/08/23 14:00	1
delta-BHC	<0.0307		0.0727	0.0307	ug/L		01/30/23 07:55	02/08/23 14:00	1
Dieldrin	<0.0295		0.0727	0.0295	ug/L		01/30/23 07:55	02/08/23 14:00	1
Endosulfan I	<0.0375		0.0727	0.0375	ug/L		01/30/23 07:55	02/08/23 14:00	1
Endosulfan II	<0.0330		0.0727	0.0330	ug/L		01/30/23 07:55	02/08/23 14:00	1
Endosulfan sulfate	<0.0341		0.0727	0.0341	ug/L		01/30/23 07:55	02/08/23 14:00	1
Endrin	<0.0295		0.0727	0.0295	ug/L		01/30/23 07:55	02/08/23 14:00	1
Endrin aldehyde	<0.0330		0.0727	0.0330	ug/L		01/30/23 07:55	02/08/23 14:00	1
gamma-BHC (Lindane)	<0.0409		0.0727	0.0409	ug/L		01/30/23 07:55	02/08/23 14:00	1
Heptachlor	<0.0375		0.0727	0.0375	ug/L		01/30/23 07:55	02/08/23 14:00	1
Heptachlor epoxide	<0.0330		0.0727	0.0330	ug/L		01/30/23 07:55	02/08/23 14:00	1
Methoxychlor	<0.0466		0.0727	0.0466	ug/L		01/30/23 07:55	02/08/23 14:00	1
Toxaphene	<0.784		2.27	0.784	ug/L		01/30/23 07:55	02/08/23 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*31*		*10 - 136*	*01/30/23 07:55*	*02/08/23 14:00*	*1*
Tetrachloro-m-xylene	*37*		*10 - 130*	*01/30/23 07:55*	*02/08/23 14:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.193		0.909	0.193	ug/L		01/30/23 07:55	02/08/23 14:00	1
PCB-1221	<0.193		0.909	0.193	ug/L		01/30/23 07:55	02/08/23 14:00	1
PCB-1232	<0.193		0.909	0.193	ug/L		01/30/23 07:55	02/08/23 14:00	1
PCB-1242	<0.193		0.909	0.193	ug/L		01/30/23 07:55	02/08/23 14:00	1
PCB-1248	<0.125		0.909	0.125	ug/L		01/30/23 07:55	02/08/23 14:00	1
PCB-1254	<0.125		0.909	0.125	ug/L		01/30/23 07:55	02/08/23 14:00	1
PCB-1260	<0.125		0.909	0.125	ug/L		01/30/23 07:55	02/08/23 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*31*		*10 - 136*	*01/30/23 07:55*	*02/08/23 14:00*	*1*
Tetrachloro-m-xylene	*37*		*10 - 130*	*01/30/23 07:55*	*02/08/23 14:00*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.619		1.15	0.619	ug/L		02/02/23 08:21	02/03/23 12:08	1
Silvex (2,4,5-TP)	<0.146		1.15	0.146	ug/L		02/02/23 08:21	02/03/23 12:08	1
2,4,5-T	<0.158		1.15	0.158	ug/L		02/02/23 08:21	02/03/23 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*105*		*25 - 130*	*02/02/23 08:21*	*02/03/23 12:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		02/01/23 09:50	02/01/23 19:47	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		02/01/23 09:50	02/01/23 19:47	1
Barium	**0.139**		0.00200	0.000880	mg/L		02/01/23 09:50	02/01/23 19:47	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		02/01/23 09:50	02/01/23 19:47	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		02/01/23 09:50	02/01/23 19:47	1
Chromium	<0.00110		0.00500	0.00110	mg/L		02/01/23 09:50	02/01/23 19:47	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Client Sample ID: MW-26_23_02
Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.000190		0.000500	0.000190	mg/L		02/01/23 09:50	02/01/23 19:47	1
Copper	<0.00180		0.00500	0.00180	mg/L		02/01/23 09:50	02/01/23 19:47	1
Lead	<0.000240		0.000500	0.000240	mg/L		02/01/23 09:50	02/01/23 19:47	1
Nickel	<0.00190		0.00500	0.00190	mg/L		02/01/23 09:50	02/01/23 19:47	1
Selenium	<0.000960		0.00500	0.000960	mg/L		02/01/23 09:50	02/01/23 19:47	1
Silver	<0.000490		0.00100	0.000490	mg/L		02/01/23 09:50	02/01/23 19:47	1
Thallium	<0.000260		0.00100	0.000260	mg/L		02/01/23 09:50	02/01/23 19:47	1
Tin	<0.00300		0.00500	0.00300	mg/L		02/01/23 09:50	02/01/23 19:47	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		02/01/23 09:50	02/01/23 19:47	1
Zinc	<0.0100		0.0200	0.0100	mg/L		02/01/23 09:50	02/01/23 19:47	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		01/30/23 14:09	01/31/23 12:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00430		0.0100	0.00430	mg/L		02/01/23 10:00	02/02/23 18:04	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		01/30/23 18:25	01/31/23 00:44	1
Total Suspended Solids (USGS I-3765-85)	**5.00**		5.00	1.70	mg/L			01/30/23 12:49	1

Client Sample ID: TB-1_23_02
Date Collected: 01/27/23 00:00
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			01/31/23 22:05	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			01/31/23 22:05	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			01/31/23 22:05	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			01/31/23 22:05	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			01/31/23 22:05	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			01/31/23 22:05	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			01/31/23 22:05	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			01/31/23 22:05	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			01/31/23 22:05	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			01/31/23 22:05	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			01/31/23 22:05	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			01/31/23 22:05	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			01/31/23 22:05	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			01/31/23 22:05	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			01/31/23 22:05	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/23 22:05	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			01/31/23 22:05	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			01/31/23 22:05	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			01/31/23 22:05	1
2-Hexanone	<2.00		10.0	2.00	ug/L			01/31/23 22:05	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/23 22:05	1
Acetone	<3.10		10.0	3.10	ug/L			01/31/23 22:05	1
Acrolein	<3.60		10.0	3.60	ug/L			01/31/23 22:05	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			01/31/23 22:05	1
Allyl chloride	<0.700		2.00	0.700	ug/L			01/31/23 22:05	1
Benzene	<0.220		0.500	0.220	ug/L			01/31/23 22:05	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			01/31/23 22:05	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			01/31/23 22:05	1
Bromoform	<0.780		5.00	0.780	ug/L			01/31/23 22:05	1
Bromomethane	<1.10		4.00	1.10	ug/L			01/31/23 22:05	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			01/31/23 22:05	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			01/31/23 22:05	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			01/31/23 22:05	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			01/31/23 22:05	1
Chloroethane	<0.790		4.00	0.790	ug/L			01/31/23 22:05	1
Chloroform	<1.30		3.00	1.30	ug/L			01/31/23 22:05	1
Chloromethane	<0.610		3.00	0.610	ug/L			01/31/23 22:05	1
Chloroprene	<0.230		1.00	0.230	ug/L			01/31/23 22:05	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			01/31/23 22:05	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			01/31/23 22:05	1
Dibromomethane	<0.330		1.00	0.330	ug/L			01/31/23 22:05	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			01/31/23 22:05	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			01/31/23 22:05	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			01/31/23 22:05	1
Iodomethane	<7.00		10.0	7.00	ug/L			01/31/23 22:05	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			01/31/23 22:05	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			01/31/23 22:05	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			01/31/23 22:05	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			01/31/23 22:05	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Client Sample ID: TB-1_23_02
Date Collected: 01/27/23 00:00
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			01/31/23 22:05	1
o-Xylene	<0.400		1.00	0.400	ug/L			01/31/23 22:05	1
Propionitrile	<3.40		10.0	3.40	ug/L			01/31/23 22:05	1
Styrene	<0.370		1.00	0.370	ug/L			01/31/23 22:05	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			01/31/23 22:05	1
Toluene	<0.430		1.00	0.430	ug/L			01/31/23 22:05	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			01/31/23 22:05	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			01/31/23 22:05	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			01/31/23 22:05	1
Trichloroethene	<0.430		1.00	0.430	ug/L			01/31/23 22:05	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			01/31/23 22:05	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			01/31/23 22:05	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			01/31/23 22:05	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			01/31/23 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*80 - 128*		*01/31/23 22:05*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/31/23 22:05*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*01/31/23 22:05*	*1*

Definitions/Glossary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DBFM	TOL	BFB						
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)						
310-248830-1	MW-26_23_02	106	99	105						
310-248830-1 MS	MW-26_23_02	109	99	95						
310-248830-1 MSD	MW-26_23_02	106	100	99						
310-248830-2	TB-1_23_02	107	101	102						
LCS 310-378099/6	Lab Control Sample	106	100	101						
LCS 310-378099/7	Lab Control Sample	104	99	102						
MB 310-378099/5	Method Blank	103	101	100						

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		2FP	PHL	NBZ	FBP	TBP	TPHL		
Lab Sample ID	Client Sample ID	(13-110)	(12-110)	(27-115)	(28-110)	(15-121)	(10-125)		
310-248830-1	MW-26_23_02	61	47	82	80	52	93		
LCS 310-377951/2-A	Lab Control Sample	72	59	88	82	79	98		
LCS 310-377951/2-A	Lab Control Sample	67	59	87	81	87	108		
LCSD 310-377951/3-A	Lab Control Sample Dup	70	59	84	77	75	93		
LCSD 310-377951/3-A	Lab Control Sample Dup	70	62	86	81	89	105		
MB 310-377951/1-A	Method Blank	71	61	89	78	73	106		
MB 310-377951/1-A	Method Blank	68	60	86	89	79	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: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		DCB1	TCX1							
Lab Sample ID	Client Sample ID	(10-136)	(10-130)							
310-248830-1	MW-26_23_02	31	37							
LCS 310-377959/4-A	Lab Control Sample	56	68							
LCSD 310-377959/5-A	Lab Control Sample Dup	45	76							
MB 310-377959/1-A	Method Blank	54	81							

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-248830-1
Project/Site: CRLCSWA_1
SDG: 22C061_23_02

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)								
310-248830-1	MW-26_23_02	31	37								
LCS 310-377959/2-A	Lab Control Sample	62	94								
LCSD 310-377959/3-A	Lab Control Sample Dup	51	71								
MB 310-377959/1-A	Method Blank	54	81								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1									
Lab Sample ID	Client Sample ID	(25-130)									
310-248830-1	MW-26_23_02	105									
LB 500-696537/1-E	Method Blank	73									
LCS 500-696865/2-A	Lab Control Sample	84									
LCSD 500-696865/3-A	Lab Control Sample Dup	79									
MB 500-696865/1-A	Method Blank	77									

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1									
Lab Sample ID	Client Sample ID	(25-130)									
500-228454-D-2-O MS	Matrix Spike	68									

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-378099/5
Matrix: Water
Analysis Batch: 378099

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			01/31/23 20:23	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			01/31/23 20:23	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			01/31/23 20:23	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			01/31/23 20:23	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			01/31/23 20:23	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			01/31/23 20:23	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			01/31/23 20:23	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			01/31/23 20:23	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			01/31/23 20:23	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			01/31/23 20:23	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			01/31/23 20:23	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			01/31/23 20:23	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			01/31/23 20:23	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			01/31/23 20:23	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			01/31/23 20:23	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/23 20:23	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			01/31/23 20:23	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			01/31/23 20:23	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			01/31/23 20:23	1
2-Hexanone	<2.00		10.0	2.00	ug/L			01/31/23 20:23	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/23 20:23	1
Acetone	<3.10		10.0	3.10	ug/L			01/31/23 20:23	1
Acrolein	<3.60		10.0	3.60	ug/L			01/31/23 20:23	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			01/31/23 20:23	1
Allyl chloride	<0.700		2.00	0.700	ug/L			01/31/23 20:23	1
Benzene	<0.220		0.500	0.220	ug/L			01/31/23 20:23	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			01/31/23 20:23	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			01/31/23 20:23	1
Bromoform	<0.780		5.00	0.780	ug/L			01/31/23 20:23	1
Bromomethane	<1.10		4.00	1.10	ug/L			01/31/23 20:23	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			01/31/23 20:23	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			01/31/23 20:23	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			01/31/23 20:23	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			01/31/23 20:23	1
Chloroethane	<0.790		4.00	0.790	ug/L			01/31/23 20:23	1
Chloroform	<1.30		3.00	1.30	ug/L			01/31/23 20:23	1
Chloromethane	<0.610		3.00	0.610	ug/L			01/31/23 20:23	1
Chloroprene	<0.230		1.00	0.230	ug/L			01/31/23 20:23	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			01/31/23 20:23	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			01/31/23 20:23	1
Dibromomethane	<0.330		1.00	0.330	ug/L			01/31/23 20:23	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			01/31/23 20:23	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			01/31/23 20:23	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			01/31/23 20:23	1
Iodomethane	<7.00		10.0	7.00	ug/L			01/31/23 20:23	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			01/31/23 20:23	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			01/31/23 20:23	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			01/31/23 20:23	1

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

Lab Sample ID: MB 310-378099/5
Matrix: Water
Analysis Batch: 378099

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<1.70		5.00	1.70	ug/L			01/31/23 20:23	1
Naphthalene	<3.00		5.00	3.00	ug/L			01/31/23 20:23	1
o-Xylene	<0.400		1.00	0.400	ug/L			01/31/23 20:23	1
Propionitrile	<3.40		10.0	3.40	ug/L			01/31/23 20:23	1
Styrene	<0.370		1.00	0.370	ug/L			01/31/23 20:23	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			01/31/23 20:23	1
Toluene	<0.430		1.00	0.430	ug/L			01/31/23 20:23	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			01/31/23 20:23	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			01/31/23 20:23	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			01/31/23 20:23	1
Trichloroethene	<0.430		1.00	0.430	ug/L			01/31/23 20:23	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			01/31/23 20:23	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			01/31/23 20:23	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			01/31/23 20:23	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			01/31/23 20:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*01/31/23 20:23*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/31/23 20:23*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/31/23 20:23*	*1*

Lab Sample ID: LCS 310-378099/6
Matrix: Water
Analysis Batch: 378099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.65		ug/L		98	68 - 123
1,1,1-Trichloroethane	20.0	19.58		ug/L		98	71 - 128
1,1,2,2-Tetrachloroethane	20.0	20.06		ug/L		100	64 - 124
1,1,2-Trichloroethane	20.0	19.60		ug/L		98	70 - 124
1,1-Dichloroethane	20.0	20.30		ug/L		101	71 - 123
1,1-Dichloroethene	20.0	20.64		ug/L		103	61 - 129
1,1-Dichloropropene	20.0	19.67		ug/L		98	70 - 131
1,2,3-Trichloropropane	20.0	19.36		ug/L		97	64 - 125
1,2,4-Trichlorobenzene	20.0	21.17		ug/L		106	61 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.91		ug/L		100	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.04		ug/L		100	73 - 125
1,2-Dichlorobenzene	20.0	19.91		ug/L		100	68 - 120
1,2-Dichloroethane	20.0	20.08		ug/L		100	70 - 124
1,2-Dichloropropane	20.0	19.41		ug/L		97	73 - 121
1,3-Dichlorobenzene	20.0	19.90		ug/L		100	67 - 123
1,3-Dichloropropane	20.0	19.33		ug/L		97	72 - 124
1,4-Dichlorobenzene	20.0	20.04		ug/L		100	67 - 120
2,2-Dichloropropane	20.0	19.07		ug/L		95	50 - 150
2-Butanone (MEK)	40.0	38.85		ug/L		97	50 - 150
2-Hexanone	40.0	38.06		ug/L		95	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	39.24		ug/L		98	62 - 130
Acetone	40.0	39.37		ug/L		98	50 - 150

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

Lab Sample ID: LCS 310-378099/6
Matrix: Water
Analysis Batch: 378099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	94.8	86.56		ug/L		91	12 - 150
Acrylonitrile	200	199.6		ug/L		100	50 - 150
Allyl chloride	20.0	20.41		ug/L		102	50 - 150
Benzene	20.0	18.75		ug/L		94	73 - 122
Bromochloromethane	20.0	18.23		ug/L		91	68 - 132
Bromodichloromethane	20.0	19.96		ug/L		100	72 - 121
Bromoform	20.0	19.55		ug/L		98	55 - 129
Carbon disulfide	20.0	19.80		ug/L		99	58 - 131
Carbon tetrachloride	20.0	19.41		ug/L		97	67 - 132
Chlorobenzene	20.0	19.99		ug/L		100	69 - 121
Chlorodibromomethane	20.0	19.14		ug/L		96	69 - 122
Chloroform	20.0	20.41		ug/L		102	72 - 120
Chloroprene	20.0	20.47		ug/L		102	67 - 131
cis-1,2-Dichloroethene	20.0	19.35		ug/L		97	74 - 120
cis-1,3-Dichloropropene	20.0	19.07		ug/L		95	71 - 126
Dibromomethane	20.0	19.66		ug/L		98	72 - 123
Ethyl methacrylate	20.0	20.07		ug/L		100	64 - 131
Ethylbenzene	20.0	19.96		ug/L		100	69 - 122
Iodomethane	20.0	14.18		ug/L		71	10 - 150
Methacrylonitrile	200	192.3		ug/L		96	70 - 126
Methyl methacrylate	40.0	38.65		ug/L		97	68 - 127
Methylene Chloride	20.0	20.12		ug/L		101	50 - 150
Naphthalene	20.0	21.08		ug/L		105	50 - 150
Propionitrile	200	191.7		ug/L		96	66 - 125
Styrene	20.0	18.87		ug/L		94	67 - 125
Tetrachloroethene	20.0	19.06		ug/L		95	69 - 131
Toluene	20.0	19.30		ug/L		97	72 - 121
trans-1,2-Dichloroethene	20.0	19.56		ug/L		98	68 - 125
trans-1,3-Dichloropropene	20.0	19.92		ug/L		100	68 - 124
trans-1,4-Dichloro-2-butene	20.0	19.32		ug/L		97	48 - 150
Trichloroethene	20.0	19.33		ug/L		97	73 - 126
Vinyl acetate	40.0	51.79		ug/L		129	50 - 150
Xylenes, Total	40.0	39.18		ug/L		98	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: LCS 310-378099/7
Matrix: Water
Analysis Batch: 378099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.04		ug/L		80	24 - 150
Chloroethane	20.0	19.37		ug/L		97	51 - 137
Chloromethane	20.0	20.11		ug/L		101	37 - 150
Dichlorodifluoromethane	20.0	16.90		ug/L		84	37 - 150

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

Lab Sample ID: LCS 310-378099/7
Matrix: Water
Analysis Batch: 378099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichlorofluoromethane			20.0	17.48		ug/L		87	56 - 144		
Vinyl chloride			20.0	17.59		ug/L		88	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 310-248830-1 MS
Matrix: Water
Analysis Batch: 378099

Client Sample ID: MW-26_23_02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane	<0.380		25.0	23.50		ug/L		94	52 - 130		
1,1,1-Trichloroethane	<0.190		25.0	21.63		ug/L		87	49 - 130		
1,1,2,2-Tetrachloroethane	<0.470		25.0	25.65		ug/L		103	51 - 130		
1,1,2-Trichloroethane	<0.450		25.0	23.33		ug/L		93	56 - 130		
1,1-Dichloroethane	<0.220		25.0	22.82		ug/L		91	53 - 130		
1,1-Dichloroethene	<0.560		25.0	22.37		ug/L		89	39 - 130		
1,1-Dichloropropene	<0.430		25.0	20.82		ug/L		83	50 - 131		
1,2,3-Trichloropropane	<0.590		25.0	23.34		ug/L		93	50 - 130		
1,2,4-Trichlorobenzene	<0.750		25.0	23.58		ug/L		94	45 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		25.0	23.16		ug/L		93	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		25.0	22.44		ug/L		90	59 - 130		
1,2-Dichlorobenzene	<0.370		25.0	21.83		ug/L		87	53 - 130		
1,2-Dichloroethane	<0.390		25.0	23.50		ug/L		94	57 - 130		
1,2-Dichloropropane	<0.270		25.0	22.28		ug/L		89	60 - 130		
1,3-Dichlorobenzene	<0.300		25.0	22.20		ug/L		89	54 - 130		
1,3-Dichloropropane	<0.400		25.0	22.94		ug/L		92	57 - 130		
1,4-Dichlorobenzene	<0.230		25.0	22.76		ug/L		91	53 - 130		
2,2-Dichloropropane	<0.690		25.0	19.38		ug/L		78	28 - 150		
2-Butanone (MEK)	<2.10		50.0	44.60		ug/L		89	47 - 150		
2-Hexanone	<2.00		50.0	45.95		ug/L		92	45 - 132		
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	47.26		ug/L		95	46 - 132		
Acetone	<3.10		50.0	46.45		ug/L		93	35 - 150		
Acrolein	<3.60		119	99.64		ug/L		84	10 - 150		
Acrylonitrile	<2.20		250	224.5		ug/L		90	50 - 150		
Allyl chloride	<0.700		25.0	23.11		ug/L		92	35 - 150		
Benzene	<0.220		25.0	21.41		ug/L		86	47 - 130		
Bromochloromethane	<0.540		25.0	19.45		ug/L		78	54 - 132		
Bromodichloromethane	<0.390		25.0	23.32		ug/L		93	58 - 130		
Bromoform	<0.780		25.0	22.75		ug/L		91	42 - 130		
Carbon disulfide	<0.450		25.0	24.92		ug/L		100	39 - 131		
Carbon tetrachloride	<0.650		25.0	20.54		ug/L		82	45 - 132		
Chlorobenzene	<0.400		25.0	23.64		ug/L		95	54 - 130		
Chlorodibromomethane	<0.750		25.0	23.64		ug/L		95	53 - 130		
Chloroform	<1.30		25.0	22.83		ug/L		91	55 - 130		
Chloroprene	<0.230		25.0	21.97		ug/L		88	47 - 131		

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

Lab Sample ID: 310-248830-1 MS
Matrix: Water
Analysis Batch: 378099

Client Sample ID: MW-26_23_02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	<0.210		25.0	22.38		ug/L		90	52 - 130
cis-1,3-Dichloropropene	<0.250		25.0	22.31		ug/L		89	55 - 130
Dibromomethane	<0.330		25.0	23.25		ug/L		93	61 - 130
Ethyl methacrylate	<0.680		25.0	23.73		ug/L		95	50 - 131
Ethylbenzene	<0.310		25.0	21.50		ug/L		86	48 - 130
Iodomethane	<7.00		25.0	25.09		ug/L		100	10 - 150
Methacrylonitrile	<3.30		250	222.0		ug/L		89	57 - 130
Methyl methacrylate	<0.760		50.0	45.85		ug/L		92	50 - 131
Methylene Chloride	<1.70		25.0	24.02		ug/L		96	50 - 150
Naphthalene	<3.00		25.0	23.74		ug/L		95	33 - 150
Propionitrile	<3.40		250	218.4		ug/L		87	53 - 130
Styrene	<0.370		25.0	21.88		ug/L		88	46 - 130
Tetrachloroethene	<0.480		25.0	20.04		ug/L		80	42 - 131
Toluene	<0.430		25.0	20.77		ug/L		83	48 - 130
trans-1,2-Dichloroethene	<0.270		25.0	23.24		ug/L		93	54 - 130
trans-1,3-Dichloropropene	<0.560		25.0	23.05		ug/L		92	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		25.0	23.05		ug/L		92	33 - 150
Trichloroethene	<0.430		25.0	21.29		ug/L		85	55 - 130
Vinyl acetate	<2.50		50.0	58.36		ug/L		117	34 - 150
Xylenes, Total	<0.400		50.0	42.57		ug/L		85	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*109*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*

Lab Sample ID: 310-248830-1 MSD
Matrix: Water
Analysis Batch: 378099

Client Sample ID: MW-26_23_02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.380		25.0	22.24		ug/L		89	52 - 130	6	20
1,1,1-Trichloroethane	<0.190		25.0	19.40		ug/L		78	49 - 130	11	20
1,1,2,2-Tetrachloroethane	<0.470		25.0	24.15		ug/L		97	51 - 130	6	20
1,1,2-Trichloroethane	<0.450		25.0	22.64		ug/L		91	56 - 130	3	20
1,1-Dichloroethane	<0.220		25.0	21.77		ug/L		87	53 - 130	5	20
1,1-Dichloroethene	<0.560		25.0	20.44		ug/L		82	39 - 130	9	28
1,1-Dichloropropene	<0.430		25.0	18.86		ug/L		75	50 - 131	10	20
1,2,3-Trichloropropane	<0.590		25.0	23.59		ug/L		94	50 - 130	1	20
1,2,4-Trichlorobenzene	<0.750		25.0	24.52		ug/L		98	45 - 130	4	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	22.02		ug/L		88	45 - 150	5	20
1,2-Dibromoethane (EDB)	<0.340		25.0	21.70		ug/L		87	59 - 130	3	20
1,2-Dichlorobenzene	<0.370		25.0	22.20		ug/L		89	53 - 130	2	20
1,2-Dichloroethane	<0.390		25.0	22.17		ug/L		89	57 - 130	6	21
1,2-Dichloropropane	<0.270		25.0	20.36		ug/L		81	60 - 130	9	31
1,3-Dichlorobenzene	<0.300		25.0	21.72		ug/L		87	54 - 130	2	20
1,3-Dichloropropane	<0.400		25.0	21.63		ug/L		87	57 - 130	6	20
1,4-Dichlorobenzene	<0.230		25.0	21.73		ug/L		87	53 - 130	5	20

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

Lab Sample ID: 310-248830-1 MSD
Matrix: Water
Analysis Batch: 378099

Client Sample ID: MW-26_23_02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,2-Dichloropropane	<0.690		25.0	18.14		ug/L		73	28 - 150	7	20
2-Butanone (MEK)	<2.10		50.0	44.66		ug/L		89	47 - 150	0	20
2-Hexanone	<2.00		50.0	45.65		ug/L		91	45 - 132	1	20
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	46.80		ug/L		94	46 - 132	1	20
Acetone	<3.10		50.0	47.93		ug/L		96	35 - 150	3	26
Acrolein	<3.60		119	97.61		ug/L		82	10 - 150	2	27
Acrylonitrile	<2.20		250	221.3		ug/L		89	50 - 150	1	21
Allyl chloride	<0.700		25.0	21.79		ug/L		87	35 - 150	6	35
Benzene	<0.220		25.0	20.06		ug/L		80	47 - 130	7	20
Bromochloromethane	<0.540		25.0	17.24		ug/L		69	54 - 132	12	20
Bromodichloromethane	<0.390		25.0	22.33		ug/L		89	58 - 130	4	20
Bromoform	<0.780		25.0	22.17		ug/L		89	42 - 130	3	20
Carbon disulfide	<0.450		25.0	20.83		ug/L		83	39 - 131	18	32
Carbon tetrachloride	<0.650		25.0	18.46		ug/L		74	45 - 132	11	20
Chlorobenzene	<0.400		25.0	21.89		ug/L		88	54 - 130	8	20
Chlorodibromomethane	<0.750		25.0	23.06		ug/L		92	53 - 130	2	20
Chloroform	<1.30		25.0	21.59		ug/L		86	55 - 130	6	20
Chloroprene	<0.230		25.0	19.59		ug/L		78	47 - 131	11	20
cis-1,2-Dichloroethene	<0.210		25.0	20.82		ug/L		83	52 - 130	7	20
cis-1,3-Dichloropropene	<0.250		25.0	21.22		ug/L		85	55 - 130	5	20
Dibromomethane	<0.330		25.0	21.50		ug/L		86	61 - 130	8	20
Ethyl methacrylate	<0.680		25.0	23.18		ug/L		93	50 - 131	2	20
Ethylbenzene	<0.310		25.0	19.86		ug/L		79	48 - 130	8	20
Iodomethane	<7.00		25.0	25.69		ug/L		103	10 - 150	2	35
Methacrylonitrile	<3.30		250	218.7		ug/L		87	57 - 130	1	20
Methyl methacrylate	<0.760		50.0	44.76		ug/L		90	50 - 131	2	20
Methylene Chloride	<1.70		25.0	21.34		ug/L		85	50 - 150	12	24
Naphthalene	<3.00		25.0	24.63		ug/L		99	33 - 150	4	30
Propionitrile	<3.40		250	216.3		ug/L		87	53 - 130	1	20
Styrene	<0.370		25.0	20.94		ug/L		84	46 - 130	4	20
Tetrachloroethene	<0.480		25.0	17.68		ug/L		71	42 - 131	13	20
Toluene	<0.430		25.0	19.59		ug/L		78	48 - 130	6	20
trans-1,2-Dichloroethene	<0.270		25.0	20.09		ug/L		80	54 - 130	15	24
trans-1,3-Dichloropropene	<0.560		25.0	22.11		ug/L		88	51 - 130	4	20
trans-1,4-Dichloro-2-butene	<1.10		25.0	21.47		ug/L		86	33 - 150	7	20
Trichloroethene	<0.430		25.0	19.81		ug/L		79	55 - 130	7	20
Vinyl acetate	<2.50		50.0	59.99		ug/L		120	34 - 150	3	27
Xylenes, Total	<0.400		50.0	40.05		ug/L		80	44 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

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

Lab Sample ID: MB 310-377951/1-A
Matrix: Water
Analysis Batch: 377973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377951

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		01/30/23 07:11	01/30/23 16:42	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		01/30/23 07:11	01/30/23 16:42	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		01/30/23 07:11	01/30/23 16:42	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		01/30/23 07:11	01/30/23 16:42	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		01/30/23 07:11	01/30/23 16:42	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		01/30/23 07:11	01/30/23 16:42	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		01/30/23 07:11	01/30/23 16:42	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		01/30/23 07:11	01/30/23 16:42	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		01/30/23 07:11	01/30/23 16:42	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		01/30/23 07:11	01/30/23 16:42	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		01/30/23 07:11	01/30/23 16:42	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		01/30/23 07:11	01/30/23 16:42	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		01/30/23 07:11	01/30/23 16:42	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		01/30/23 07:11	01/30/23 16:42	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		01/30/23 07:11	01/30/23 16:42	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		01/30/23 07:11	01/30/23 16:42	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		01/30/23 07:11	01/30/23 16:42	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		01/30/23 07:11	01/30/23 16:42	1
Acenaphthene	<0.640		10.0	0.640	ug/L		01/30/23 07:11	01/30/23 16:42	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		01/30/23 07:11	01/30/23 16:42	1
Acetophenone	<0.690		10.0	0.690	ug/L		01/30/23 07:11	01/30/23 16:42	1
Anthracene	<0.870		10.0	0.870	ug/L		01/30/23 07:11	01/30/23 16:42	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		01/30/23 07:11	01/30/23 16:42	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		01/30/23 07:11	01/30/23 16:42	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		01/30/23 07:11	01/30/23 16:42	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		01/30/23 07:11	01/30/23 16:42	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		01/30/23 07:11	01/30/23 16:42	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		01/30/23 07:11	01/30/23 16:42	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		01/30/23 07:11	01/30/23 16:42	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		01/30/23 07:11	01/30/23 16:42	1
2,2'-oxybis[1-chloropropane]	<0.540		10.0	0.540	ug/L		01/30/23 07:11	01/30/23 16:42	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		01/30/23 07:11	01/30/23 16:42	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		01/30/23 07:11	01/30/23 16:42	1
Chrysene	<0.870		10.0	0.870	ug/L		01/30/23 07:11	01/30/23 16:42	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		01/30/23 07:11	01/30/23 16:42	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		01/30/23 07:11	01/30/23 16:42	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		01/30/23 07:11	01/30/23 16:42	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		01/30/23 07:11	01/30/23 16:42	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		01/30/23 07:11	01/30/23 16:42	1

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

Lab Sample ID: MB 310-377951/1-A
Matrix: Water
Analysis Batch: 377973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		01/30/23 07:11	01/30/23 16:42	1
Diphenylamine	<6.00		10.0	6.00	ug/L		01/30/23 07:11	01/30/23 16:42	1
Fluoranthene	<1.70		10.0	1.70	ug/L		01/30/23 07:11	01/30/23 16:42	1
Fluorene	<0.790		10.0	0.790	ug/L		01/30/23 07:11	01/30/23 16:42	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		01/30/23 07:11	01/30/23 16:42	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		01/30/23 07:11	01/30/23 16:42	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		01/30/23 07:11	01/30/23 16:42	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		01/30/23 07:11	01/30/23 16:42	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		01/30/23 07:11	01/30/23 16:42	1
Isophorone	<0.930		10.0	0.930	ug/L		01/30/23 07:11	01/30/23 16:42	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		01/30/23 07:11	01/30/23 16:42	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		01/30/23 07:11	01/30/23 16:42	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		01/30/23 07:11	01/30/23 16:42	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		01/30/23 07:11	01/30/23 16:42	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		01/30/23 07:11	01/30/23 16:42	1
Phenanthrene	<0.790		10.0	0.790	ug/L		01/30/23 07:11	01/30/23 16:42	1
Phenol	<1.10		10.0	1.10	ug/L		01/30/23 07:11	01/30/23 16:42	1
Pyrene	<0.790		10.0	0.790	ug/L		01/30/23 07:11	01/30/23 16:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*71*		*13 - 110*	*01/30/23 07:11*	*01/30/23 16:42*	*1*
Phenol-d5 (Surr)	*61*		*12 - 110*	*01/30/23 07:11*	*01/30/23 16:42*	*1*
Nitrobenzene-d5 (Surr)	*89*		*27 - 115*	*01/30/23 07:11*	*01/30/23 16:42*	*1*
2-Fluorobiphenyl (Surr)	*78*		*28 - 110*	*01/30/23 07:11*	*01/30/23 16:42*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*15 - 121*	*01/30/23 07:11*	*01/30/23 16:42*	*1*
Terphenyl-d14 (Surr)	*106*		*10 - 125*	*01/30/23 07:11*	*01/30/23 16:42*	*1*

Lab Sample ID: MB 310-377951/1-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377951

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		01/30/23 07:11	02/01/23 15:23	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		01/30/23 07:11	02/01/23 15:23	1

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

Lab Sample ID: MB 310-377951/1-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		01/30/23 07:11	02/01/23 15:23	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		01/30/23 07:11	02/01/23 15:23	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		01/30/23 07:11	02/01/23 15:23	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		01/30/23 07:11	02/01/23 15:23	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		01/30/23 07:11	02/01/23 15:23	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		01/30/23 07:11	02/01/23 15:23	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		01/30/23 07:11	02/01/23 15:23	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
Acenaphthene	<0.640		10.0	0.640	ug/L		01/30/23 07:11	02/01/23 15:23	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		01/30/23 07:11	02/01/23 15:23	1
Acetophenone	<0.690		10.0	0.690	ug/L		01/30/23 07:11	02/01/23 15:23	1
Anthracene	<0.870		10.0	0.870	ug/L		01/30/23 07:11	02/01/23 15:23	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		01/30/23 07:11	02/01/23 15:23	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		01/30/23 07:11	02/01/23 15:23	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		01/30/23 07:11	02/01/23 15:23	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		01/30/23 07:11	02/01/23 15:23	1
2,2'-oxybis[1-chloropropane]	<0.540		10.0	0.540	ug/L		01/30/23 07:11	02/01/23 15:23	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		01/30/23 07:11	02/01/23 15:23	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		01/30/23 07:11	02/01/23 15:23	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
Chrysene	<0.870		10.0	0.870	ug/L		01/30/23 07:11	02/01/23 15:23	1
Diallate	<4.00		10.0	4.00	ug/L		01/30/23 07:11	02/01/23 15:23	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		01/30/23 07:11	02/01/23 15:23	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		01/30/23 07:11	02/01/23 15:23	1
Dimethoate	<3.60		10.0	3.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		01/30/23 07:11	02/01/23 15:23	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		01/30/23 07:11	02/01/23 15:23	1
Dinoseb	<2.40		10.0	2.40	ug/L		01/30/23 07:11	02/01/23 15:23	1
Diphenylamine	<6.00		10.0	6.00	ug/L		01/30/23 07:11	02/01/23 15:23	1

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

Lab Sample ID: MB 310-377951/1-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Disulfoton	<2.40		10.0	2.40	ug/L		01/30/23 07:11	02/01/23 15:23	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
Famphur	<3.80		10.0	3.80	ug/L		01/30/23 07:11	02/01/23 15:23	1
Fluoranthene	<1.70		10.0	1.70	ug/L		01/30/23 07:11	02/01/23 15:23	1
Fluorene	<0.790		10.0	0.790	ug/L		01/30/23 07:11	02/01/23 15:23	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		01/30/23 07:11	02/01/23 15:23	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		01/30/23 07:11	02/01/23 15:23	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		01/30/23 07:11	02/01/23 15:23	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		01/30/23 07:11	02/01/23 15:23	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
Isodrin	<4.70		10.0	4.70	ug/L		01/30/23 07:11	02/01/23 15:23	1
Isophorone	<0.930		10.0	0.930	ug/L		01/30/23 07:11	02/01/23 15:23	1
Isosafrole	<2.30		10.0	2.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
Kepone	<1.00		10.0	1.00	ug/L		01/30/23 07:11	02/01/23 15:23	1
Methapyrilene	<0.760		10.0	0.760	ug/L		01/30/23 07:11	02/01/23 15:23	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
Methyl parathion	<2.30		10.0	2.30	ug/L		01/30/23 07:11	02/01/23 15:23	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		01/30/23 07:11	02/01/23 15:23	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
o-Toluidine	<2.90		10.0	2.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		01/30/23 07:11	02/01/23 15:23	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		01/30/23 07:11	02/01/23 15:23	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		01/30/23 07:11	02/01/23 15:23	1
Phenacetin	<1.90		10.0	1.90	ug/L		01/30/23 07:11	02/01/23 15:23	1
Phenanthrene	<0.790		10.0	0.790	ug/L		01/30/23 07:11	02/01/23 15:23	1
Phenol	<1.10		10.0	1.10	ug/L		01/30/23 07:11	02/01/23 15:23	1
Phorate	<3.20		10.0	3.20	ug/L		01/30/23 07:11	02/01/23 15:23	1
Pronamide	<2.70		10.0	2.70	ug/L		01/30/23 07:11	02/01/23 15:23	1
Pyrene	<0.790		10.0	0.790	ug/L		01/30/23 07:11	02/01/23 15:23	1
Safrole	<2.80		10.0	2.80	ug/L		01/30/23 07:11	02/01/23 15:23	1
Thionazin	<3.50		10.0	3.50	ug/L		01/30/23 07:11	02/01/23 15:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*68*		*13 - 110*	*01/30/23 07:11*	*02/01/23 15:23*	*1*
Phenol-d5 (Surr)	*60*		*12 - 110*	*01/30/23 07:11*	*02/01/23 15:23*	*1*
Nitrobenzene-d5 (Surr)	*86*		*27 - 115*	*01/30/23 07:11*	*02/01/23 15:23*	*1*
2-Fluorobiphenyl (Surr)	*89*		*28 - 110*	*01/30/23 07:11*	*02/01/23 15:23*	*1*

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

Lab Sample ID: MB 310-377951/1-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377951

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	*79*		*15 - 121*	*01/30/23 07:11*	*02/01/23 15:23*	*1*
Terphenyl-d14 (Surr)	*110*		*10 - 125*	*01/30/23 07:11*	*02/01/23 15:23*	*1*

Lab Sample ID: LCS 310-377951/2-A
Matrix: Water
Analysis Batch: 377973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	100	67.84		ug/L		68	25 - 110
1,3-Dinitrobenzene	100	90.12		ug/L		90	29 - 119
2,3,4,6-Tetrachlorophenol	100	80.88		ug/L		81	15 - 116
2,4,5-Trichlorophenol	100	87.54		ug/L		88	25 - 113
2,4,6-Trichlorophenol	100	91.80		ug/L		92	21 - 117
2,4-Dichlorophenol	100	84.63		ug/L		85	31 - 110
2,4-Dimethylphenol	100	96.84		ug/L		97	22 - 110
2,4-Dinitrophenol	200	95.81		ug/L		48	10 - 110
2,4-Dinitrotoluene	100	79.91		ug/L		80	36 - 115
2,6-Dichlorophenol	100	80.73		ug/L		81	24 - 112
2,6-Dinitrotoluene	100	86.19		ug/L		86	35 - 117
2-Chloronaphthalene	100	84.02		ug/L		84	24 - 110
2-Chlorophenol	100	83.99		ug/L		84	32 - 110
2-Methylnaphthalene	100	64.99		ug/L		65	26 - 110
2-Methylphenol	100	80.12		ug/L		80	29 - 110
2-Nitroaniline	100	94.88		ug/L		95	33 - 115
2-Nitrophenol	100	87.94		ug/L		88	28 - 112
3,3'-Dichlorobenzidine	100	108.1		ug/L		108	20 - 120
3-Nitroaniline	100	81.15		ug/L		81	20 - 119
4,6-Dinitro-2-methylphenol	200	155.0		ug/L		77	10 - 125
4-Bromophenyl phenyl ether	100	87.80		ug/L		88	33 - 110
4-Chloro-3-methylphenol	100	80.90		ug/L		81	34 - 115
4-Chloroaniline	100	86.12		ug/L		86	10 - 121
4-Chlorophenyl phenyl ether	100	77.95		ug/L		78	31 - 110
Methylphenol, 3 & 4	100	74.71		ug/L		75	24 - 110
4-Nitroaniline	100	81.53		ug/L		82	18 - 118
4-Nitrophenol	200	87.83		ug/L		44	10 - 110
Acenaphthene	100	80.71		ug/L		81	26 - 110
Acenaphthylene	100	79.71		ug/L		80	20 - 110
Acetophenone	100	74.40		ug/L		74	35 - 110
Anthracene	100	81.24		ug/L		81	30 - 113
Benzo[a]anthracene	100	84.75		ug/L		85	38 - 110
Benzo[a]pyrene	100	74.74		ug/L		75	15 - 126
Benzo[b]fluoranthene	100	85.09		ug/L		85	35 - 114
Benzo[g,h,i]perylene	100	80.19		ug/L		80	30 - 114
Benzo[k]fluoranthene	100	74.47		ug/L		74	39 - 111
Benzyl alcohol	100	86.79		ug/L		87	28 - 110
Bis(2-chloroethoxy)methane	100	89.53		ug/L		90	31 - 110
Bis(2-chloroethyl)ether	100	90.70		ug/L		91	30 - 110
2,2'-oxybis[1-chloropropane]	100	82.20		ug/L		82	27 - 110

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

Lab Sample ID: LCS 310-377951/2-A
Matrix: Water
Analysis Batch: 377973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-ethylhexyl) phthalate	100	100.2		ug/L		100	29 - 126
Butyl benzyl phthalate	100	95.79		ug/L		96	31 - 121
Chrysene	100	84.60		ug/L		85	40 - 110
Dibenzo(a,h)anthracene	100	78.76		ug/L		79	31 - 122
Dibenzofuran	100	79.21		ug/L		79	31 - 110
Diethyl phthalate	100	77.92		ug/L		78	36 - 113
Dimethyl phthalate	100	84.45		ug/L		84	23 - 117
Di-n-butyl phthalate	100	82.44		ug/L		82	39 - 119
Di-n-octyl phthalate	100	93.82		ug/L		94	25 - 139
Fluoranthene	100	72.78		ug/L		73	39 - 111
Fluorene	100	78.41		ug/L		78	32 - 110
Hexachlorobenzene	100	86.21		ug/L		86	35 - 110
Hexachlorobutadiene	100	63.43		ug/L		63	21 - 110
Hexachlorocyclopentadiene	100	77.04		ug/L		77	10 - 110
Hexachloroethane	100	56.82		ug/L		57	17 - 110
Indeno[1,2,3-cd]pyrene	100	79.58		ug/L		80	26 - 124
Isophorone	100	89.41		ug/L		89	33 - 111
Nitrobenzene	100	86.95		ug/L		87	31 - 110
N-Nitrosodimethylamine	100	78.05		ug/L		78	24 - 110
N-Nitrosodi-n-propylamine	100	88.23		ug/L		88	32 - 114
N-Nitrosodiphenylamine	100	89.74		ug/L		90	22 - 119
Pentachlorophenol	200	147.8		ug/L		74	10 - 116
Phenanthrene	100	80.71		ug/L		81	37 - 110
Phenol	100	64.25		ug/L		64	20 - 110
Pyrene	100	93.10		ug/L		93	35 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*72*		*13 - 110*
Phenol-d5 (Surr)	*59*		*12 - 110*
Nitrobenzene-d5 (Surr)	*88*		*27 - 115*
2-Fluorobiphenyl (Surr)	*82*		*28 - 110*
2,4,6-Tribromophenol (Surr)	*79*		*15 - 121*
Terphenyl-d14 (Surr)	*98*		*10 - 125*

Lab Sample ID: LCS 310-377951/2-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	100	82.15		ug/L		82	25 - 110
1,3,5-Trinitrobenzene	64.0	36.68		ug/L		57	20 - 120
1,3-Dinitrobenzene	100	93.00		ug/L		93	29 - 119
1,4-Naphthoquinone	64.0	56.03		ug/L		88	20 - 120
1,4-phenylenediamine	64.0	<1.90	*-	ug/L		0.2	20 - 120
1-Naphthylamine	64.0	25.47		ug/L		40	20 - 120
2,3,4,6-Tetrachlorophenol	100	66.10		ug/L		66	15 - 116
2,4,5-Trichlorophenol	100	73.18		ug/L		73	25 - 113
2,4,6-Trichlorophenol	100	82.19		ug/L		82	21 - 117

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

Lab Sample ID: LCS 310-377951/2-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dichlorophenol	100	84.94		ug/L		85	31 - 110
2,4-Dimethylphenol	100	97.70		ug/L		98	22 - 110
2,4-Dinitrophenol	200	16.22	J *-	ug/L		8	10 - 110
2,4-Dinitrotoluene	100	88.59		ug/L		89	36 - 115
2,6-Dichlorophenol	100	81.17		ug/L		81	24 - 112
2,6-Dinitrotoluene	100	91.35		ug/L		91	35 - 117
2-Acetylaminofluorene	64.0	71.68		ug/L		112	20 - 120
2-Chloronaphthalene	100	75.41		ug/L		75	24 - 110
2-Chlorophenol	100	80.99		ug/L		81	32 - 110
2-Methylnaphthalene	100	71.76		ug/L		72	26 - 110
2-Methylphenol	100	81.23		ug/L		81	29 - 110
2-Naphthylamine	64.0	35.78		ug/L		56	20 - 120
2-Nitroaniline	100	92.12		ug/L		92	33 - 115
2-Nitrophenol	100	75.01		ug/L		75	28 - 112
3,3'-Dichlorobenzidine	100	101.5		ug/L		101	20 - 120
3,3'-Dimethylbenzidine	64.0	18.20		ug/L		28	20 - 120
3-Methylcholanthrene	64.0	67.10		ug/L		105	20 - 120
3-Nitroaniline	100	83.99		ug/L		84	20 - 119
4,6-Dinitro-2-methylphenol	200	23.09		ug/L		12	10 - 125
4-Aminobiphenyl	64.0	43.24		ug/L		68	20 - 120
4-Bromophenyl phenyl ether	100	94.53		ug/L		95	33 - 110
4-Chloro-3-methylphenol	100	83.81		ug/L		84	34 - 115
4-Chloroaniline	100	89.13		ug/L		89	10 - 121
4-Chlorophenyl phenyl ether	100	85.37		ug/L		85	31 - 110
Methylphenol, 3 & 4	100	73.14		ug/L		73	24 - 110
4-Nitroaniline	100	58.58		ug/L		59	18 - 118
4-Nitrophenol	200	82.21		ug/L		41	10 - 110
5-Nitro-o-toluidine	64.0	52.64		ug/L		82	20 - 120
7,12-Dimethylbenz(a)anthracene	64.0	59.36		ug/L		93	20 - 120
Acenaphthene	100	88.12		ug/L		88	26 - 110
Acenaphthylene	100	85.16		ug/L		85	20 - 110
Acetophenone	100	82.99		ug/L		83	35 - 110
Anthracene	100	85.32		ug/L		85	30 - 113
Benzo[a]anthracene	100	94.13		ug/L		94	38 - 110
Benzo[a]pyrene	100	87.80		ug/L		88	15 - 126
Benzo[b]fluoranthene	100	87.83		ug/L		88	35 - 114
Benzo[g,h,i]perylene	100	76.01		ug/L		76	30 - 114
Benzo[k]fluoranthene	100	87.21		ug/L		87	39 - 111
Benzyl alcohol	100	87.71		ug/L		88	28 - 110
Bis(2-chloroethoxy)methane	100	91.07		ug/L		91	31 - 110
Bis(2-chloroethyl)ether	100	86.04		ug/L		86	30 - 110
2,2'-oxybis[1-chloropropane]	100	78.83		ug/L		79	27 - 110
Bis(2-ethylhexyl) phthalate	100	114.1		ug/L		114	29 - 126
Butyl benzyl phthalate	100	100.7		ug/L		101	31 - 121
Chlorobenzilate	64.0	66.44		ug/L		104	20 - 120
Chrysene	100	93.46		ug/L		93	40 - 110
Diallate	64.0	67.24		ug/L		105	20 - 120
Dibenzo(a,h)anthracene	100	71.11		ug/L		71	31 - 122
Dibenzofuran	100	84.92		ug/L		85	31 - 110

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

Lab Sample ID: LCS 310-377951/2-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diethyl phthalate	100	97.16		ug/L		97	36 - 113
Dimethoate	64.0	65.41		ug/L		102	20 - 120
Dimethyl phthalate	100	97.32		ug/L		97	23 - 117
Di-n-butyl phthalate	100	88.66		ug/L		89	39 - 119
Di-n-octyl phthalate	100	118.8		ug/L		119	25 - 139
Dinoseb	64.0	10.01	*-	ug/L		16	20 - 120
Disulfoton	64.0	57.39		ug/L		90	20 - 120
Ethyl methanesulfonate	64.0	52.46		ug/L		82	20 - 120
Ethyl Parathion	64.0	61.99		ug/L		97	20 - 120
Famphur	64.0	94.01	E	ug/L		147	50 - 150
Fluoranthene	100	73.81		ug/L		74	39 - 111
Fluorene	100	96.79		ug/L		97	32 - 110
Hexachlorobenzene	100	96.48		ug/L		96	35 - 110
Hexachlorobutadiene	100	63.32		ug/L		63	21 - 110
Hexachlorocyclopentadiene	100	43.39		ug/L		43	10 - 110
Hexachloroethane	100	56.55		ug/L		57	17 - 110
Hexachloropropene	64.0	5.890	J *-	ug/L		9	10 - 110
Indeno[1,2,3-cd]pyrene	100	92.89		ug/L		93	26 - 124
Isodrin	64.0	53.42		ug/L		83	20 - 120
Isophorone	100	94.01		ug/L		94	33 - 111
Methapyrilene	64.0	8.636	J	ug/L		13	10 - 110
Methyl methanesulfonate	64.0	33.36		ug/L		52	20 - 120
Methyl parathion	64.0	67.12		ug/L		105	20 - 120
Nitrobenzene	100	83.65		ug/L		84	31 - 110
N-Nitrosodiethylamine	64.0	59.78		ug/L		93	20 - 120
N-Nitrosodimethylamine	100	74.84		ug/L		75	24 - 110
N-Nitrosodi-n-butylamine	64.0	65.75		ug/L		103	20 - 120
N-Nitrosodi-n-propylamine	100	92.08		ug/L		92	32 - 114
N-Nitrosodiphenylamine	100	82.56		ug/L		83	22 - 119
N-Nitrosomethylethylamine	64.0	58.05		ug/L		91	20 - 120
N-Nitrosopiperidine	64.0	63.42		ug/L		99	20 - 120
N-Nitrosopyrrolidine	64.0	64.57		ug/L		101	20 - 120
o,o',o''-Triethylphosphorothioate	64.0	52.78		ug/L		82	20 - 120
o-Toluidine	64.0	52.75		ug/L		82	20 - 120
p-Dimethylamino azobenzene	64.0	58.93		ug/L		92	20 - 120
Pentachlorobenzene	64.0	45.88		ug/L		72	20 - 120
Pentachloronitrobenzene	64.0	66.74		ug/L		104	20 - 120
Pentachlorophenol	200	131.7		ug/L		66	10 - 116
Phenacetin	64.0	58.06		ug/L		91	20 - 120
Phenanthrene	100	83.90		ug/L		84	37 - 110
Phenol	100	57.52		ug/L		58	20 - 110
Phorate	64.0	65.22		ug/L		102	20 - 120
Pronamide	64.0	61.68		ug/L		96	20 - 120
Pyrene	100	92.44		ug/L		92	35 - 115
Safrole	64.0	44.86		ug/L		70	20 - 120
Thionazin	64.0	63.07		ug/L		99	20 - 120

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

Lab Sample ID: LCS 310-377951/2-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377951

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol (Surr)	67		13 - 110
Phenol-d5 (Surr)	59		12 - 110
Nitrobenzene-d5 (Surr)	87		27 - 115
2-Fluorobiphenyl (Surr)	81		28 - 110
2,4,6-Tribromophenol (Surr)	87		15 - 121
Terphenyl-d14 (Surr)	108		10 - 125

Lab Sample ID: LCSD 310-377951/3-A
Matrix: Water
Analysis Batch: 377973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			100	65.77		ug/L		66	25 - 110	3	35
1,3-Dinitrobenzene			100	91.80		ug/L		92	29 - 119	2	35
2,3,4,6-Tetrachlorophenol			100	81.21		ug/L		81	15 - 116	0	35
2,4,5-Trichlorophenol			100	86.53		ug/L		87	25 - 113	1	35
2,4,6-Trichlorophenol			100	89.87		ug/L		90	21 - 117	2	35
2,4-Dichlorophenol			100	81.96		ug/L		82	31 - 110	3	35
2,4-Dimethylphenol			100	92.44		ug/L		92	22 - 110	5	35
2,4-Dinitrophenol			200	107.3		ug/L		54	10 - 110	11	35
2,4-Dinitrotoluene			100	78.51		ug/L		79	36 - 115	2	35
2,6-Dichlorophenol			100	77.30		ug/L		77	24 - 112	4	35
2,6-Dinitrotoluene			100	85.63		ug/L		86	35 - 117	1	35
2-Chloronaphthalene			100	84.81		ug/L		85	24 - 110	1	35
2-Chlorophenol			100	82.69		ug/L		83	32 - 110	2	35
2-Methylnaphthalene			100	63.92		ug/L		64	26 - 110	2	35
2-Methylphenol			100	78.15		ug/L		78	29 - 110	2	35
2-Nitroaniline			100	93.13		ug/L		93	33 - 115	2	35
2-Nitrophenol			100	86.33		ug/L		86	28 - 112	2	35
3,3'-Dichlorobenzidine			100	99.24		ug/L		99	20 - 120	9	35
3-Nitroaniline			100	78.67		ug/L		79	20 - 119	3	35
4,6-Dinitro-2-methylphenol			200	162.3		ug/L		81	10 - 125	5	35
4-Bromophenyl phenyl ether			100	85.08		ug/L		85	33 - 110	3	35
4-Chloro-3-methylphenol			100	80.67		ug/L		81	34 - 115	0	35
4-Chloroaniline			100	77.87		ug/L		78	10 - 121	10	35
4-Chlorophenyl phenyl ether			100	76.22		ug/L		76	31 - 110	2	35
Methylphenol, 3 & 4			100	74.78		ug/L		75	24 - 110	0	35
4-Nitroaniline			100	81.61		ug/L		82	18 - 118	0	35
4-Nitrophenol			200	92.44		ug/L		46	10 - 110	5	35
Acenaphthene			100	77.69		ug/L		78	26 - 110	4	35
Acenaphthylene			100	76.28		ug/L		76	20 - 110	4	35
Acetophenone			100	72.16		ug/L		72	35 - 110	3	35
Anthracene			100	79.77		ug/L		80	30 - 113	2	35
Benzo[a]anthracene			100	82.10		ug/L		82	38 - 110	3	35
Benzo[a]pyrene			100	72.71		ug/L		73	15 - 126	3	35
Benzo[b]fluoranthene			100	81.61		ug/L		82	35 - 114	4	35
Benzo[g,h,i]perylene			100	78.32		ug/L		78	30 - 114	2	35
Benzo[k]fluoranthene			100	75.59		ug/L		76	39 - 111	1	35

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

Lab Sample ID: LCSD 310-377951/3-A
Matrix: Water
Analysis Batch: 377973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzyl alcohol			100	84.72		ug/L		85	28 - 110	2	35
Bis(2-chloroethoxy)methane			100	85.02		ug/L		85	31 - 110	5	35
Bis(2-chloroethyl)ether			100	85.41		ug/L		85	30 - 110	6	35
2,2'-oxybis[1-chloropropane]			100	77.99		ug/L		78	27 - 110	5	35
Bis(2-ethylhexyl) phthalate			100	97.66		ug/L		98	29 - 126	3	35
Butyl benzyl phthalate			100	94.46		ug/L		94	31 - 121	1	35
Chrysene			100	81.08		ug/L		81	40 - 110	4	35
Dibenzo(a,h)anthracene			100	80.78		ug/L		81	31 - 122	3	35
Dibenzofuran			100	76.23		ug/L		76	31 - 110	4	35
Diethyl phthalate			100	75.53		ug/L		76	36 - 113	3	35
Dimethyl phthalate			100	82.44		ug/L		82	23 - 117	2	35
Di-n-butyl phthalate			100	80.39		ug/L		80	39 - 119	3	35
Di-n-octyl phthalate			100	94.11		ug/L		94	25 - 139	0	35
Fluoranthene			100	70.48		ug/L		70	39 - 111	3	35
Fluorene			100	75.15		ug/L		75	32 - 110	4	35
Hexachlorobenzene			100	84.30		ug/L		84	35 - 110	2	35
Hexachlorobutadiene			100	64.72		ug/L		65	21 - 110	2	35
Hexachlorocyclopentadiene			100	76.64		ug/L		77	10 - 110	1	35
Hexachloroethane			100	57.66		ug/L		58	17 - 110	1	35
Indeno[1,2,3-cd]pyrene			100	75.86		ug/L		76	26 - 124	5	35
Isophorone			100	86.38		ug/L		86	33 - 111	3	35
Nitrobenzene			100	84.10		ug/L		84	31 - 110	3	35
N-Nitrosodimethylamine			100	78.37		ug/L		78	24 - 110	0	35
N-Nitrosodi-n-propylamine			100	84.81		ug/L		85	32 - 114	4	35
N-Nitrosodiphenylamine			100	87.21		ug/L		87	22 - 119	3	35
Pentachlorophenol			200	151.4		ug/L		76	10 - 116	2	35
Phenanthrene			100	78.25		ug/L		78	37 - 110	3	35
Phenol			100	62.77		ug/L		63	20 - 110	2	35
Pyrene			100	92.40		ug/L		92	35 - 115	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*70*		*13 - 110*
Phenol-d5 (Surr)	*59*		*12 - 110*
Nitrobenzene-d5 (Surr)	*84*		*27 - 115*
2-Fluorobiphenyl (Surr)	*77*		*28 - 110*
2,4,6-Tribromophenol (Surr)	*75*		*15 - 121*
Terphenyl-d14 (Surr)	*93*		*10 - 125*

Lab Sample ID: LCSD 310-377951/3-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			100	84.45		ug/L		84	25 - 110	3	35
1,3,5-Trinitrobenzene			64.0	49.38		ug/L		77	20 - 120	30	35
1,3-Dinitrobenzene			100	94.98		ug/L		95	29 - 119	2	35
1,4-Naphthoquinone			64.0	58.75		ug/L		92	20 - 120	5	35
1,4-phenylenediamine			64.0	<1.90	*-	ug/L		0.3	20 - 120	33	35

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

Lab Sample ID: LCSD 310-377951/3-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Naphthylamine	64.0	23.40		ug/L		37	20 - 120	8	35
2,3,4,6-Tetrachlorophenol	100	69.46		ug/L		69	15 - 116	5	35
2,4,5-Trichlorophenol	100	73.10		ug/L		73	25 - 113	0	35
2,4,6-Trichlorophenol	100	86.23		ug/L		86	21 - 117	5	35
2,4-Dichlorophenol	100	88.35		ug/L		88	31 - 110	4	35
2,4-Dimethylphenol	100	99.99		ug/L		100	22 - 110	2	35
2,4-Dinitrophenol	200	27.91	*1	ug/L		14	10 - 110	53	35
2,4-Dinitrotoluene	100	92.11		ug/L		92	36 - 115	4	35
2,6-Dichlorophenol	100	83.10		ug/L		83	24 - 112	2	35
2,6-Dinitrotoluene	100	94.46		ug/L		94	35 - 117	3	35
2-Acetylaminofluorene	64.0	65.64		ug/L		103	20 - 120	9	35
2-Chloronaphthalene	100	80.93		ug/L		81	24 - 110	7	35
2-Chlorophenol	100	84.41		ug/L		84	32 - 110	4	35
2-Methylnaphthalene	100	74.23		ug/L		74	26 - 110	3	35
2-Methylphenol	100	82.08		ug/L		82	29 - 110	1	35
2-Naphthylamine	64.0	23.97	*1	ug/L		37	20 - 120	40	35
2-Nitroaniline	100	94.78		ug/L		95	33 - 115	3	35
2-Nitrophenol	100	79.36		ug/L		79	28 - 112	6	35
3,3'-Dichlorobenzidine	100	95.11		ug/L		95	20 - 120	6	35
3,3'-Dimethylbenzidine	64.0	<1.50	*- *1	ug/L		2	20 - 120	179	35
3-Methylcholanthrene	64.0	62.56		ug/L		98	20 - 120	7	35
3-Nitroaniline	100	85.47		ug/L		85	20 - 119	2	35
4,6-Dinitro-2-methylphenol	200	40.11	*1	ug/L		20	10 - 125	54	35
4-Aminobiphenyl	64.0	29.88	*1	ug/L		47	20 - 120	37	35
4-Bromophenyl phenyl ether	100	95.61		ug/L		96	33 - 110	1	35
4-Chloro-3-methylphenol	100	87.63		ug/L		88	34 - 115	4	35
4-Chloroaniline	100	81.96		ug/L		82	10 - 121	8	35
4-Chlorophenyl phenyl ether	100	86.23		ug/L		86	31 - 110	1	35
Methylphenol, 3 & 4	100	72.85		ug/L		73	24 - 110	0	35
4-Nitroaniline	100	60.84		ug/L		61	18 - 118	4	35
4-Nitrophenol	200	93.04		ug/L		47	10 - 110	12	35
5-Nitro-o-toluidine	64.0	53.46		ug/L		84	20 - 120	2	35
7,12-Dimethylbenz(a)anthracene	64.0	56.46		ug/L		88	20 - 120	5	35
Acenaphthene	100	88.90		ug/L		89	26 - 110	1	35
Acenaphthylene	100	84.66		ug/L		85	20 - 110	1	35
Acetophenone	100	82.21		ug/L		82	35 - 110	1	35
Anthracene	100	85.05		ug/L		85	30 - 113	0	35
Benzo[a]anthracene	100	91.88		ug/L		92	38 - 110	2	35
Benzo[a]pyrene	100	84.73		ug/L		85	15 - 126	4	35
Benzo[b]fluoranthene	100	86.66		ug/L		87	35 - 114	1	35
Benzo[g,h,i]perylene	100	74.27		ug/L		74	30 - 114	2	35
Benzo[k]fluoranthene	100	80.94		ug/L		81	39 - 111	7	35
Benzyl alcohol	100	87.78		ug/L		88	28 - 110	0	35
Bis(2-chloroethoxy)methane	100	92.73		ug/L		93	31 - 110	2	35
Bis(2-chloroethyl)ether	100	85.60		ug/L		86	30 - 110	1	35
2,2'-oxybis[1-chloropropane]	100	80.13		ug/L		80	27 - 110	2	35
Bis(2-ethylhexyl) phthalate	100	110.5		ug/L		111	29 - 126	3	35
Butyl benzyl phthalate	100	98.88		ug/L		99	31 - 121	2	35
Chlorobenzilate	64.0	66.10		ug/L		103	20 - 120	1	35

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

Lab Sample ID: LCSD 310-377951/3-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chrysene	100	89.36		ug/L		89	40 - 110	4	35
Diallate	64.0	65.89		ug/L		103	20 - 120	2	35
Dibenzo(a,h)anthracene	100	74.09		ug/L		74	31 - 122	4	35
Dibenzofuran	100	84.17		ug/L		84	31 - 110	1	35
Diethyl phthalate	100	98.39		ug/L		98	36 - 113	1	35
Dimethoate	64.0	65.61		ug/L		103	20 - 120	0	35
Dimethyl phthalate	100	99.90		ug/L		100	23 - 117	3	35
Di-n-butyl phthalate	100	89.95		ug/L		90	39 - 119	1	35
Di-n-octyl phthalate	100	116.2		ug/L		116	25 - 139	2	35
Dinoseb	64.0	16.74	*1	ug/L		26	20 - 120	50	35
Disulfoton	64.0	55.53		ug/L		87	20 - 120	3	35
Ethyl methanesulfonate	64.0	52.42		ug/L		82	20 - 120	0	35
Ethyl Parathion	64.0	60.54		ug/L		95	20 - 120	2	35
Famphur	64.0	89.55	E	ug/L		140	50 - 150	5	35
Fluoranthene	100	73.51		ug/L		74	39 - 111	0	35
Fluorene	100	96.06		ug/L		96	32 - 110	1	35
Hexachlorobenzene	100	94.24		ug/L		94	35 - 110	2	35
Hexachlorobutadiene	100	69.05		ug/L		69	21 - 110	9	35
Hexachlorocyclopentadiene	100	55.32		ug/L		55	10 - 110	24	35
Hexachloroethane	100	58.86		ug/L		59	17 - 110	4	35
Hexachloropropene	64.0	9.929	J *1	ug/L		16	10 - 110	51	35
Indeno[1,2,3-cd]pyrene	100	87.32		ug/L		87	26 - 124	6	35
Isodrin	64.0	53.19		ug/L		83	20 - 120	0	35
Isophorone	100	96.69		ug/L		97	33 - 111	3	35
Methapyrilene	64.0	6.295	J	ug/L		10	10 - 110	31	35
Methyl methanesulfonate	64.0	33.27		ug/L		52	20 - 120	0	35
Methyl parathion	64.0	66.28		ug/L		104	20 - 120	1	35
Nitrobenzene	100	82.65		ug/L		83	31 - 110	1	35
N-Nitrosodiethylamine	64.0	59.33		ug/L		93	20 - 120	1	35
N-Nitrosodimethylamine	100	77.81		ug/L		78	24 - 110	4	35
N-Nitrosodi-n-butylamine	64.0	68.13		ug/L		106	20 - 120	4	35
N-Nitrosodi-n-propylamine	100	94.14		ug/L		94	32 - 114	2	35
N-Nitrosodiphenylamine	100	85.34		ug/L		85	22 - 119	3	35
N-Nitrosomethylethylamine	64.0	57.45		ug/L		90	20 - 120	1	35
N-Nitrosopiperidine	64.0	62.96		ug/L		98	20 - 120	1	35
N-Nitrosopyrrolidine	64.0	63.29		ug/L		99	20 - 120	2	35
o,o',o''-Triethylphosphorothioate	64.0	54.91		ug/L		86	20 - 120	4	35
o-Toluidine	64.0	50.68		ug/L		79	20 - 120	4	35
p-Dimethylamino azobenzene	64.0	60.30		ug/L		94	20 - 120	2	35
Pentachlorobenzene	64.0	49.83		ug/L		78	20 - 120	8	35
Pentachloronitrobenzene	64.0	65.98		ug/L		103	20 - 120	1	35
Pentachlorophenol	200	146.4		ug/L		73	10 - 116	11	35
Phenacetin	64.0	56.79		ug/L		89	20 - 120	2	35
Phenanthrene	100	83.45		ug/L		83	37 - 110	1	35
Phenol	100	59.43		ug/L		59	20 - 110	3	35
Phorate	64.0	63.38		ug/L		99	20 - 120	3	35
Pronamide	64.0	61.06		ug/L		95	20 - 120	1	35
Pyrene	100	91.41		ug/L		91	35 - 115	1	35
Safrole	64.0	50.00		ug/L		78	20 - 120	11	35

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

Lab Sample ID: LCSD 310-377951/3-A
Matrix: Water
Analysis Batch: 378204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thionazin			64.0	63.44		ug/L		99	20 - 120	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*70*		*13 - 110*
Phenol-d5 (Surr)	*62*		*12 - 110*
Nitrobenzene-d5 (Surr)	*86*		*27 - 115*
2-Fluorobiphenyl (Surr)	*81*		*28 - 110*
2,4,6-Tribromophenol (Surr)	*89*		*15 - 121*
Terphenyl-d14 (Surr)	*105*		*10 - 125*

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

Lab Sample ID: MB 310-377945/5
Matrix: Water
Analysis Batch: 377945

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.404		10.0	0.404	mg/L			01/30/23 08:56	1
Isobutanol	<0.553		10.0	0.553	mg/L			01/30/23 08:56	1

Lab Sample ID: LCS 310-377945/6
Matrix: Water
Analysis Batch: 377945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile			52.0	53.87		mg/L		104	66 - 122		
Isobutanol			54.0	56.92		mg/L		106	77 - 120		

Lab Sample ID: 310-248830-1 MS
Matrix: Water
Analysis Batch: 377945

Client Sample ID: MW-26_23_02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile	<0.404		52.0	41.41		mg/L		80	58 - 129		
Isobutanol	<0.553		54.0	55.06		mg/L		102	60 - 130		

Lab Sample ID: 310-248830-1 MSD
Matrix: Water
Analysis Batch: 377945

Client Sample ID: MW-26_23_02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetonitrile	<0.404		52.0	52.45		mg/L		101	58 - 129	24	35
Isobutanol	<0.553		54.0	56.54		mg/L		105	60 - 130	3	35

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-377959/1-A
Matrix: Water
Analysis Batch: 378700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377959

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0270		0.0640	0.0270	ug/L		01/30/23 07:55	02/08/23 11:25	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		01/30/23 07:55	02/08/23 11:25	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		01/30/23 07:55	02/08/23 11:25	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		01/30/23 07:55	02/08/23 11:25	1
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		01/30/23 07:55	02/08/23 11:25	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		01/30/23 07:55	02/08/23 11:25	1
Chlordane (technical)	<0.810		2.00	0.810	ug/L		01/30/23 07:55	02/08/23 11:25	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		01/30/23 07:55	02/08/23 11:25	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		01/30/23 07:55	02/08/23 11:25	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		01/30/23 07:55	02/08/23 11:25	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		01/30/23 07:55	02/08/23 11:25	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		01/30/23 07:55	02/08/23 11:25	1
Endrin	<0.0260		0.0640	0.0260	ug/L		01/30/23 07:55	02/08/23 11:25	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		01/30/23 07:55	02/08/23 11:25	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		01/30/23 07:55	02/08/23 11:25	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		01/30/23 07:55	02/08/23 11:25	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		01/30/23 07:55	02/08/23 11:25	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		01/30/23 07:55	02/08/23 11:25	1
Toxaphene	<0.690		2.00	0.690	ug/L		01/30/23 07:55	02/08/23 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*54*		*10 - 136*	*01/30/23 07:55*	*02/08/23 11:25*	*1*
Tetrachloro-m-xylene	*81*		*10 - 130*	*01/30/23 07:55*	*02/08/23 11:25*	*1*

Lab Sample ID: LCS 310-377959/4-A
Matrix: Water
Analysis Batch: 378700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377959

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.00	0.7620		ug/L		76	36 - 149
4,4'-DDE	1.00	0.8852		ug/L		89	34 - 130
4,4'-DDT	1.00	0.6147		ug/L		61	23 - 150
Aldrin	1.00	0.6367		ug/L		64	13 - 120
alpha-BHC	1.00	0.7107		ug/L		71	36 - 127
beta-BHC	1.00	0.7345		ug/L		73	37 - 136
delta-BHC	1.00	0.6614		ug/L		66	33 - 134
Dieldrin	1.00	0.7195		ug/L		72	39 - 130
Endosulfan I	1.00	0.2886		ug/L		29	10 - 120
Endosulfan II	1.00	0.3589		ug/L		36	14 - 120
Endosulfan sulfate	1.00	0.7236		ug/L		72	36 - 147
Endrin	1.00	0.7097		ug/L		71	39 - 140
Endrin aldehyde	1.00	0.6115		ug/L		61	32 - 137
gamma-BHC (Lindane)	1.00	0.7241		ug/L		72	36 - 132
Heptachlor	1.00	0.6189		ug/L		62	27 - 120
Heptachlor epoxide	1.00	0.7396		ug/L		74	38 - 133
Methoxychlor	1.00	0.6447		ug/L		64	10 - 150

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

Lab Sample ID: LCS 310-377959/4-A
Matrix: Water
Analysis Batch: 378700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377959

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	56		10 - 136
Tetrachloro-m-xylene	68		10 - 130

Lab Sample ID: LCSD 310-377959/5-A
Matrix: Water
Analysis Batch: 378700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377959

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			1.00	0.7716		ug/L		77	36 - 149	1	35
4,4'-DDE			1.00	0.9044		ug/L		90	34 - 130	2	35
4,4'-DDT			1.00	0.6124		ug/L		61	23 - 150	0	35
Aldrin			1.00	0.6938		ug/L		69	13 - 120	9	35
alpha-BHC			1.00	0.7838		ug/L		78	36 - 127	10	35
beta-BHC			1.00	0.8110		ug/L		81	37 - 136	10	35
delta-BHC			1.00	0.7227		ug/L		72	33 - 134	9	35
Dieldrin			1.00	0.7559		ug/L		76	39 - 130	5	35
Endosulfan I			1.00	0.3155		ug/L		32	10 - 120	9	35
Endosulfan II			1.00	0.3735		ug/L		37	14 - 120	4	35
Endosulfan sulfate			1.00	0.7341		ug/L		73	36 - 147	1	35
Endrin			1.00	0.7270		ug/L		73	39 - 140	2	35
Endrin aldehyde			1.00	0.6014		ug/L		60	32 - 137	2	35
gamma-BHC (Lindane)			1.00	0.7950		ug/L		80	36 - 132	9	35
Heptachlor			1.00	0.6810		ug/L		68	27 - 120	10	35
Heptachlor epoxide			1.00	0.7982		ug/L		80	38 - 133	8	35
Methoxychlor			1.00	0.6001		ug/L		60	10 - 150	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	45		10 - 136
Tetrachloro-m-xylene	76		10 - 130

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

Lab Sample ID: MB 310-377959/1-A
Matrix: Water
Analysis Batch: 378702

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377959

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.170		0.800	0.170	ug/L		01/30/23 07:55	02/08/23 11:25	1
PCB-1221	<0.170		0.800	0.170	ug/L		01/30/23 07:55	02/08/23 11:25	1
PCB-1232	<0.170		0.800	0.170	ug/L		01/30/23 07:55	02/08/23 11:25	1
PCB-1242	<0.170		0.800	0.170	ug/L		01/30/23 07:55	02/08/23 11:25	1
PCB-1248	<0.110		0.800	0.110	ug/L		01/30/23 07:55	02/08/23 11:25	1
PCB-1254	<0.110		0.800	0.110	ug/L		01/30/23 07:55	02/08/23 11:25	1
PCB-1260	<0.110		0.800	0.110	ug/L		01/30/23 07:55	02/08/23 11:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	54		10 - 136	01/30/23 07:55	02/08/23 11:25	1
Tetrachloro-m-xylene	81		10 - 130	01/30/23 07:55	02/08/23 11:25	1

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

Lab Sample ID: LCS 310-377959/2-A
Matrix: Water
Analysis Batch: 378702

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377959

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			10.0	12.20		ug/L		122	30 - 133		
PCB-1260			10.0	11.07		ug/L		111	31 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*62*		*10 - 136*
Tetrachloro-m-xylene	*94*		*10 - 130*

Lab Sample ID: LCSD 310-377959/3-A
Matrix: Water
Analysis Batch: 378702

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377959

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			10.0	8.770		ug/L		88	30 - 133	33	35
PCB-1260			10.0	8.465		ug/L		85	31 - 133	27	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*51*		*10 - 136*
Tetrachloro-m-xylene	*71*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: LB 500-696537/1-E
Matrix: Water
Analysis Batch: 697014

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 696865

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<54.0		100	54.0	ug/L		02/02/23 08:21	02/03/23 11:20	1
Silvex (2,4,5-TP)	<12.7		100	12.7	ug/L		02/02/23 08:21	02/03/23 11:20	1
2,4,5-T	<13.8		100	13.8	ug/L		02/02/23 08:21	02/03/23 11:20	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*73*		*25 - 130*	*02/02/23 08:21*	*02/03/23 11:20*	*1*

Lab Sample ID: MB 500-696865/1-A
Matrix: Water
Analysis Batch: 697014

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 696865

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.540		1.00	0.540	ug/L		02/02/23 08:21	02/03/23 10:10	1
Silvex (2,4,5-TP)	<0.127		1.00	0.127	ug/L		02/02/23 08:21	02/03/23 10:10	1
2,4,5-T	<0.138		1.00	0.138	ug/L		02/02/23 08:21	02/03/23 10:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*77*		*25 - 130*	*02/02/23 08:21*	*02/03/23 10:10*	*1*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 500-696865/2-A
Matrix: Water
Analysis Batch: 697014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 696865

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			10.1	8.211		ug/L		82	30 - 115		
Silvex (2,4,5-TP)			2.50	1.973		ug/L		79	32 - 115		
2,4,5-T			2.53	1.865		ug/L		74	30 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*84*		*25 - 130*

Lab Sample ID: LCSD 500-696865/3-A
Matrix: Water
Analysis Batch: 697014

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 696865

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			10.1	8.063		ug/L		80	30 - 115	2	20
Silvex (2,4,5-TP)			2.50	1.947		ug/L		78	32 - 115	1	20
2,4,5-T			2.53	1.822		ug/L		72	30 - 115	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*79*		*25 - 130*

Lab Sample ID: 500-228454-D-2-O MS
Matrix: Water
Analysis Batch: 697014

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 696865

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D	<54.0		1010	669.9		ug/L		67	30 - 115		
Silvex (2,4,5-TP)	<12.7		250	156.7		ug/L		63	32 - 115		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCAA	*68*		*25 - 130*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-378139/1-A
Matrix: Water
Analysis Batch: 378296

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378139

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		02/01/23 09:50	02/01/23 18:19	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		02/01/23 09:50	02/01/23 18:19	1
Barium	<0.000880		0.00200	0.000880	mg/L		02/01/23 09:50	02/01/23 18:19	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		02/01/23 09:50	02/01/23 18:19	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		02/01/23 09:50	02/01/23 18:19	1
Chromium	<0.00110		0.00500	0.00110	mg/L		02/01/23 09:50	02/01/23 18:19	1
Cobalt	<0.000190		0.000500	0.000190	mg/L		02/01/23 09:50	02/01/23 18:19	1
Copper	<0.00180		0.00500	0.00180	mg/L		02/01/23 09:50	02/01/23 18:19	1
Lead	<0.000240		0.000500	0.000240	mg/L		02/01/23 09:50	02/01/23 18:19	1
Nickel	<0.00190		0.00500	0.00190	mg/L		02/01/23 09:50	02/01/23 18:19	1
Selenium	<0.000960		0.00500	0.000960	mg/L		02/01/23 09:50	02/01/23 18:19	1

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

Lab Sample ID: MB 310-378139/1-A
Matrix: Water
Analysis Batch: 378296

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378139

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.000490		0.00100	0.000490	mg/L		02/01/23 09:50	02/01/23 18:19	1
Thallium	<0.000260		0.00100	0.000260	mg/L		02/01/23 09:50	02/01/23 18:19	1
Tin	<0.00300		0.00500	0.00300	mg/L		02/01/23 09:50	02/01/23 18:19	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		02/01/23 09:50	02/01/23 18:19	1
Zinc	<0.0100		0.0200	0.0100	mg/L		02/01/23 09:50	02/01/23 18:19	1

Lab Sample ID: LCS 310-378139/2-A
Matrix: Water
Analysis Batch: 378296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378139

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2000		mg/L		100	80 - 120
Arsenic	0.200	0.1951		mg/L		98	80 - 120
Barium	0.100	0.09847		mg/L		98	80 - 120
Beryllium	0.100	0.09972		mg/L		100	80 - 120
Cadmium	0.100	0.09753		mg/L		98	80 - 120
Chromium	0.100	0.09358		mg/L		94	80 - 120
Cobalt	0.100	0.1017		mg/L		102	80 - 120
Copper	0.200	0.2067		mg/L		103	80 - 120
Lead	0.200	0.2067		mg/L		103	80 - 120
Nickel	0.200	0.2025		mg/L		101	80 - 120
Selenium	0.400	0.3650		mg/L		91	80 - 120
Silver	0.100	0.1011		mg/L		101	80 - 120
Thallium	0.200	0.2189		mg/L		109	80 - 120
Tin	0.200	0.1891		mg/L		95	80 - 120
Vanadium	0.100	0.09566		mg/L		96	80 - 120
Zinc	0.200	0.1954		mg/L		98	80 - 120

Lab Sample ID: 310-248478-A-2-B MS
Matrix: Water
Analysis Batch: 378296

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 378139

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.00119	J	0.200	0.2145		mg/L		107	75 - 125
Arsenic	<0.000750		0.200	0.2078		mg/L		104	75 - 125
Barium	0.00409		0.100	0.1074		mg/L		103	75 - 125
Beryllium	<0.000270		0.100	0.1052		mg/L		105	75 - 125
Cadmium	0.000135		0.100	0.1020		mg/L		102	75 - 125
Chromium	<0.00110		0.100	0.09661		mg/L		97	75 - 125
Cobalt	<0.000190		0.100	0.1041		mg/L		104	75 - 125
Copper	<0.00180		0.200	0.2154		mg/L		108	75 - 125
Lead	0.0134		0.200	0.2290		mg/L		108	75 - 125
Nickel	<0.00190		0.200	0.2095		mg/L		105	75 - 125
Selenium	0.00189	J	0.400	0.3950		mg/L		98	75 - 125
Silver	0.000726	J	0.100	0.1033		mg/L		103	75 - 125
Thallium	0.00128		0.200	0.2295		mg/L		114	75 - 125
Tin	0.0120		0.200	0.2140		mg/L		101	75 - 125
Vanadium	<0.00110		0.100	0.09892		mg/L		99	75 - 125
Zinc	<0.0100		0.200	0.2091		mg/L		105	75 - 125

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

Lab Sample ID: 310-248478-A-2-C MSD
Matrix: Water
Analysis Batch: 378296

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 378139

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.00119	J	0.200	0.2178		mg/L		108	75 - 125	2	20
Arsenic	<0.000750		0.200	0.2076		mg/L		104	75 - 125	0	20
Barium	0.00409		0.100	0.1079		mg/L		104	75 - 125	0	20
Beryllium	<0.000270		0.100	0.1049		mg/L		105	75 - 125	0	20
Cadmium	0.000135		0.100	0.1031		mg/L		103	75 - 125	1	20
Chromium	<0.00110		0.100	0.09679		mg/L		97	75 - 125	0	20
Cobalt	<0.000190		0.100	0.1054		mg/L		105	75 - 125	1	20
Copper	<0.00180		0.200	0.2144		mg/L		107	75 - 125	0	20
Lead	0.0134		0.200	0.2297		mg/L		108	75 - 125	0	20
Nickel	<0.00190		0.200	0.2098		mg/L		105	75 - 125	0	20
Selenium	0.00189	J	0.400	0.3958		mg/L		98	75 - 125	0	20
Silver	0.000726	J	0.100	0.1029		mg/L		102	75 - 125	0	20
Thallium	0.00128		0.200	0.2303		mg/L		115	75 - 125	0	20
Tin	0.0120		0.200	0.2129		mg/L		100	75 - 125	1	20
Vanadium	<0.00110		0.100	0.09955		mg/L		100	75 - 125	1	20
Zinc	<0.0100		0.200	0.2094		mg/L		105	75 - 125	0	20

Lab Sample ID: 310-248684-A-3-B DU
Matrix: Water
Analysis Batch: 378296

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 378139

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	<0.000690			<0.000690		mg/L				NC	20
Arsenic	<0.000750			<0.000750		mg/L				NC	20
Barium	0.162			0.1617		mg/L				0.1	20
Beryllium	<0.000270			<0.000270		mg/L				NC	20
Cadmium	<0.0000550			<0.0000550		mg/L				NC	20
Chromium	0.00694			0.006971		mg/L				0.5	20
Cobalt	<0.000190			<0.000190		mg/L				NC	20
Copper	<0.00180			<0.00180		mg/L				NC	20
Lead	<0.000240			<0.000240		mg/L				NC	20
Nickel	<0.00190			<0.00190		mg/L				NC	20
Selenium	<0.000960			<0.000960		mg/L				NC	20
Silver	<0.000490			<0.000490		mg/L				NC	20
Thallium	<0.000260			<0.000260		mg/L				NC	20
Tin	<0.00300			<0.00300		mg/L				NC	20
Vanadium	<0.00110			<0.00110		mg/L				NC	20
Zinc	<0.0100			<0.0100		mg/L				NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-378037/1-A
Matrix: Water
Analysis Batch: 378122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378037

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		01/30/23 14:08	01/31/23 11:52	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 310-378037/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378122 — **Prep Batch: 378037**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.001672		mg/L		100	80 - 120		

Lab Sample ID: 310-248587-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378122 — **Prep Batch: 378037**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000110		0.00167	0.001649		mg/L		99	80 - 120		

Lab Sample ID: 310-248587-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378122 — **Prep Batch: 378037**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000110		0.00167	0.001648		mg/L		99	80 - 120	0	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-378201/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378369 — **Prep Batch: 378201**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.00430		0.0100	0.00430	mg/L		02/01/23 10:00	02/02/23 17:57	1

Lab Sample ID: LCS 310-378201/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378369 — **Prep Batch: 378201**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.200	0.2050		mg/L		102	90 - 110		

Lab Sample ID: 310-248830-1 MS — **Client Sample ID: MW-26_23_02**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378369 — **Prep Batch: 378201**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	<0.00430		0.200	0.1408		mg/L		70	59 - 126		

Lab Sample ID: 310-248830-1 MSD — **Client Sample ID: MW-26_23_02**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 378369 — **Prep Batch: 378201**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.00430		0.200	0.1445		mg/L		72	59 - 126	3	35

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-696364/1-A
Matrix: Water
Analysis Batch: 696365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 696364

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.231		1.00	0.231	mg/L		01/30/23 18:00	01/30/23 23:35	1

Lab Sample ID: LCS 500-696364/2-A
Matrix: Water
Analysis Batch: 696365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 696364

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			3.97	3.937		mg/L		99	80 - 120		

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-378019/1
Matrix: Water
Analysis Batch: 378019

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	<1.70		5.00	1.70	mg/L			01/30/23 12:49	1

Lab Sample ID: LCS 310-378019/2
Matrix: Water
Analysis Batch: 378019

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	106.0		mg/L		106	75 - 116		

Lab Sample ID: 310-248825-B-1 DU
Matrix: Water
Analysis Batch: 378019

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	214			206.0		mg/L				4	35

GC/MS VOA

Analysis Batch: 378099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8260D	
310-248830-2	TB-1_23_02	Total/NA	Water	8260D	
MB 310-378099/5	Method Blank	Total/NA	Water	8260D	
LCS 310-378099/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-378099/7	Lab Control Sample	Total/NA	Water	8260D	
310-248830-1 MS	MW-26_23_02	Total/NA	Water	8260D	
310-248830-1 MSD	MW-26_23_02	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 377951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	3510C	
MB 310-377951/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-377951/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-377951/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 377973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8270E	377951
MB 310-377951/1-A	Method Blank	Total/NA	Water	8270E	377951
LCS 310-377951/2-A	Lab Control Sample	Total/NA	Water	8270E	377951
LCSD 310-377951/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	377951

Analysis Batch: 378204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8270E	377951
MB 310-377951/1-A	Method Blank	Total/NA	Water	8270E	377951
LCS 310-377951/2-A	Lab Control Sample	Total/NA	Water	8270E	377951
LCSD 310-377951/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	377951

GC Semi VOA

Analysis Batch: 377945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8015C	
MB 310-377945/5	Method Blank	Total/NA	Water	8015C	
LCS 310-377945/6	Lab Control Sample	Total/NA	Water	8015C	
310-248830-1 MS	MW-26_23_02	Total/NA	Water	8015C	
310-248830-1 MSD	MW-26_23_02	Total/NA	Water	8015C	

Prep Batch: 377959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	3510C	
MB 310-377959/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-377959/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 310-377959/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-377959/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 310-377959/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

GC Semi VOA

Analysis Batch: 378700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8081B	377959
MB 310-377959/1-A	Method Blank	Total/NA	Water	8081B	377959
LCS 310-377959/4-A	Lab Control Sample	Total/NA	Water	8081B	377959
LCSD 310-377959/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	377959

Analysis Batch: 378702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8082A	377959
MB 310-377959/1-A	Method Blank	Total/NA	Water	8082A	377959
LCS 310-377959/2-A	Lab Control Sample	Total/NA	Water	8082A	377959
LCSD 310-377959/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	377959

Leach Batch: 696537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-696537/1-E	Method Blank	Total/NA	Water	1311	
500-228454-D-2-O MS	Matrix Spike	TCLP	Water	1311	

Prep Batch: 696865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8151A	
LB 500-696537/1-E	Method Blank	Total/NA	Water	8151A	696537
MB 500-696865/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-696865/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-696865/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
500-228454-D-2-O MS	Matrix Spike	TCLP	Water	8151A	696537

Analysis Batch: 697014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	8151A	696865
LB 500-696537/1-E	Method Blank	Total/NA	Water	8151A	696865
MB 500-696865/1-A	Method Blank	Total/NA	Water	8151A	696865
LCS 500-696865/2-A	Lab Control Sample	Total/NA	Water	8151A	696865
LCSD 500-696865/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	696865
500-228454-D-2-O MS	Matrix Spike	TCLP	Water	8151A	696865

Metals

Prep Batch: 378037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	7470A	
MB 310-378037/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-378037/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-248587-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	
310-248587-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 378122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	7470A	378037
MB 310-378037/1-A	Method Blank	Total/NA	Water	7470A	378037
LCS 310-378037/2-A	Lab Control Sample	Total/NA	Water	7470A	378037
310-248587-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	378037

Metals (Continued)

Analysis Batch: 378122 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248587-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	378037

Prep Batch: 378139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	3005A	
MB 310-378139/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-378139/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-248478-A-2-B MS	Matrix Spike	Total/NA	Water	3005A	
310-248478-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-248684-A-3-B DU	Duplicate	Total/NA	Water	3005A	

Analysis Batch: 378296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	6020B	378139
MB 310-378139/1-A	Method Blank	Total/NA	Water	6020B	378139
LCS 310-378139/2-A	Lab Control Sample	Total/NA	Water	6020B	378139
310-248478-A-2-B MS	Matrix Spike	Total/NA	Water	6020B	378139
310-248478-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	378139
310-248684-A-3-B DU	Duplicate	Total/NA	Water	6020B	378139

General Chemistry

Analysis Batch: 378019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	I-3765-85	
MB 310-378019/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-378019/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-248825-B-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Prep Batch: 378201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	9012B	
MB 310-378201/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-378201/2-A	Lab Control Sample	Total/NA	Water	9012B	
310-248830-1 MS	MW-26_23_02	Total/NA	Water	9012B	
310-248830-1 MSD	MW-26_23_02	Total/NA	Water	9012B	

Analysis Batch: 378369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	9012B	378201
MB 310-378201/1-A	Method Blank	Total/NA	Water	9012B	378201
LCS 310-378201/2-A	Lab Control Sample	Total/NA	Water	9012B	378201
310-248830-1 MS	MW-26_23_02	Total/NA	Water	9012B	378201
310-248830-1 MSD	MW-26_23_02	Total/NA	Water	9012B	378201

Prep Batch: 696364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	9030B	
MB 500-696364/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-696364/2-A	Lab Control Sample	Total/NA	Water	9030B	

QC Association Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

General Chemistry

Analysis Batch: 696365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-248830-1	MW-26_23_02	Total/NA	Water	9034	696364
MB 500-696364/1-A	Method Blank	Total/NA	Water	9034	696364
LCS 500-696364/2-A	Lab Control Sample	Total/NA	Water	9034	696364

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

Client Sample ID: MW-26_23_02

Date Collected: 01/27/23 10:35
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	378099	WSE8	EET CF	01/31/23 22:26
Total/NA	Prep	3510C			377951	Y6AF	EET CF	01/30/23 07:11
Total/NA	Analysis	8270E		1	378204	L0FS	EET CF	02/01/23 19:02
Total/NA	Prep	3510C			377951	Y6AF	EET CF	01/30/23 07:11
Total/NA	Analysis	8270E		1	377973	L0FS	EET CF	01/30/23 21:00
Total/NA	Analysis	8015C		1	377945	V7YZ	EET CF	01/30/23 10:10
Total/NA	Prep	3510C			377959	Y6AF	EET CF	01/30/23 07:55
Total/NA	Analysis	8081B		1	378700	D2YP	EET CF	02/08/23 14:00
Total/NA	Prep	3510C			377959	Y6AF	EET CF	01/30/23 07:55
Total/NA	Analysis	8082A		1	378702	D2YP	EET CF	02/08/23 14:00
Total/NA	Prep	8151A			696865	GM	EET CHI	02/02/23 08:21
Total/NA	Analysis	8151A		1	697014	SS	EET CHI	02/03/23 12:08
Total/NA	Prep	3005A			378139	QTZ5	EET CF	02/01/23 09:50
Total/NA	Analysis	6020B		1	378296	A6US	EET CF	02/01/23 19:47
Total/NA	Prep	7470A			378037	XXW3	EET CF	01/30/23 14:09
Total/NA	Analysis	7470A		1	378122	DHM5	EET CF	01/31/23 12:32
Total/NA	Prep	9012B			378201	WZC8	EET CF	02/01/23 10:00
Total/NA	Analysis	9012B		1	378369	ZJX4	EET CF	02/02/23 18:04
Total/NA	Prep	9030B			696364	CLB	EET CHI	01/30/23 18:25 - 01/30/23 18:30 [1]
Total/NA	Analysis	9034		1	696365	CLB	EET CHI	01/31/23 00:44 - 01/31/23 00:58 [1]
Total/NA	Analysis	I-3765-85		1	378019	D7CP	EET CF	01/30/23 12:49

Client Sample ID: TB-1_23_02

Date Collected: 01/27/23 00:00
Date Received: 01/27/23 12:40

Lab Sample ID: 310-248830-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	378099	WSE8	EET CF	01/31/23 22:05

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

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

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

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	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Allyl chloride
8260D		Water	Ethyl methacrylate
8260D		Water	m,p-Xylene
8260D		Water	o-Xylene

Laboratory: Eurofins Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	082	05-01-24

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
8151A	8151A	Water	2,4,5-T

Method Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-248830-1
SDG: 22C061_23_02

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	EET CHI
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	EET CHI
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.

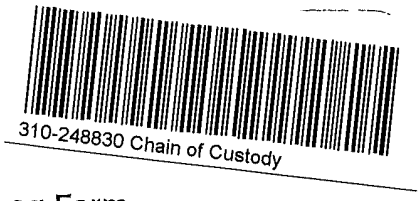
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

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

eurofins | Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth I+E

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 1/27/23 | TIME 1240 | Received By: SJ

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☐ Yes ☒ No *If yes:* Cooler # _____ of _____

Cooler Custody Seals Present? ☒ Yes ☐ No *If yes:* Cooler custody seals intact? ☒ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

All Samples

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: P | Correction Factor (°C): +0.2

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 3.5 | Corrected Temp (°C): +0.2 3.7

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding If no, proceed with login

Additional Comments

Chain of Custody Record

604738 eurofins | Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: G.Wilming / H.Dubbs	Site Contact: →	Date: 1/27/23	COC No →
Company Name Foth I+E	Tel/Email: gwilming@foth.com	Lab Contact: Shirley T	Carrier:	1 of 1 COCs
Address 411 6th Ave SE Suite 400	Analysis Turnaround Time			Sampler: Tyler Merritt
City/State/Zip Cedar Rapids, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone (319) 365-9565	TAT if different from Below _____			Walk-in Client:
Fax (319) 365-9681	☐ 2 weeks			Lab Sampling
Project Name CRLCSWA #1	☐ 1 week			
Site Cedar Rapids	☐ 2 days			Job / SDG No
P O # —	☐ 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)														Sample Specific Notes
MW-26_23_02	1/27/23	10:35	G									See Attached									
TB-1_23_02	—	—										Parameter Sheet									

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
Tyler Merritt	O.A. Tech Services	1/27 11:20			
Relinquished by:	Company	Date/Time	Received by:	Company	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by: ST	Company	Date/Time: 1/27/23 1240

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2/1/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 1

COC Number: 1-3865545471-011023-315076

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 22C061 00
Phone: (319) 365-9565	P.O.		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members: Randy Gavin & Tyler Merritt
hannah.dubbs@foth.com	Task #: 22C061_23_02	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N		Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix II List	TSS	IA App. II VOCs Only		
1	MW-26_23_02	MW-26	WG	G	1/27/23	10:35									X	X			
2	TB-1_23_02	Trip Blank	WQ	G	—	—											X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					Tyler Merritt	1/27	11:20			

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tyler Merritt

SIGNATURE of SAMPLER: Tyler Merritt

DATE Signed: 1/27/23

Additional Comments:

2/2/2023

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone 319 277 2401 Fax 319-277-2425

Chain of Custody Record

eurofins

310-248830 COC

Client Information (Sub Contract Lab)	Sampler	Lab PM: Thompson Shirley J		COC No: 310-58070 1
Client Contact: Shipping/Receiving	Phone	E Mail: Shirley.Thompson@et.eurofinsus.com	Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-248830-1
Address: 2417 Bond Street	Due Date Requested: 2/15/2023			
City: University Park	TAT Requested (days):			
State Zip: IL 60484	PO #:			
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	WO #:			
Email:	Project #: 31009776			
Project Name: CRLCSWA_1	SSOW#:			
Site				

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

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 Appendix II	9034_Calc/9030B Sulfide Acid soluble and Insoluble (Tit	Total Number of containers	Special Instructions/Note
			Preservation Code:							
MW-26_23_02 (310-248830-1)	1/27/23	10 35 Central		Water			X	X	3	

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]	1/27/23 1410		Stephanie Hernandez	1/28/23 0915	EEIA
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
		5.8 + 4.9

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-248830-1
SDG Number: 22C061_23_02

Login Number: 248830
List Number: 1
Creator: Tucker, Sarah L

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: Foth Infrastructure & Environment, LLC

Job Number: 310-248830-1
SDG Number: 22C061_23_02

Login Number: 248830
List Number: 2
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago
List Creation: 01/28/23 12:09 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	4.8
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	

Data Validation Report

Project Name:	CRLCSWA Site 1 – Cedar Rapids, IA (22C061.00)
Task Name:	22C061_23_01
Data Set Description:	Re-triggered Baseline Appendix II at MW-26
Laboratory(s):	Eurofins – Cedar Falls, IA and Chicago, IL
Laboratory Sample Delivery Group (SDG) ID(s):	310-248830-1
Sample Collection Dates:	1/27/2023
Sample Analysis Dates:	1/30/2023 – 2/8/2023
Sample Matrices:	Groundwater
Sample IDs Reviewed:	See Table 1
Verification and Validation Stage, 100% data:	☐ 1 ☒ 2A ☐ 2B ☐ 3 ☐ 4
Verified and Validated By:	Gina Wilming, Lead Environmental Scientist 2/27/2023

The analytical data were validated to verify that laboratory quality assurance and quality control (QA/QC) procedures were documented and to evaluate the overall quality of the data reported. The analytical report includes 1 investigative groundwater sample collected via low-flow sampling techniques at the Cedar Rapids Linn County Solid Waste Agency (CRLCSWA) Site 1 on January 27, 2023; samples are listed in Table 1. The data were collected in accordance with the *Hydrologic Monitoring System Plan* (HRG, 2006), Iowa Department of Natural Resources (IDNR) Sanitary Disposal Closure Permit Number 57-SDP-03-75C (including Amendments), and 567 Iowa Administrative Code (IAC) 113.10.

Validation Summary

Stage 2A data validation was performed on 100% of the data from this SDG, with review tasks and items of note documented in the summary table below.

Validation Task and Description	Review Notes	Action
Chain of Custody (COC) and Sample Receipt Form Confirm relinquish & receipt signatures. Confirm parameters and analytical methods match COC and Hydrologic Monitoring System Plan (HMSP).	All appropriate relinquish and receipt signatures were present. Parameters and analytical methods analyzed match the COC and current sampling program. A field blank was not requested, sampled, or analyzed during the January 2023 event. This event was limited to the first re-triggered baseline assessment monitoring for the full Appendix II list at MW-26. Project requirements do not require a field blank for events conducted outside a semiannual event.	Not applicable
Case Narrative Review for items noted by the laboratory that may impact the validation process.	The quality control issues noted in the case narrative were reviewed and found acceptable. Issues either were addressed in the comments below, had no impact on investigative samples, or were corrected/qualified by the laboratory. No additional actions are required. Note: continuing calibration verification (CCV) evaluation is not part of Stage 2A validation.	Not applicable

Validation Task and Description	Review Notes	Action
Sample Condition Upon Receipt (SCUR) Confirm samples in acceptable condition and no discrepancies noted. Confirm preservation meets method requirements.	Samples were received by Eurofins – Cedar Falls, IA in acceptable conditions. In addition, the herbicide and sulfide sample shipment from Eurofins – Cedar Falls, IA to Eurofins – Chicago, IL was received in acceptable conditions.	Not applicable
Methods Requested Confirm methods match project requirements and lab provided all methods ordered.	The methods ordered and analyzed were performed in accordance with the project requirements. Methods include United States Environmental Protection Agency (USEPA) 8260D Volatile Organic Compounds (VOCs), USEPA 8270E Semivolatile Organic Compounds (SVOCs), USEPA 8015C Acetonitrile and Isobutanol, USEPA 8081B Organochlorine Pesticides, USEPA 8082A Polychlorinated Biphenyls, USEPA 8151A Herbicides, USEPA 6020B Total Metals, USEPA 7470A Total Mercury, USEPA 9012 Cyanide, USEPA 9034 Sulfide, and United States Geological Survey (USGS) I-3765-85 Total Suspended Solids.	Not applicable
Analytes Requested Confirm analytes ordered match project requirements and lab provided all analytes ordered.	The analytes requested were analyzed in accordance with the project requirements. The laboratory provided all analytes ordered.	Not applicable
Holding Times Confirm laboratory performed extractions and analyses within method-required holding times.	Eurofins performed analysis within the method-required holding times.	Not applicable
Blanks Confirm no detections in laboratory method blanks, field blanks, and trip blanks.	Table 3 is intended to present analytes detected in the method, field, and trip blanks. As detailed in the COC and Sample Receipt Form Review Notes, a field blank sample was not collected during the January 2023 event. No detections were found in the method and trip blanks.	Not applicable
Surrogates or Deuterated Monitoring Compounds For *organic analyses only*, confirm surrogates analyzed and surrogate recovery within QC limits.	Table 4 is intended to present surrogate recoveries that were outside the control limits. Surrogate recoveries were within control limits for this SDG.	Not applicable
Matrix Spike/Matrix Spike Duplicates (MS/MSDs) Confirm MS/MSDs analyzed at frequency specified by project requirements and MS/MSD percent recovery within lab specified limits. Confirm, for Organic analytes, MSD relative percent difference (RPD) within limits. For inorganic analytes, lab replicate RPD within limits.	MS/MSD quality control samples are not required for this project. As a result, no MS/MSD samples were collected or submitted for analysis. Where analyzed and reported by the laboratory, MS/MSD results associated with the samples in 310-248830-1 are reviewed under Stage 2A validation guidelines. Table 5 is intended to present MS/MSD recoveries and RPDs that were outside the control limits, MS/MSD recoveries and RPDs were within control limits for this SDG.	Not applicable

Validation Task and Description	Review Notes	Action
Laboratory Control Sample/Laboratory Control Sample Duplicates (LCS/LCSDs) Confirm LCS analyzed and LCS/LCSD recovery and RPD within lab specified limits.	LCS/LCSD quality control samples are not required for this project. Where analyzed and reported by the laboratory, LCS/LCSD results associated with method batches in 310-248830-1 are reviewed under Stage 2A validation guidelines. Table 6 presents the LCS/LCSD recoveries and RPDs that were outside the control limits. Qualifiers are assigned in Table 9. The 1,4-phenylenediamine LCS and LCSD recoveries associated with prep batch 377951 were below the recovery limit (20%-120%), indicating potential low bias. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for SVOCs, when LSC and LCSD recoveries are both below the recovery limit, non-detect sample results from the same prep batch are qualified R (i.e., MW-26_23_01). Resampling is not recommended for the rejected 1,4-phenylenediamine datum since 1,4-phenylenediamine was sampled and analyzed at MW-26 in January 2023 as part of the re-triggered quarterly baseline assessment monitoring for the full Appendix II list, this parameter has not been detected at MW-26, and 1,4-phenylenediamine will be included in the 2nd quarterly baseline assessment monitoring event. The Spring 2023 Statistical Notifications report will provide recommendations regarding baseline sampling at MW-26. The 2,4-dinitrophenol, dinoseb, and hexachloropropene LCS recoveries associated with prep batch 377951 were below the recovery limit (i.e., 10%-110% for 2,4-dinitrophenol and hexachloropropene and 20%-120% for dinoseb); however, the LCSD recoveries were within the recovery limits. Similarly, the 3,3'-dimethylbenzidine LCSD recovery associated with batch 377951 was below the recovery limit (20%-120%); however, the LCS recovery was within the recovery limit. For LCS/LCSD recovery, qualifiers are typically only assigned if both LCS and LCSD recoveries are outside the control limits; therefore, no qualifiers were assigned to the associated 2,4-dinitrophenol, 3,3'-dimethylbenzidine, dinoseb, and hexachloropropene results from prep batch 377951. The 2,4-dinitrophenol, 2-naphthylamine, 3,3'-dimethylbenzidine, 4,6-dinitro-2-methylphenol, 4-aminobiphenyl, dinoseb, and hexachloropropene LCS/LCSD RPDs associated with prep batch 377951 were above the RPD limit (35%). In accordance with the approved data validation SOP, when LCS/LCSD RPD is above the RPD limit for SVOCs, non-detect sample results from the same prep batch are not qualified.	Yes, qualifier assigned & resampling is not recommended No qualifiers assigned No qualifiers assigned

Validation Task and Description	Review Notes	Action
Laboratory Duplicates Confirm lab duplicates analyzed and RPD within lab specified limits.	Laboratory duplicate quality control samples are not required for this project. Where analyzed and reported by the laboratory, laboratory duplicate results associated with the samples in 310-248830-1 are reviewed under Stage 2A validation guidelines. Table 7 is intended to present the lab duplicate sample RPDs that were outside the RPD limits. None of the lab duplicate samples analyzed for this SDG were associated with Site 1 samples.	Not applicable
Field Duplicates Confirm field duplicates collected at required frequency and field duplicate RPD within acceptable limits.	Table 8 is intended to present the precision evaluation of the parent/field duplicate samples. No field duplicates were submitted for analysis. The event was limited to the first re-triggered baseline assessment monitoring for the full Appendix II list at MW-26. Project requirements do not require a field duplicate for events conducted outside a semiannual event.	Not applicable

Abbreviations:
CCV = continuing calibration verification
COC = chain of custody
HMSP = Hydrologic Monitoring System Plan
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MS = matrix spike
MSD = matrix spike duplicate
QA = quality assurance
QC = quality control
RPD = relative percent difference
SCUR = sample condition upon receipt
SDG = sample delivery group
SOP = standard operating procedure
SVOC = semivolatile organic compound
USEPA = United States Environmental Protection Agency
USGS = United States Geological Survey
VOC = volatile organic compound

Overall Assessment of Data

Item	Acceptable Yes	Acceptable No	Comments
1. Method Criteria	X		Samples were collected, preserved, shipped/delivered, and analyzed within the method protocols.
2. Precision	X		Field precision was not evaluated since a field duplicate sample was not collected. The event was limited to the first re-triggered baseline assessment monitoring for the full Appendix II list at MW-26. Project requirements do not require a field duplicate for events conducted outside a semiannual event. Laboratory precision was evaluated through MS/MSD, LCS/LCSD, and laboratory duplicate RPDs. None of the lab duplicate samples analyzed for this SDG were associated with Site 1 samples. MS/MSD recoveries and RPDs were within control limits. LCS/LCSD RPDs were outside the control limits for several SVOC compounds, but no qualifiers were assigned since the associated results were non-detect.

Item	Acceptable		Comments
	Yes	No	
3. Accuracy	X		Accuracy was evaluated through surrogate, MS/MSD, and LCS/LCD recovery. The % recoveries for surrogates and MS/MSD samples were within control limits. LCS/LCSD recoveries were outside the control limits for several SVOC compounds, with only one qualifier being assigned (i.e., R qualifier for 1,4-phenylenediamine in MW-26_23_01) as listed in Table 9. Resampling is not recommended for the rejected 1,4-phenylenediamine datum since 1,4-phenylenediamine was sampled and analyzed at MW-26 in January 2023 as part of the re-triggered quarterly baseline assessment monitoring for the full Appendix II list, this parameter has not been detected at MW-26, and 1,4-phenylenediamine will be included in the 2nd quarterly baseline assessment monitoring event. The Spring 2023 Statistical Notifications report will provide recommendations regarding baseline sampling at MW-26.
4. Representativeness	X		Sampling was conducted in accordance with the sample collection procedures described in the approved HMSP, approved HMSP revisions, and standard operating procedures (SOPs).
5. Comparability	X		Collection techniques, measurement procedures, methods, and reporting were equivalent to currently approved procedures and are comparable to historical data.
6. Completeness	X		Valid analytical results exceeded 90%.
7. Suitability for Intended Use	X		No evidence of gross contamination or significant issues with the method criteria, precision, accuracy, representativeness, comparability, or completeness were identified.

Overall, the data reported are of good quality and the results for the QA/QC measurements that were used by the laboratories during the analysis of the samples were generally acceptable. Some sample results required qualification during data validation because method-specific QA/QC criteria were not met; results may be qualified for more than one reason. Qualified data are usable (unless qualified as rejected [R]), represent data of good quality and reasonable confidence, and have an acceptable degree of uncertainty (i.e., may be less precise or less accurate than unqualified data). Table 2 provides a definition of the qualifiers that may be assigned by the validator and/or retained from the laboratory. A summary of the validation qualifiers is provided below.

- No results were qualified as estimated (assigned a J qualifier), biased low (assigned as J- qualifier), biased high (assigned as J+ qualifiers), non-detect at concentrations less than the reporting limit or less than the sample result (assigned as U qualifier), non-detect with the reporting limit an estimated value (assigned as UJ, UJ+, or UJ- qualifiers), or presumptive evidence of presence of an analyte (assigned as N or NJ qualifiers).
- One result (0.4%) was not usable or rejected (assigned as R qualifier).
- 99.6% of the data is usable for project data quality objectives.

Attachment 1

Tables

Table 1
Sample IDs Reviewed

Project Sample ID	Analyzed Lab Sample ID	Project Sample ID Matches Lab Client Sample ID	Lab Sample Date/Time Match COC/Logbook	Parameters and Analytical Methods Match COC	Sample Type
MW-26_23_02	310-248830-1	Yes	Yes	Yes	Normal
TB-1_23_02	310-248830-2	Yes	Yes	Yes	TB

Notes:
TB = trip blank

Table 2
Data Qualifiers That May Be Used to Qualify Analytical Results During Validation

Qualifier	Explanation
U	The analyte was analyzed for and was not detected above the numerical quantitation limit.
J	The analyte was analyzed for and was positively identified, but the analytical result (i.e., quantitation) is an estimated value. In some cases it is recognized that the estimated value is biased high (J+) suggesting the actual value is lower than estimated; or biased low (J-) suggesting the actual value is higher than estimated.
UJ	The analyte was analyzed for and was not detected above the reporting limit, but the reporting limit is an estimated value.
R	The analyte was analyzed for but may or may not be present and/or quantifiable due to quality control issues. The analytical result is not usable and should be rejected.
N	The analysis indicates presumptive evidence of the presence of the analyte.
NJ	The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Notes:
Results qualified as "J" or "UJ" are of acceptable data quality and may be used quantitatively per United States Environmental Protection Agency guidelines.

Table 3
Method, Field, and Trip Blank Exceedances [1]

Lab Report	Blank Type	Lab Sample ID	Analysis Batch	Prep Batch	Parameter	Result	Units	Lab Qualifier	MDL	PQL	Associated Samples
No detections were found in the method and trip blanks.											

Notes:
MDL = minimum detection limit
PQL = practical quantitation limit
[1] A field blank sample was not collected during the January 2023 event. See COC and Sample Receipt Form Review Notes.

Table 4
Surrogate Recovery Exceedances

Lab Sample ID	Parent Sample	Parameter	Surrogate % Recovery	% Recovery Limits
Surrogate recoveries were within control limits for this Sample Delivery Group.				

Notes:
% = percent

Table 5
Matrix Spike - Matrix Spike Duplicate Exceedances

Lab Sample ID	Parent Sample	Parameter	MS % Recovery	MSD % Recovery	% Recovery Limits	RPD	RPD Limit
MS/MSD recoveries and RPDs were within control limits for this Sample Delivery Group.							

Notes:
% = percent
MS = matrix spike
MSD = matrix spike duplicate
RPD = relative percent difference

Table 6
Laboratory Control Sample and Laboratory Control Sample Duplicate Exceedances

Lab Sample ID	Associated SDG Batch	Parameter	LCS % Recovery	LCSD % Recovery	% Recovery Limits		RPD	RPD Limit
LCS 310-377951/2-A	377951	1,4-Phenylenediamine	0.2	0.3	20	120	33	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	2,4-Dinitrophenol	8	14	10	110	53	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	2-Naphthylamine	56	37	20	120	40	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	3,3'-Dimethylbenzidine	28	2	20	120	179	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	4,6-Dinitro-2-methylphenol	12	20	10	125	54	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	4-Aminobiphenyl	68	47	20	120	37	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	Dinoseb	16	26	20	120	50	35
LCSD 310-377951/3-A								
LCS 310-377951/2-A	377951	Hexachloropropene	9	16	10	110	51	35
LCSD 310-377951/3-A								

Notes:
% = percent
LCS = laboratory control sample
LSCD = laboratory control sample duplicate
RPD = relative percent difference
SDG = sample delivery group

Table 7
Laboratory Duplicate Sample Exceedances

Lab Sample ID	Client Sample ID	Parameter	RPD	RPD Limit
None of the lab duplicate samples analyzed for this Sample Delivery Group were associated with Site 1 samples.				

Notes:
RPD = relative percent difference

Table 8
Relative Percent Difference (RPD) Analysis for Field Duplicate Samples

RPD = $\dfrac{\text{absolute value (a - b)}}{\text{(a + b)/2}} \times 100\%$

Acceptance Criteria*: 35%

* Unless otherwise noted in project planning documents, the acceptance criteria for field duplicates RPD is as follows:
- For analytes with concentrations greater than 5x (2x for soil matrices) the reporting limit, the RPD should be within 35% for water matrices (50% for soil matrices).
- For analytes with either or both concentrations less than 5x (2x for soil matrices) the reporting limit (indicated below by "low-level"), the absolute difference between the sample and field duplicate should not exceed 5x the reporting limit.

Duplicate Result Analysis:

Parameter	Unit	Parent	Duplicate Sample	RPD	Acceptable?
No field duplicate samples were collected.					

Table 9
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
MW-26_23_01	310-248830-1	USEPA 8270E	1,4-Phenylenediamine	<2.07	U	ug/L	<2.07	R	Associated LCS and LCSD recoveries were below the lower acceptance limit, indicating low bias.

Notes:
This table only lists validator qualified data. Not all laboratory qualified data are listed; only the laboratory qualified data that was validator qualified are included.
< = less than
LCS = laboratory control sample
LSCD = laboratory control sample duplicate
ug/L = micrograms per liter
USEPA = United States Environmental Protection Agency

Attachment 2

References

References

Howard R. Green Company (HRG), 2006. *Landfill Permit Application, Cedar Rapids/Linn County Solid Waste Agency, Waste Management Site 1, Appendix 4: Hydrologic Monitoring System Plan (HMSP).* September.

United States Environmental Protection Agency (USEPA, 2020a). *National Functional Guidelines for Organic Superfund Methods Data Review.* EPA-540-R-20-005. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

USEPA, 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* EPA-542-R-20-006. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

March 2023 Sampling Event

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-1 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 736.84
Top of screen (ft. MSL): 711.84 | Materials: PVC | Top of Casing elevation (ft. MSL): 739.51
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	33.56	N/A*	N/A*
Water elevation (ft. MSL)	705.95	N/A*	N/A*

3 Well Volumes (gal): 6.90 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	47.67	48.00	0.33

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at AW-1. In Spring 2023, AW-1 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-2 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 788.60
Top of screen (ft. MSL): 710.60 | Materials: PVC | Top of Casing elevation (ft. MSL): 788.18
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	77.54	N/A*	N/A*
Water elevation (ft. MSL)	710.64	N/A*	N/A*

3 Well Volumes (gal): 9.80 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	97.58	97.50	0.08

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at AW-2. In Spring 2023, AW-2 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-3 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 799.70
Top of screen (ft. MSL): 711.70 | Materials: PVC | Top of Casing elevation (ft. MSL): 799.31
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	91.07	N/A*	N/A*
Water elevation (ft. MSL)	708.24	N/A*	N/A*

3 Well Volumes (gal): 8.09 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	107.61	107.90	0.29

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at AW-3. In Spring 2023, AW-3 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-4 | Weather: Cloudy, 52°F, SE wind at 12 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 723.44
Top of screen (ft. MSL): 712.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 725.76
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	21.82	N/A*	N/A*
Water elevation (ft. MSL)	703.94	N/A*	N/A*

3 Well Volumes (gal): 5.62 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	33.32	33.10	0.22

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at AW-4. In Spring 2023, AW-4 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-5 | Weather: Cloudy, 52°F, SE wind at 12 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 718.94
Top of screen (ft. MSL): 711.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.33
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	16.99	N/A*	N/A*
Water elevation (ft. MSL)	704.34	N/A*	N/A*

3 Well Volumes (gal): 6.31 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	29.89	30.25	0.36

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at AW-55. In Spring 2023, AW-5 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-6 | Weather: Cloudy, 52°F, SE wind at 12 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 718.94
Top of screen (ft. MSL): 651.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.13
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.58	N/A*	N/A*
Water elevation (ft. MSL)	703.55	N/A*	N/A*

3 Well Volumes (gal): 30.37 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	79.69	79.50	0.19

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at AW-6. In Spring 2023, AW-6 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: CRL-9 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 734.10
Top of screen (ft. MSL): 672.89 | Materials: PVC | Top of Casing elevation (ft. MSL): 736.59
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	31.32	N/A*	N/A*
Water elevation (ft. MSL)	705.27	N/A*	N/A*

3 Well Volumes (gal): 20.72 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	73.70	73.65	0.05

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at CRL-9. In Spring 2023, CRL-9 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-11 | Weather: Fair, 55°F, SSE wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 742.00
Top of screen (ft. MSL): 678.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 745.62
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	38.77	N/A*	N/A*
Water elevation (ft. MSL)	706.85	N/A*	N/A*

3 Well Volumes (gal): 16.34 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	72.18	72.60	0.42

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-11. In Spring 2023, MW-11 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-12	Weather:	Cloudy, 36°F, NNW wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	742.11
Top of screen (ft. MSL):	708.84	Materials:	PVC	Top of Casing elevation (ft. MSL):	745.37
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	38.42	38.45	38.45
Water elevation (ft. MSL)	706.95	706.92	706.92

3 Well Volumes (gal): 3.97 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	46.53	46.80	0.27

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	702.37	Flow Rate (mL/min):	200	Volume removed (gal):	0.8
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-12_23_03	USEPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	USEPA 8081B - beta-BHC	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	12:54	12:56	12:58
Temp (°C)	11.93	12.14	12.33
Sp. Cond (umhos/cm)	4388.3	4375.7	4388.9
pH	6.56	6.57	6.57
DO (mg/l)	0.35	0.35	0.37
ORP (mV)	38.0	33.2	28.6
Turbidity (NTU)	0.35	0.00	1.15

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-12	Weather:	Cloudy, 36°F, NNW wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments:

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-13	Weather:	Cloudy, 34°F, N wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	737.34
Top of screen (ft. MSL):	714.16	Materials:	PVC	Top of Casing elevation (ft. MSL):	740.99
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	32.85	32.85	33.40
Water elevation (ft. MSL)	708.14	708.14	707.59

3 Well Volumes (gal): 4.39 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	41.83	42.15	0.32

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	701.99	Flow Rate (mL/min):	200	Volume removed (gal):	3.4
Well dry? (Y/N):	No	Odor? (Y/N):	Yes*	Volume sampled (L):	3.37
				Color? (Y/N):	Yes, slight*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-13_23_03	USEPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	USEPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:05	10:07	10:09
Temp (°C)	12.06	11.90	11.85
Sp. Cond (umhos/cm)	3085.7	3091.4	3090.8
pH	6.60	6.61	6.61
DO (mg/l)	0.11	0.11	0.13
ORP (mV)	-67.9	-72.7	-75.5
Turbidity (NTU)	0.25	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-13	Weather:	Cloudy, 34°F, N wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments: *Slight color, odor, slight effervescence, and suspended solids in sample.
Collected field duplicate (FD-1_23_03) at MW-23.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-14	Weather:	Cloudy, 35°F, N wind at 12 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	737.42
Top of screen (ft. MSL):	679.13	Materials:	PVC	Top of Casing elevation (ft. MSL):	740.93
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	33.66	33.66	36.67
Water elevation (ft. MSL)	707.27	707.27	704.26

3 Well Volumes (gal): 16.21 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	66.80	67.15	0.35

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	678.93	Flow Rate (mL/min):	150	Volume removed (gal):	1.6
Well dry? (Y/N):	No	Odor? (Y/N):	Yes, slight*	Volume sampled (L):	1.37
				Color? (Y/N):	Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-14_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	11:24	11:28	11:31
Temp (°C)	11.96	11.87	11.92
Sp. Cond (umhos/cm)	3162.2	3205.8	3227.3
pH	6.70	6.71	6.71
DO (mg/l)	0.16	0.13	0.13
ORP (mV)	-40.9	-42.0	-42.6
Turbidity (NTU)	0.00	0.00	0.06

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-14	Weather:	Cloudy, 35°F, N wind at 12 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments: *Slight odor and black suspended solids in sample.
Collected field blank (FB-1_23_03) at 11:05.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-15	Weather:	Cloudy, 46°F, S wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	735.19
Top of screen (ft. MSL):	673.59	Materials:	PVC	Top of Casing elevation (ft. MSL):	737.99
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	30.24	N/A*	N/A*
Water elevation (ft. MSL)	707.75	N/A*	N/A*

3 Well Volumes (gal): 19.15 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	69.40	69.65	0.25

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method:	Pump (low flow)		No-purge (specify sample interval):
	Bailer	X	Other (specify): Water Level Only - No Sample*

Equipment type:	Submersible pump	Peristaltic pump	Bladder pump		
	Inertial lift pump	Bailer	No-purge (specify):		
	Other (specify):				

Equipment name/description: Dedicated? (Y/N): Disposable? (Y/N):

Decontamination method:

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-15. In Spring 2023, MW-15 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-16	Weather:	Partly cloudy, 70°F, SSE wind @ 6 mph
Date:	3/24/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.81
Top of screen (ft. MSL):	711.67	Materials:	PVC	Top of Casing elevation (ft. MSL):	737.92
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	30.30	30.54	30.83
Water elevation (ft. MSL)	707.62	707.38	707.09

3 Well Volumes (gal): 5.35 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	41.25	41.50	0.25

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	699.92	Flow Rate (mL/min):	200	Volume removed (gal):	1.0
Well dry? (Y/N):	No	Odor? (Y/N):	Yes*	Volume sampled (L):	3.37
				Color? (Y/N):	Yes, slight*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-16_23_03	USEPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	USEPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:03	10:06	10:08
Temp (°C)	10.99	10.71	10.63
Sp. Cond (umhos/cm)	2260.2	2255.1	2255.0
pH	6.44	6.45	6.45
DO (mg/l)	0.20	0.19	0.18
ORP (mV)	147.1	144.7	144.4
Turbidity (NTU)	0.00	0.40	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-16	Weather:	Partly cloudy, 70°F, SSE wind @ 6 mph
Date:	3/24/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments: *Slight yellow color and odor in sample.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-17	Weather:	Clear, 35°F, NE wind at 7 mph
Date:	3/24/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.80
Top of screen (ft. MSL):	709.99	Materials:	PVC	Top of Casing elevation (ft. MSL):	736.68
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	23.29	23.49	23.67
Water elevation (ft. MSL)	713.39	713.19	713.01

3 Well Volumes (gal): 6.55 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	36.69	36.90	0.21

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	703.18	Flow Rate (mL/min):	200	Volume removed (gal):	1.1
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	3.87
				Color? (Y/N):	Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-17_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:06	9:09	9:11
Temp (°C)	10.24	10.42	10.36
Sp. Cond (umhos/cm)	3024.0	3026.2	3024.6
pH	6.76	6.74	6.74
DO (mg/l)	0.15	0.14	0.13
ORP (mV)	172.0	169.9	163.1
Turbidity (NTU)	3.86	4.10	2.76

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-17	Weather:	Clear, 35°F, NE wind at 7 mph
Date:	3/24/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments: *Very slight color and suspended solids in sample.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-18	Weather:	Cloudy, 46°F, S wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.40
Top of screen (ft. MSL):	676.53	Materials:	PVC	Top of Casing elevation (ft. MSL):	736.28
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	25.68	N/A*	N/A*
Water elevation (ft. MSL)	710.60	N/A*	N/A*

3 Well Volumes (gal): 19.11 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	64.75	65.10	0.35

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-18. In Spring 2023, MW-18 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-19	Weather:	Cloudy, 46°F, S wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	721.10
Top of screen (ft. MSL):	680.23	Materials:	PVC	Top of Casing elevation (ft. MSL):	723.01
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	18.23	N/A*	N/A*
Water elevation (ft. MSL)	704.78	N/A*	N/A*

3 Well Volumes (gal): 14.45 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	47.78	47.80	0.02

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-19. In Spring 2023, MW-19 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-20 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 721.14
Top of screen (ft. MSL):* 706.73 | Materials: PVC | Top of Casing elevation (ft. MSL)*: 723.48
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	18.77	N/A**	N/A**
Water elevation (ft. MSL)	704.71	N/A**	N/A**

3 Well Volumes (gal): 3.90 | Screen submerged? (Y/N): No

	Constructed*	Measured	Difference
Well Depth (ft. TOC)	26.75	26.50	0.25

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample**

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected**	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *Well replaced in 2005 - could not find well construction form on DocDNA. TOC and Constructed Well Depth from 2005 AWQR. TOS estimated.

**In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-21. In Spring 2023, MW-21 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C

Well/Piezometer: MW-21 | Weather: Cloudy, 46°F, S wind at 8 mph

Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 730.62

Top of screen (ft. MSL):* 706.93 | Materials: PVC | Top of Casing elevation (ft. MSL): 732.88

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	27.92	N/A**	N/A**
Water elevation (ft. MSL)	704.96	N/A**	N/A**

3 Well Volumes (gal): 4.20 | Screen submerged? (Y/N): No

	Constructed*	Measured	Difference
Well Depth (ft. TOC)	36.50	35.90	0.60

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___

___ Bailer | X Other (specify): Water Level Only - No Sample**

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump

___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___

___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___

Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A

Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected**	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *Well replaced in 2005 - could not find well construction form on DocDNA. Constructed Well Depth from 2005 AWQR plus the Spring 2021 casing extension. TOS estimated.

**In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-21. In Spring 2023, MW-21 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-22 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 731.05
Top of screen (ft. MSL): 681.27 | Materials: PVC | Top of Casing elevation (ft. MSL): 733.34
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	28.37	N/A*	N/A*
Water elevation (ft. MSL)	704.97	N/A*	N/A*

3 Well Volumes (gal): 14.22 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	57.45	57.50	0.05

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-22. In Spring 2023, MW-22 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-23	Weather:	Cloudy, 46°F, S wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.30
Top of screen (ft. MSL):	712.29	Materials:	PVC	Top of Casing elevation (ft. MSL):	736.74
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	31.48	N/A*	N/A*
Water elevation (ft. MSL)	705.26	N/A*	N/A*

3 Well Volumes (gal): 3.90 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	39.45	39.50	0.05

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-23. In Spring 2023, MW-23 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-24 | Weather: Fair, 55°F, SSE wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 783.32
Top of screen (ft. MSL):* 707.00 | Materials: PVC | Top of Casing elevation (ft. MSL)*: 785.70
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	78.63	N/A**	N/A**
Water elevation (ft. MSL)	707.07	N/A**	N/A**

3 Well Volumes (gal): 4.92 | Screen submerged? (Y/N): Yes

	Constructed*	Measured	Difference
Well Depth (ft. TOC)	88.70	89.00	0.30

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample**

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected**	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *Well replaced in 2005 - could not find well construction form on DocDNA. TOC and Constructed Well Depth from 2005 AWQR. TOS estimated.

**In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-24. In Spring 2023, MW-24 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-25 | Weather: Fair, 55°F, SSE wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 781.70
Top of screen (ft. MSL): 679.02 | Materials: PVC | Top of Casing elevation (ft. MSL): 784.20
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	77.25	N/A*	N/A*
Water elevation (ft. MSL)	706.95	N/A*	N/A*

3 Well Volumes (gal): 16.10 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	110.18	110.20	0.02

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-25. In Spring 2023, MW-25 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-26	Weather:	Cloudy, 37°F, NNW wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	807.70
Top of screen (ft. MSL):	716.70	Materials:	PVC	Top of Casing elevation (ft. MSL):	811.58
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	103.07	103.19	105.21
Water elevation (ft. MSL)	708.51	708.39	706.37

3 Well Volumes (gal): 3.33 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	109.88	111.35	1.47

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	703.58	Flow Rate (mL/min):	150	Volume removed (gal):	0.8
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-26_23_03	USEPA 8260D - Appendix II VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8015C - Acetonitrile & Isobutanol	(3) VOA Vial 40 mL - Unpreserved	
	USEPA 8270E - Appendix II SVOCs	(6) Amber Glass 250 mL - Unpreserved	No
	USEPA 8081B - Appendix II Pesticides		
	USEPA 8082A - Appendix II PCBs		
	USEPA 8151A - Appendix II Herbicides	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix II Total Metals	(1) Plastic 250 mL - HNO_3	No
	USEPA 7470A - Mercury		
	USEPA 9012B - Cyanide	(1) Plastic 250 mL - NaOH	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No
	USGS I-3765-85 - TSS [(1)]	Container was not provided [(1)]	No

[(1)] Eurofins inadvertently omitted the Plastic 1 Liter - Unpreserved container for TSS. Analysis was able to be conducted from another unpreserved, glass container.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-26	Weather:	Cloudy, 37°F, NNW wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Field Analysis

			Final Reading
Time	13:43	13:48	13:53
Temp (°C)	15.59	16.26	16.36
Sp. Cond (umhos/cm)	1332.1	1335.6	1339.4
pH	6.80	6.77	6.77
DO (mg/l)	0.74	0.64	0.54
ORP (mV)	-2.2	-5.4	-7.9
Turbidity (NTU)	3.46	4.30	4.24

Comments: In accordance with 567 IAC 113.10(6), the second re-triggered baseline assessment monitoring event for the full Appendix II list was conducted at MW-26 in March 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-27 | Weather: Fair, 55°F, SSE wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 807.30
Top of screen (ft. MSL): 671.66 | Materials: PVC | Top of Casing elevation (ft. MSL): 809.66
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	101.95	N/A*	N/A*
Water elevation (ft. MSL)	707.71	N/A*	N/A*

3 Well Volumes (gal): 20.07 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	143.00	143.35	0.35

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-27 is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-28 | Weather: Fair, 55°F, SSE wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 814.40
Top of screen (ft. MSL): 715.46 | Materials: PVC | Top of Casing elevation (ft. MSL): 816.62
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	108.78	N/A*	N/A*
Water elevation (ft. MSL)	707.84	N/A*	N/A*

3 Well Volumes (gal): 3.61 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	116.16	117.15	0.99

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-28. In Spring 2023, MW-28 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-29 | Weather: Fair, 55°F, SSE wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 813.80
Top of screen (ft. MSL): 679.70 | Materials: PVC | Top of Casing elevation (ft. MSL): 816.20
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	108.36	N/A*	N/A*
Water elevation (ft. MSL)	707.84	N/A*	N/A*

3 Well Volumes (gal): 16.21 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	141.50	141.75	0.25

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-29 is a water level only location.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-30	Weather:	Fair, 55°F, SSE wind at 17 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	788.60
Top of screen (ft. MSL):	712.40	Materials:	PVC	Top of Casing elevation (ft. MSL):	790.98
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	82.14	N/A*	N/A*
Water elevation (ft. MSL)	708.84	N/A*	N/A*

3 Well Volumes (gal): 3.15 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	88.58	89.60	1.02

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-30. In Spring 2023, MW-30 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-31	Weather:	Fair, 55°F, SSE wind at 17 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	787.90
Top of screen (ft. MSL):	671.00	Materials:	PVC	Top of Casing elevation (ft. MSL):	790.06
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	82.12	N/A*	N/A*
Water elevation (ft. MSL)	707.94	N/A*	N/A*

3 Well Volumes (gal): 20.51 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	124.06	124.20	0.14

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	Flow Rate (mL/min):	Volume removed (gal):	Volume sampled (L):
N/A	N/A	N/A	N/A

Well dry? (Y/N): No Odor? (Y/N): N/A Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-31. In Spring 2023, MW-31 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-32	Weather:	Cloudy, 50°F, NNW wind at 6 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	746.80
Top of screen (ft. MSL):	713.62	Materials:	PVC	Top of Casing elevation (ft. MSL):	749.01
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	44.24	44.24	44.26
Water elevation (ft. MSL)	704.77	704.77	704.75

3 Well Volumes (gal): 5.56 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	55.62	55.80	0.18

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	699.01	Flow Rate (mL/min):	200	Volume removed (gal):	1.1
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	3.87
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-32_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	16:14	16:17	16:20
Temp (°C)	12.62	12.63	12.61
Sp. Cond (umhos/cm)	3791.7	3784.6	3780.6
pH	6.80	6.80	6.80
DO (mg/l)	0.27	0.26	0.25
ORP (mV)	-50.9	-54.6	-57.2
Turbidity (NTU)	4.49	4.25	4.21

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-32	Weather:	Cloudy, 50°F, NNW wind at 6 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments:

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-33	Weather:	Cloudy, 50°F, NNW wind at 6 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.86	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	746.36
Top of screen (ft. MSL):	670.39	Materials:	PVC	Top of Casing elevation (ft. MSL):	749.92
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	44.93	44.93	44.96
Water elevation (ft. MSL)	704.99	704.99	704.96

3 Well Volumes (gal): 19.36 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	84.53	84.70	0.17

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	670.92	Flow Rate (mL/min):	200	Volume removed (gal):	2.2
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	1.87
				Color? (Y/N):	Yes, slight*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-33_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	17:25	17:28	17:31
Temp (°C)	12.10	12.06	12.05
Sp. Cond (umhos/cm)	2059.5	2033.7	2013.1
pH	6.66	6.66	6.67
DO (mg/l)	0.17	0.17	0.15
ORP (mV)	-49.0	-49.5	-50.0
Turbidity (NTU)*	4.38	1.38	5.88

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-33	Weather:	Cloudy, 50°F, NNW wind at 6 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments: *Slight black suspended solids in sample.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-34	Weather:	Fair, 55°F, SSE wind at 17 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	745.33
Top of screen (ft. MSL):	708.91	Materials:	PVC	Top of Casing elevation (ft. MSL):	748.72
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	42.81	N/A*	N/A*
Water elevation (ft. MSL)	705.91	N/A*	N/A*

3 Well Volumes (gal): 3.42 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	49.81	49.50	0.31

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-34. In Spring 2023, MW-34 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-35	Weather:	Fair, 55°F, SSE wind at 17 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	741.63
Top of screen (ft. MSL):	711.04	Materials:	PVC	Top of Casing elevation (ft. MSL):	744.89
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	39.66	N/A*	N/A*
Water elevation (ft. MSL)	705.23	N/A*	N/A*

3 Well Volumes (gal): 2.05 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	43.85	45.40	1.55

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-35. In Spring 2023, MW-35 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-36	Weather:	Fair, 55°F, SSE wind at 17 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	741.58
Top of screen (ft. MSL):	674.03	Materials:	PVC	Top of Casing elevation (ft. MSL):	745.22
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	40.05	N/A*	N/A*
Water elevation (ft. MSL)	705.17	N/A*	N/A*

3 Well Volumes (gal): 17.67 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	76.19	76.20	0.01

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-36. In Spring 2023, MW-36 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-37	Weather:	Cloudy, 44°F, S wind at 9 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	782.70
Top of screen (ft. MSL):	724.97	Materials:	PVC	Top of Casing elevation (ft. MSL):	784.81
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	64.37	64.22	N/A
Water elevation (ft. MSL)	720.44	720.59	N/A

3 Well Volumes (gal): 2.67 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	69.84	69.95	0.11

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) X No-purge (specify sample interval): Bottom of Screen
_ Bailer _ Other (specify): _

Equipment type: _ Submersible pump _ Peristaltic pump X Bladder pump
_ Inertial lift pump _ Bailer _ No-purge (specify): _
_ Other (specify): _

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	715.81	Flow Rate (mL/min):	200	Volume removed (gal):	--
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Volume sampled (L): 4.74

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-37_23_03	USEPA 8260D - Appendix II VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8015C - Acetonitrile & Isobutanol	(3) VOA Vial 40 mL - Unpreserved	
	USEPA 8270E - Appendix II SVOCs	(6) Amber Glass 250 mL - Unpreserved	No
	USEPA 8081B - Appendix II Pesticides		
	USEPA 8082A - Appendix II PCBs		
	USEPA 8151A - Appendix II Herbicides	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix II Total Metals	(1) Plastic 250 mL - HNO_3	No
	USEPA 7470A - Mercury		
	USEPA 9012B - Cyanide	(1) Plastic 250 mL - NaOH	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No
	USGS I-3765-85 - TSS [1]	Container was not provided [1]	No

[1] Eurofins inadvertently omitted the Plastic 1 Liter - Unpreserved container for TSS. Analysis was able to be conducted from another unpreserved, glass container.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-37	Weather:	Cloudy, 44°F, S wind at 9 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Field Analysis

	Final Reading
Time	11:52
Temp (°C)	10.89
Sp. Cond (umhos/cm)	774.54
pH	6.95
DO (mg/l)	4.05
ORP (mV)	102.1
Turbidity (NTU)	0.00

Comments: No purge sampling conducted since well recharge rate is less than 100 mL/min. Field measurements collected prior to sample collection using flow-through cell.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-38	Weather:	Cloudy, fog, 43°F, S wind at 11 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.68 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 782.60

Top of screen (ft. MSL): 699.26 Materials: PVC Top of Casing elevation (ft. MSL): 784.81

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	64.48	64.32	66.72
Water elevation (ft. MSL)	720.33	720.49	718.09

3 Well Volumes (gal): 12.75 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	90.55	90.10	0.45

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___

___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump

___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___

___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No

Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 699.81 Flow Rate (mL/min): 225 Volume removed (gal): 3.3 Volume sampled (L): 1.87

Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-38_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	11:18	11:21	11:24
Temp (°C)	10.75	10.77	10.77
Sp. Cond (umhos/cm)	435.36	434.45	433.40
pH	7.27	7.27	7.25
DO (mg/l)*	0.28	0.22	0.22
ORP (mV)	88.9	88.5	80.2
Turbidity (NTU)	0.57	0.79	1.80

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-38	Weather:	Cloudy, fog, 43°F, S wind at 11 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: VP-3 | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 774.99
Top of screen (ft. MSL): 710.42 | Materials: PVC | Top of Casing elevation (ft. MSL): 774.52
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	63.21	N/A*	N/A*
Water elevation (ft. MSL)	711.31	N/A*	N/A*

3 Well Volumes (gal): 5.33 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	74.10	74.30	0.20

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at VP-3. In Spring 2023, VP-3 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	VP-4	Weather:	Cloudy, 43°F, SSE wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	9	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	791.29
Top of screen (ft. MSL):	718.01	Materials:	PVC	Top of Casing elevation (ft. MSL):	790.91
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	79.64	N/A*	N/A*
Water elevation (ft. MSL)	711.27	N/A*	N/A*

3 Well Volumes (gal): 1.64 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	82.99	83.25	0.26

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method:		Pump (low flow)		No-purge (specify sample interval):	
		Bailer	X	Other (specify):	Water Level Only - No Sample*

Equipment type:		Submersible pump		Peristaltic pump		Bladder pump
		Inertial lift pump		Bailer		No-purge (specify):
		Other (specify):				

Equipment name/description: Dedicated? (Y/N): Disposable? (Y/N):

Decontamination method:

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A	Volume sampled (L):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A			Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at VP-4. In Spring 2023, VP-4 was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-101A	Weather:	Cloudy, 49°F, W wind at 5 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	717.95
Top of screen (ft. MSL):	706.36	Materials:	PVC	Top of Casing elevation (ft. MSL):	720.47
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	15.67	15.74	15.75
Water elevation (ft. MSL)	704.80	704.73	704.72

3 Well Volumes (gal): 6.79 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	29.55	29.45	0.10

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump X Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:)	695.97	Flow Rate (mL/min):	200	Volume removed (gal):	0.5
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-101A_23_03	USEPA 8260D - Appendix II VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8015C - Acetonitrile & Isobutanol	(3) VOA Vial 40 mL - Unpreserved	
	USEPA 8270E - Appendix II SVOCs	(6) Amber Glass 250 mL - Unpreserved	No
	USEPA 8081B - Appendix II Pesticides		
	USEPA 8082A - Appendix II PCBs		
	USEPA 8151A - Appendix II Herbicides	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix II Total Metals	(1) Plastic 250 mL - HNO_3	No
	USEPA 7470A - Mercury		
	USEPA 9012B - Cyanide	(1) Plastic 250 mL - NaOH	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No
	USGS I-3765-85 - TSS [(1)]	Container was not provided [(1)]	No

[(1)] Eurofins inadvertently omitted the Plastic 1 Liter - Unpreserved container for TSS. Analysis was able to be conducted from another unpreserved, glass container.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-101A	Weather:	Cloudy, 49°F, W wind at 5 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Field Analysis

			Final Reading
Time	13:39	13:41	13:43
Temp (°C)	12.70	12.72	12.94
Sp. Cond (umhos/cm)	1073.9	1069.2	1068.4
pH	6.94	6.96	6.92
DO (mg/l)	0.34	0.31	0.29
ORP (mV)	95.4	92.9	92.0
Turbidity (NTU)	43.39	39.73	42.11

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-101B | Weather: Cloudy, 50°F, W wind at 5 mph
Date: 3/22/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.86
Top of screen (ft. MSL): 640.36 | Materials: PVC | Top of Casing elevation (ft. MSL): 720.33
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	15.48	15.57	16.11
Water elevation (ft. MSL)	704.85	704.76	704.22

3 Well Volumes (gal): 33.95 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	84.90	84.85	0.05

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 640.33 | Flow Rate (mL/min): 125 | Volume removed (gal): 1.2 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-101B_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 250 mL - HNO_3	No

Field Analysis

			Final Reading
Time	14:43	14:49	14:54
Temp (°C)	13.15	13.21	13.02
Sp. Cond (umhos/cm)	1150.8	1149.9	1154.7
pH	7.35	7.36	7.38
DO (mg/l)	3.56	3.67	3.80
ORP (mV)	65.3	62.4	60.2
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-101B	Weather:	Cloudy, 50°F, W wind at 5 mph
Date:	3/22/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-102A | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 723.29
Top of screen (ft. MSL): 705.11 | Materials: PVC | Top of Casing elevation (ft. MSL): 725.57
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.77	N/A*	N/A*
Water elevation (ft. MSL)	704.80	N/A*	N/A*

3 Well Volumes (gal): 6.35 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	33.75	33.75	0.00

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-102A is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-102B | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 723.68
Top of screen (ft. MSL): 651.28 | Materials: PVC | Top of Casing elevation (ft. MSL): 726.21
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	21.46	N/A*	N/A*
Water elevation (ft. MSL)	704.75	N/A*	N/A*

3 Well Volumes (gal): 32.54 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	88.00	88.00	0.00

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-102B. In Spring 2023, MW-102B was a water level only location. The next annual monitoring event is scheduled for Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-103A | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.62
Top of screen (ft. MSL): 707.62 | Materials: PVC | Top of Casing elevation (ft. MSL): 720.34
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	15.11	N/A*	N/A*
Water elevation (ft. MSL)	705.23	N/A*	N/A*

3 Well Volumes (gal): 3.81 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	22.90	22.50	0.40

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-103A is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-103C | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.32
Top of screen (ft. MSL): 649.32 | Materials: PVC | Top of Casing elevation (ft. MSL): 719.90
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	14.68	N/A*	N/A*
Water elevation (ft. MSL)	705.22	N/A*	N/A*

3 Well Volumes (gal): 29.91 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	75.85	75.50	0.35

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-103C. In Spring 2023, MW-103C was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-104B	Weather:	Fair, 55°F, Sse wind at 17 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 771.09

Top of screen (ft. MSL): 686.09 Materials: PVC Top of Casing elevation (ft. MSL): 773.35

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	64.09	N/A*	N/A*
Water elevation (ft. MSL)	709.26	N/A*	N/A*

3 Well Volumes (gal): 16.63 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	98.10	98.20	0.10

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___

___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump

___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___

___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___

Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-104B. In Spring 2023, MW-104B was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-105A	Weather:	Cloudy, 52°F, SE wind at 12 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 721.80

Top of screen (ft. MSL): 708.80 Materials: PVC Top of Casing elevation (ft. MSL): 723.97

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.52	N/A*	N/A*
Water elevation (ft. MSL)	703.45	N/A*	N/A*

3 Well Volumes (gal): 4.83 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	30.40	30.35	0.05

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___

___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump

___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___

___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___

Decontamination method: ___

Equipment depth (ft. MSL:) N/A Flow Rate (mL/min): N/A Volume removed (gal): N/A Volume sampled (L): N/A

Well dry? (Y/N): No Odor? (Y/N): N/A Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-105A. In Spring 2023, MW-105A was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-105B	Weather:	Cloudy, 52°F, SE wind at 12 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	721.80
Top of screen (ft. MSL):	648.80	Materials:	PVC	Top of Casing elevation (ft. MSL):	724.00
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.58	N/A*	N/A*
Water elevation (ft. MSL)	703.42	N/A*	N/A*

3 Well Volumes (gal): 31.75 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	85.50	85.40	0.10

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-105B. In Spring 2023, MW-105B was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-106A	Weather:	Cloudy, 46°F, S wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	714.04
Top of screen (ft. MSL):	707.34	Materials:	PVC	Top of Casing elevation (ft. MSL):	716.19
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	11.94	N/A*	N/A*
Water elevation (ft. MSL)	704.25	N/A*	N/A*

3 Well Volumes (gal): 5.68 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	23.55	23.50	0.05

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Volume sampled (L):	N/A
				Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-106A. In Spring 2023, MW-106A was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-107A | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.13
Top of screen (ft. MSL): 706.90 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.65
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.10	N/A*	N/A*
Water elevation (ft. MSL)	704.55	N/A*	N/A*

3 Well Volumes (gal): 6.28 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	29.95	29.65	0.30

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A	Well dry? (Y/N):	No	Odor? (Y/N):	N/A
Color? (Y/N):	N/A				

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-107A. In Spring 2023, MW-107A was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-107B | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.12
Top of screen (ft. MSL): 660.37 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.91
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.11	N/A*	N/A*
Water elevation (ft. MSL)	704.80	N/A*	N/A*

3 Well Volumes (gal): 24.65 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	67.51	67.60	0.09

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A	Well dry? (Y/N):	No	Odor? (Y/N):	N/A
Color? (Y/N):	N/A				

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-107B. In Spring 2023, MW-107B was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-108A | Weather: Cloudy, 46°F, S wind at 8 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.45
Top of screen (ft. MSL): 710.15 | Materials: PVC | Top of Casing elevation (ft. MSL): 719.11
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	12.78	N/A*	N/A*
Water elevation (ft. MSL)	706.33	N/A*	N/A*

3 Well Volumes (gal): 3.19 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	19.30	19.30	0.00

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-108A is a water level only location.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-108B	Weather:	Cloudy, 46°F, S wind at 8 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.25	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	719.45
Top of screen (ft. MSL):	646.77	Materials:	PVC	Top of Casing elevation (ft. MSL):	719.00
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	13.03	N/A*	N/A*
Water elevation (ft. MSL)	705.97	N/A*	N/A*

3 Well Volumes (gal): 31.13 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	76.70	76.80	0.10

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-108B. In Spring 2023, MW-108B was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-109A | Weather: Fair, 55°F, Sse wind at 17 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in): 8.25 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 721.23
Top of screen (ft. MSL): 707.23 | Materials: PVC | Top of Casing elevation (ft. MSL): 724.17
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.41	22.45	22.73
Water elevation (ft. MSL)	703.76	701.72	701.44

3 Well Volumes (gal): 3.44 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	27.45	27.15	0.30

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:): N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, annual monitoring was last conducted in Fall 2022 at MW-109A. In Spring 2023, MW-109A was a water level only location. The next annual monitoring event is scheduled for Fall 2023

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-109B	Weather:	Mostly cloudy, 41°F, N wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Monitoring Well Details

Borehole diameter (in):	8.25	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	721.27
Top of screen (ft. MSL):	650.27	Materials:	PVC	Top of Casing elevation (ft. MSL):	724.37
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	19.85	19.98	20.13
Water elevation (ft. MSL)	704.52	704.39	704.24

3 Well Volumes (gal): 31.39 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	84.05	83.65	0.40

Well conditions commentary: Well conditions are inspected annually - scheduled for Fall 2023 event.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump X Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:)	645.37	Flow Rate (mL/min):	125	Volume removed (gal):	0.9
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Volume sampled (L): 1.37

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-109B_23_03	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	15:08	15:13	15:18
Temp (°C)	9.48	9.64	9.81
Sp. Cond (umhos/cm)	2535.2	2534.7	2540.4
pH	7.20	7.19	7.20
DO (mg/l)	0.38	0.32	0.29
ORP (mV)	61.4	58.4	55.6
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-109B	Weather:	Mostly cloudy, 41°F, N wind at 11 mph
Date:	3/23/2023	Personnel:	O.A. Technical Services: Tyler Merritt & David Bachman

Comments: Collected field duplicate (FD-2_23_03) at MW-109B.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

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JOB DESCRIPTION

CRLCSWA Site 1

JOB NUMBER

310-252084-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

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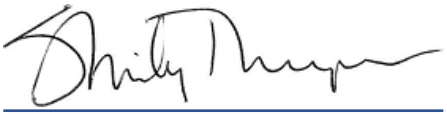

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Authorized for release by
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Case Narrative

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Job ID: 310-252084-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-252084-1

Comments
No additional comments.

Receipt
The samples were received on 3/24/2023 2:45 PM. 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 -0.1º C, 0.4º C, 0.8º C, 1.0º C and 1.2º C.

GC/MS VOA
Method 8260D: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: FD-1_23_03 (310-252084-14).

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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-382259 and analytical batch 310-382466 recovered outside control limits for the following analytes: 4-Chloroaniline.

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-382563 recovered above the upper control limit for 1,3,5-Trinitrobenzene (67.1%D), N-Nitrosopiperidine (24.5%D) and N-Nitrosomethylethylamine (25.8%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 3005A: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-13_23_03 (310-252084-2). The sample(s) was preserved to the appropriate pH in the laboratory.

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

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

Organic Prep
Methods 3510C, 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-382246.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Methods 3510C, 625: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-382259.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

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

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-252084-1	MW-12_23_03	Water	03/23/23 13:00	03/24/23 14:45
310-252084-2	MW-13_23_03	Water	03/23/23 10:10	03/24/23 14:45
310-252084-3	MW-14_23_03	Water	03/23/23 11:35	03/24/23 14:45
310-252084-4	MW-16_23_03	Water	03/24/23 10:10	03/24/23 14:45
310-252084-5	MW-17_23_03	Water	03/24/23 09:15	03/24/23 14:45
310-252084-6	MW-26_23_03	Water	03/23/23 13:55	03/24/23 14:45
310-252084-7	MW-32_23_03	Water	03/22/23 16:25	03/24/23 14:45
310-252084-8	MW-33_23_03	Water	03/22/23 17:35	03/24/23 14:45
310-252084-9	MW-37_23_03	Water	03/22/23 11:45	03/24/23 14:45
310-252084-10	MW-38_23_03	Water	03/22/23 11:25	03/24/23 14:45
310-252084-11	MW-101A_23_03	Water	03/22/23 13:50	03/24/23 14:45
310-252084-12	MW-101B_23_03	Water	03/22/23 14:55	03/24/23 14:45
310-252084-13	MW-109B_23_03	Water	03/23/23 15:20	03/24/23 14:45
310-252084-14	FD-1_23_03	Water	03/23/23 00:00	03/24/23 14:45
310-252084-15	FD-2_23_03	Water	03/23/23 00:00	03/24/23 14:45
310-252084-16	FB-1_23_03	Water	03/23/23 11:05	03/24/23 14:45
310-252084-17	TB-1_23_03	Water	03/22/23 00:00	03/24/23 14:45

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-12_23_03 — Lab Sample ID: 310-252084-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.57		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	2.28		1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	5.99		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.918		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	4.12		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.67		1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.546	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.116		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.407		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.00434		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.0828		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00410		0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	36.0		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-13_23_03 — Lab Sample ID: 310-252084-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.01		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	2.20		1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	14.6		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	3.74		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	4.31		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	2.33	J	4.00	0.790	ug/L	1		8260D	Total/NA
Xylenes, Total	0.439	J	3.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0534		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	1.10		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.00204		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.0117		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00237	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	154		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-14_23_03 — Lab Sample ID: 310-252084-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.70		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.955	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	5.39		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.665		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	1.72		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	0.999	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.15		1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.190	J	1.00	0.180	ug/L	1		8260D	Total/NA
Antimony	0.000736	J B	0.00200	0.000690	mg/L	1		6020B	Total/NA
Arsenic	0.00844		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.283		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cadmium	0.000135		0.000100	0.0000550	mg/L	1		6020B	Total/NA
Cobalt	0.000698		0.000500	0.000190	mg/L	1		6020B	Total/NA
Lead	0.000397	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0156		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00163	J	0.00500	0.000960	mg/L	1		6020B	Total/NA
Silver	0.00164		0.00100	0.000490	mg/L	1		6020B	Total/NA
Thallium	0.000975	J	0.00100	0.000260	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-14_23_03 (Continued) — Lab Sample ID: 310-252084-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	33.0		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-16_23_03 — Lab Sample ID: 310-252084-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.928	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	1.21		1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	5.20		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.726		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	1.75		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.310	J	1.00	0.210	ug/L	1		8260D	Total/NA
Antimony	0.000859	J B	0.00200	0.000690	mg/L	1		6020B	Total/NA
Arsenic	0.0481		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.172		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cadmium	0.000134		0.000100	0.0000550	mg/L	1		6020B	Total/NA
Cobalt	0.000748		0.000500	0.000190	mg/L	1		6020B	Total/NA
Lead	0.000381	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0182		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00226	J	0.00500	0.000960	mg/L	1		6020B	Total/NA
Silver	0.00159		0.00100	0.000490	mg/L	1		6020B	Total/NA
Thallium	0.00141		0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	47.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-17_23_03 — Lab Sample ID: 310-252084-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	7.09	J	10.2	5.61	ug/L	1		8270E	Total/NA
Arsenic	0.0675		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.161		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.00554		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.00967		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	57.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-26_23_03 — Lab Sample ID: 310-252084-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11.6		10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.00149	J	0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.131		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.000334	J	0.000500	0.000190	mg/L	1		6020B	Total/NA
Copper	0.00213	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000286	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.8		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-32_23_03 — Lab Sample ID: 310-252084-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.481	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	2.32		1.00	0.230	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	2.38	J	10.0	2.10	ug/L	1		8260D	Total/NA
Benzene	0.384	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	8.93		1.00	0.400	ug/L	1		8260D	Total/NA
Toluene	0.503	J	1.00	0.430	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-32_23_03 (Continued) — Lab Sample ID: 310-252084-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	7.57	J	10.9	5.98	ug/L	1		8270E	Total/NA
Arsenic	0.135		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.695		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.00354		0.000500	0.000190	mg/L	1		6020B	Total/NA
Copper	0.00222	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000534		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0285		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00156	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	47.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-33_23_03 — Lab Sample ID: 310-252084-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.676	J	1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	4.04		1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0399		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.449		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.00104		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.00555		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	9.00		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-37_23_03 — Lab Sample ID: 310-252084-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0286		0.00200	0.000880	mg/L	1		6020B	Total/NA
Selenium	0.00104	J	0.00500	0.000960	mg/L	1		6020B	Total/NA

Client Sample ID: MW-38_23_03 — Lab Sample ID: 310-252084-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00122	J	0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.0415		0.00200	0.000880	mg/L	1		6020B	Total/NA

Client Sample ID: MW-101A_23_03 — Lab Sample ID: 310-252084-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.141		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cadmium	0.000111		0.000100	0.0000550	mg/L	1		6020B	Total/NA
Cobalt	0.000419	J	0.000500	0.000190	mg/L	1		6020B	Total/NA
Copper	0.00284	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.00534		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00137	J	0.00500	0.000960	mg/L	1		6020B	Total/NA
Vanadium	0.00154	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.6		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-101B_23_03 — Lab Sample ID: 310-252084-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.114		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.000382	J	0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.00305	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00236	J	0.00500	0.000960	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-109B_23_03 — Lab Sample ID: 310-252084-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.959	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.72		1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	7.41		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.423	J	1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.267	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0202		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.633		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.0173		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.0366		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00515		0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.0		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-1_23_03 — Lab Sample ID: 310-252084-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.97		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	2.18		1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	14.2		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	3.67		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	4.16		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	2.00	J	4.00	0.790	ug/L	1		8260D	Total/NA
Xylenes, Total	0.415	J	3.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0447		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.906		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.00173		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.0117		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00146	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	165		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-2_23_03 — Lab Sample ID: 310-252084-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.910	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.81		1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	7.43		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.428	J	1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.277	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0194		0.00200	0.000750	mg/L	1		6020B	Total/NA
Barium	0.615		0.00200	0.000880	mg/L	1		6020B	Total/NA
Cobalt	0.0167		0.000500	0.000190	mg/L	1		6020B	Total/NA
Nickel	0.0355		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00495		0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.33		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FB-1_23_03 — Lab Sample ID: 310-252084-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.597	J	1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: TB-1_23_03 — Lab Sample ID: 310-252084-17

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-12_23_03
Lab Sample ID: 310-252084-1
Date Collected: 03/23/23 13:00
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 13:23	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 13:23	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 13:23	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 13:23	1
1,1-Dichloroethane	**4.57**		1.00	0.220	ug/L			03/27/23 13:23	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 13:23	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 13:23	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 13:23	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 13:23	1
1,2-Dichlorobenzene	**2.28**		1.00	0.370	ug/L			03/27/23 13:23	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 13:23	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 13:23	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 13:23	1
1,4-Dichlorobenzene	**5.99**		1.00	0.230	ug/L			03/27/23 13:23	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 13:23	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 13:23	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 13:23	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 13:23	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 13:23	1
Benzene	**0.918**		0.500	0.220	ug/L			03/27/23 13:23	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 13:23	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 13:23	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 13:23	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 13:23	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 13:23	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 13:23	1
Chlorobenzene	**4.12**		1.00	0.400	ug/L			03/27/23 13:23	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 13:23	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 13:23	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 13:23	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 13:23	1
cis-1,2-Dichloroethene	**3.67**		1.00	0.210	ug/L			03/27/23 13:23	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 13:23	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 13:23	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 13:23	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 13:23	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 13:23	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 13:23	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 13:23	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 13:23	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 13:23	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 13:23	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 13:23	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 13:23	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 13:23	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 13:23	1
Vinyl chloride	**0.546**	**J**	1.00	0.180	ug/L			03/27/23 13:23	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 13:23	1

Client Sample ID: MW-12_23_03
Date Collected: 03/23/23 13:00
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*03/27/23 13:23*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/23 13:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 13:23*	*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		03/27/23 08:07	03/30/23 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*		*10 - 136*	*03/27/23 08:07*	*03/30/23 17:30*	*1*
Tetrachloro-m-xylene	*76*		*10 - 130*	*03/27/23 08:07*	*03/30/23 17:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 14:34	1
Arsenic	**0.116**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 14:34	1
Barium	**0.407**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 14:34	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 14:34	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 14:34	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 14:34	1
Cobalt	**0.00434**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 14:34	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 14:34	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 14:34	1
Nickel	**0.0828**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 14:34	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 14:34	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 14:34	1
Thallium	**0.00410**		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 14:34	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 14:34	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 14:34	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**36.0**		7.50	2.55	mg/L			03/28/23 08:38	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-13_23_03

Date Collected: 03/23/23 10:10
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 13:45	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 13:45	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 13:45	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 13:45	1
1,1-Dichloroethane	**2.01**		1.00	0.220	ug/L			03/27/23 13:45	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 13:45	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 13:45	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 13:45	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 13:45	1
1,2-Dichlorobenzene	**2.20**		1.00	0.370	ug/L			03/27/23 13:45	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 13:45	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 13:45	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 13:45	1
1,4-Dichlorobenzene	**14.6**		1.00	0.230	ug/L			03/27/23 13:45	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 13:45	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 13:45	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 13:45	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 13:45	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 13:45	1
Benzene	**3.74**		0.500	0.220	ug/L			03/27/23 13:45	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 13:45	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 13:45	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 13:45	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 13:45	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 13:45	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 13:45	1
Chlorobenzene	**4.31**		1.00	0.400	ug/L			03/27/23 13:45	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 13:45	1
Chloroethane	**2.33**	**J**	4.00	0.790	ug/L			03/27/23 13:45	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 13:45	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 13:45	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 13:45	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 13:45	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 13:45	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 13:45	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 13:45	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 13:45	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 13:45	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 13:45	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 13:45	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 13:45	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 13:45	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 13:45	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 13:45	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 13:45	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 13:45	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 13:45	1
Xylenes, Total	**0.439**	**J**	3.00	0.400	ug/L			03/27/23 13:45	1

Client Sample ID: MW-13_23_03
Date Collected: 03/23/23 10:10
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*03/27/23 13:45*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/23 13:45*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*03/27/23 13:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 14:37	1
Arsenic	**0.0534**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 14:37	1
Barium	**1.10**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 14:37	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 14:37	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 14:37	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 14:37	1
Cobalt	**0.00204**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 14:37	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 14:37	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 14:37	1
Nickel	**0.0117**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 14:37	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 14:37	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 14:37	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 14:37	1
Vanadium	**0.00237**	**J**	0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 14:37	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**154**		15.0	5.10	mg/L			03/28/23 08:38	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*108*		*31 - 116*	*03/28/23 00:00*	*04/06/23 00:39*	*1*

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-14_23_03
Date Collected: 03/23/23 11:35
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 14:06	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 14:06	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 14:06	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 14:06	1
1,1-Dichloroethane	**1.70**		1.00	0.220	ug/L			03/27/23 14:06	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 14:06	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 14:06	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 14:06	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 14:06	1
1,2-Dichlorobenzene	**0.955**	**J**	1.00	0.370	ug/L			03/27/23 14:06	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 14:06	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 14:06	1
1,4-Dichlorobenzene	**5.39**		1.00	0.230	ug/L			03/27/23 14:06	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 14:06	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 14:06	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 14:06	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 14:06	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 14:06	1
Benzene	**0.665**		0.500	0.220	ug/L			03/27/23 14:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 14:06	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 14:06	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 14:06	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 14:06	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 14:06	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 14:06	1
Chlorobenzene	**1.72**		1.00	0.400	ug/L			03/27/23 14:06	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 14:06	1
Chloroethane	**0.999**	**J**	4.00	0.790	ug/L			03/27/23 14:06	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 14:06	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 14:06	1
cis-1,2-Dichloroethene	**1.15**		1.00	0.210	ug/L			03/27/23 14:06	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 14:06	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 14:06	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 14:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 14:06	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 14:06	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 14:06	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 14:06	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 14:06	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 14:06	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 14:06	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 14:06	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 14:06	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 14:06	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 14:06	1
Vinyl chloride	**0.190**	**J**	1.00	0.180	ug/L			03/27/23 14:06	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 128*		*03/27/23 14:06*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-14_23_03
Lab Sample ID: 310-252084-3
Date Collected: 03/23/23 11:35
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/23 14:06*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 14:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.000736**	**J B**	0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 15:04	1
Arsenic	**0.00844**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 15:04	1
Barium	**0.283**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 15:04	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 15:04	1
Cadmium	**0.000135**		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 15:04	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:04	1
Cobalt	**0.000698**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 15:04	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 15:04	1
Lead	**0.000397**	**J**	0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 15:04	1
Nickel	**0.0156**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 15:04	1
Selenium	**0.00163**	**J**	0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 15:04	1
Silver	**0.00164**		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 15:04	1
Thallium	**0.000975**	**J**	0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 15:04	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:04	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**33.0**		7.50	2.55	mg/L			03/28/23 07:19	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-16_23_03
Lab Sample ID: 310-252084-4

Date Collected: 03/24/23 10:10
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 14:28	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 14:28	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 14:28	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 14:28	1
1,1-Dichloroethane	**0.928**	**J**	1.00	0.220	ug/L			03/27/23 14:28	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 14:28	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 14:28	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 14:28	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 14:28	1
1,2-Dichlorobenzene	**1.21**		1.00	0.370	ug/L			03/27/23 14:28	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 14:28	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 14:28	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 14:28	1
1,4-Dichlorobenzene	**5.20**		1.00	0.230	ug/L			03/27/23 14:28	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 14:28	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 14:28	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 14:28	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 14:28	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 14:28	1
Benzene	**0.726**		0.500	0.220	ug/L			03/27/23 14:28	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 14:28	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 14:28	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 14:28	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 14:28	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 14:28	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 14:28	1
Chlorobenzene	**1.75**		1.00	0.400	ug/L			03/27/23 14:28	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 14:28	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 14:28	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 14:28	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 14:28	1
cis-1,2-Dichloroethene	**0.310**	**J**	1.00	0.210	ug/L			03/27/23 14:28	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 14:28	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 14:28	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 14:28	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 14:28	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 14:28	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 14:28	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 14:28	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 14:28	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 14:28	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 14:28	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 14:28	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 14:28	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 14:28	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 14:28	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 14:28	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 14:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-16_23_03
Lab Sample ID: 310-252084-4
Date Collected: 03/24/23 10:10
Matrix: Water
Date Received: 03/24/23 14:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		80 - 128		03/27/23 14:28	1
Toluene-d8 (Surr)	99		80 - 120		03/27/23 14:28	1
4-Bromofluorobenzene (Surr)	101		80 - 120		03/27/23 14:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.000859**	**J B**	0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 15:21	1
Arsenic	**0.0481**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 15:21	1
Barium	**0.172**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 15:21	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 15:21	1
Cadmium	**0.000134**		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 15:21	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:21	1
Cobalt	**0.000748**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 15:21	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 15:21	1
Lead	**0.000381**	**J**	0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 15:21	1
Nickel	**0.0182**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 15:21	1
Selenium	**0.00226**	**J**	0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 15:21	1
Silver	**0.00159**		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 15:21	1
Thallium	**0.00141**		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 15:21	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:21	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**47.0**		15.0	5.10	mg/L			03/28/23 07:19	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dichlorobenzoic Acid	112		31 - 116	03/28/23 00:00	04/06/23 01:11	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-17_23_03
Date Collected: 03/24/23 09:15
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 14:49	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 14:49	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 14:49	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 14:49	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 14:49	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 14:49	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 14:49	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 14:49	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 14:49	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 14:49	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 14:49	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 14:49	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 14:49	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 14:49	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 14:49	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 14:49	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 14:49	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 14:49	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 14:49	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 14:49	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 14:49	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 14:49	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 14:49	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 14:49	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 14:49	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 14:49	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 14:49	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 14:49	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 14:49	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 14:49	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 14:49	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 14:49	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 14:49	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 14:49	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 14:49	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 14:49	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 14:49	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 14:49	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 14:49	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 14:49	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 14:49	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 14:49	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 14:49	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 14:49	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 14:49	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 14:49	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*03/27/23 14:49*	*1*

Client Sample ID: MW-17_23_03
Lab Sample ID: 310-252084-5

Date Collected: 03/24/23 09:15
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/23 14:49*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/27/23 14:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	**7.09**	**J**	10.2	5.61	ug/L		03/27/23 09:25	03/28/23 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*83*		*27 - 115*	*03/27/23 09:25*	*03/28/23 17:48*	*1*
2-Fluorobiphenyl (Surr)	*68*		*28 - 110*	*03/27/23 09:25*	*03/28/23 17:48*	*1*
Terphenyl-d14 (Surr)	*39*		*10 - 125*	*03/27/23 09:25*	*03/28/23 17:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 15:24	1
Arsenic	**0.0675**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 15:24	1
Barium	**0.161**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 15:24	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 15:24	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 15:24	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:24	1
Cobalt	**0.00554**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 15:24	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 15:24	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 15:24	1
Nickel	**0.00967**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 15:24	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 15:24	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 15:24	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 15:24	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:24	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 15:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**57.0**		15.0	5.10	mg/L			03/28/23 07:19	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 01:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dichlorobenzoic Acid	*32.4*		*31 - 116*	*03/28/23 00:00*	*04/06/23 01:44*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-26_23_03
Lab Sample ID: 310-252084-6

Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 15:10	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 15:10	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 15:10	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 15:10	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 15:10	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 15:10	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			03/27/23 15:10	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 15:10	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			03/27/23 15:10	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 15:10	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 15:10	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 15:10	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 15:10	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 15:10	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 15:10	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			03/27/23 15:10	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 15:10	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			03/27/23 15:10	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 15:10	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 15:10	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 15:10	1
Acetone	**11.6**		10.0	3.10	ug/L			03/27/23 15:10	1
Acrolein	<3.60		10.0	3.60	ug/L			03/27/23 15:10	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 15:10	1
Allyl chloride	<0.700		2.00	0.700	ug/L			03/27/23 15:10	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 15:10	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 15:10	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 15:10	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 15:10	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 15:10	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 15:10	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 15:10	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 15:10	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 15:10	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 15:10	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 15:10	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 15:10	1
Chloroprene	<0.230		1.00	0.230	ug/L			03/27/23 15:10	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 15:10	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 15:10	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 15:10	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			03/27/23 15:10	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			03/27/23 15:10	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 15:10	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 15:10	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			03/27/23 15:10	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			03/27/23 15:10	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			03/27/23 15:10	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 15:10	1

Client Sample ID: MW-26_23_03
Lab Sample ID: 310-252084-6

Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			03/27/23 15:10	1
o-Xylene	<0.400		1.00	0.400	ug/L			03/27/23 15:10	1
Propionitrile	<3.40		10.0	3.40	ug/L			03/27/23 15:10	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 15:10	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 15:10	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 15:10	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 15:10	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 15:10	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 15:10	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 15:10	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 15:10	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 15:10	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 15:10	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*03/27/23 15:10*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 15:10*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 15:10*	*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	<0.563		10.4	0.563	ug/L		03/27/23 09:25	03/28/23 18:15	1
1,3,5-Trinitrobenzene	<2.40		10.4	2.40	ug/L		03/27/23 09:25	03/29/23 12:46	1
1,3-Dinitrobenzene	<3.33		10.4	3.33	ug/L		03/27/23 09:25	03/28/23 18:15	1
1,4-Naphthoquinone	<3.75		10.4	3.75	ug/L		03/27/23 09:25	03/29/23 12:46	1
1,4-phenylenediamine	<1.98		10.4	1.98	ug/L		03/27/23 09:25	03/29/23 12:46	1
1-Naphthylamine	<2.60		10.4	2.60	ug/L		03/27/23 09:25	03/29/23 12:46	1
2,3,4,6-Tetrachlorophenol	<5.52		10.4	5.52	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,4,5-Trichlorophenol	<5.52		10.4	5.52	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,4,6-Trichlorophenol	<5.21		10.4	5.21	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,4-Dichlorophenol	<0.885		10.4	0.885	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,4-Dimethylphenol	<0.604		10.4	0.604	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,4-Dinitrophenol	<13.5		20.8	13.5	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,4-Dinitrotoluene	<6.67		10.4	6.67	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,6-Dichlorophenol	<0.719		10.4	0.719	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,6-Dinitrotoluene	<0.542		10.4	0.542	ug/L		03/27/23 09:25	03/28/23 18:15	1
2-Acetylaminofluorene	<2.81		10.4	2.81	ug/L		03/27/23 09:25	03/29/23 12:46	1
2-Chloronaphthalene	<0.667		10.4	0.667	ug/L		03/27/23 09:25	03/28/23 18:15	1
2-Chlorophenol	<0.563		10.4	0.563	ug/L		03/27/23 09:25	03/28/23 18:15	1
2-Methylnaphthalene	<0.615		10.4	0.615	ug/L		03/27/23 09:25	03/28/23 18:15	1
2-Methylphenol	<0.677		10.4	0.677	ug/L		03/27/23 09:25	03/28/23 18:15	1
2-Naphthylamine	<2.19		10.4	2.19	ug/L		03/27/23 09:25	03/29/23 12:46	1
2-Nitroaniline	<6.15		10.4	6.15	ug/L		03/27/23 09:25	03/28/23 18:15	1
2-Nitrophenol	<7.08		10.4	7.08	ug/L		03/27/23 09:25	03/28/23 18:15	1
3,3'-Dichlorobenzidine	<1.46		10.4	1.46	ug/L		03/27/23 09:25	03/28/23 18:15	1
3,3'-Dimethylbenzidine	<1.56		10.4	1.56	ug/L		03/27/23 09:25	03/29/23 12:46	1
3-Methylcholanthrene	<0.333		10.4	0.333	ug/L		03/27/23 09:25	03/29/23 12:46	1
3-Nitroaniline	<2.81		10.4	2.81	ug/L		03/27/23 09:25	03/28/23 18:15	1
4,6-Dinitro-2-methylphenol	<7.19		10.4	7.19	ug/L		03/27/23 09:25	03/28/23 18:15	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-26_23_03
Lab Sample ID: 310-252084-6
Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.29		10.4	2.29	ug/L		03/27/23 09:25	03/29/23 12:46	1
4-Bromophenyl phenyl ether	<0.729		10.4	0.729	ug/L		03/27/23 09:25	03/28/23 18:15	1
4-Chloro-3-methylphenol	<0.875		10.4	0.875	ug/L		03/27/23 09:25	03/28/23 18:15	1
4-Chloroaniline	<0.646	*1	10.4	0.646	ug/L		03/27/23 09:25	03/28/23 18:15	1
4-Chlorophenyl phenyl ether	<0.719		10.4	0.719	ug/L		03/27/23 09:25	03/28/23 18:15	1
Methylphenol, 3 & 4	<0.729		10.4	0.729	ug/L		03/27/23 09:25	03/28/23 18:15	1
4-Nitroaniline	<1.35		10.4	1.35	ug/L		03/27/23 09:25	03/28/23 18:15	1
4-Nitrophenol	<7.92		10.4	7.92	ug/L		03/27/23 09:25	03/28/23 18:15	1
5-Nitro-o-toluidine	<2.92		10.4	2.92	ug/L		03/27/23 09:25	03/29/23 12:46	1
7,12-Dimethylbenz(a)anthracene	<1.98		10.4	1.98	ug/L		03/27/23 09:25	03/29/23 12:46	1
Acenaphthene	<0.667		10.4	0.667	ug/L		03/27/23 09:25	03/28/23 18:15	1
Acenaphthylene	<0.750		10.4	0.750	ug/L		03/27/23 09:25	03/28/23 18:15	1
Acetophenone	<0.719		10.4	0.719	ug/L		03/27/23 09:25	03/28/23 18:15	1
Anthracene	<0.906		10.4	0.906	ug/L		03/27/23 09:25	03/28/23 18:15	1
Benzo[a]anthracene	<0.885		10.4	0.885	ug/L		03/27/23 09:25	03/28/23 18:15	1
Benzo[a]pyrene	<8.44		10.4	8.44	ug/L		03/27/23 09:25	03/28/23 18:15	1
Benzo[b]fluoranthene	<5.10		10.4	5.10	ug/L		03/27/23 09:25	03/28/23 18:15	1
Benzo[g,h,i]perylene	<6.56		10.4	6.56	ug/L		03/27/23 09:25	03/28/23 18:15	1
Benzo[k]fluoranthene	<2.29		10.4	2.29	ug/L		03/27/23 09:25	03/28/23 18:15	1
Benzyl alcohol	<1.35		10.4	1.35	ug/L		03/27/23 09:25	03/28/23 18:15	1
Bis(2-chloroethoxy)methane	<0.792		10.4	0.792	ug/L		03/27/23 09:25	03/28/23 18:15	1
Bis(2-chloroethyl)ether	<0.854		10.4	0.854	ug/L		03/27/23 09:25	03/28/23 18:15	1
2,2'-oxybis[1-chloropropane]	<0.563		10.4	0.563	ug/L		03/27/23 09:25	03/28/23 18:15	1
Bis(2-ethylhexyl) phthalate	<5.73		10.4	5.73	ug/L		03/27/23 09:25	03/28/23 18:15	1
Butyl benzyl phthalate	<5.63		10.4	5.63	ug/L		03/27/23 09:25	03/28/23 18:15	1
Chlorobenzilate	<3.75		10.4	3.75	ug/L		03/27/23 09:25	03/29/23 12:46	1
Chrysene	<0.906		10.4	0.906	ug/L		03/27/23 09:25	03/28/23 18:15	1
Diallate	<4.17		10.4	4.17	ug/L		03/27/23 09:25	03/29/23 12:46	1
Dibenzo(a,h)anthracene	<4.06		10.4	4.06	ug/L		03/27/23 09:25	03/28/23 18:15	1
Dibenzofuran	<0.771		10.4	0.771	ug/L		03/27/23 09:25	03/28/23 18:15	1
Diethyl phthalate	<1.77		10.4	1.77	ug/L		03/27/23 09:25	03/28/23 18:15	1
Dimethoate	<3.75		10.4	3.75	ug/L		03/27/23 09:25	03/29/23 12:46	1
Dimethyl phthalate	<1.04		10.4	1.04	ug/L		03/27/23 09:25	03/28/23 18:15	1
Di-n-butyl phthalate	<5.83		10.4	5.83	ug/L		03/27/23 09:25	03/28/23 18:15	1
Di-n-octyl phthalate	<7.29		20.8	7.29	ug/L		03/27/23 09:25	03/28/23 18:15	1
Dinoseb	<2.50		10.4	2.50	ug/L		03/27/23 09:25	03/29/23 12:46	1
Diphenylamine	<6.25		10.4	6.25	ug/L		03/27/23 09:25	03/28/23 18:15	1
Disulfoton	<2.50		10.4	2.50	ug/L		03/27/23 09:25	03/29/23 12:46	1
Ethyl methanesulfonate	<3.75		10.4	3.75	ug/L		03/27/23 09:25	03/29/23 12:46	1
Ethyl Parathion	<2.29		10.4	2.29	ug/L		03/27/23 09:25	03/29/23 12:46	1
Famphur	<3.96		10.4	3.96	ug/L		03/27/23 09:25	03/29/23 12:46	1
Fluoranthene	<1.77		10.4	1.77	ug/L		03/27/23 09:25	03/28/23 18:15	1
Fluorene	<0.823		10.4	0.823	ug/L		03/27/23 09:25	03/28/23 18:15	1
Hexachlorobenzene	<0.729		10.4	0.729	ug/L		03/27/23 09:25	03/28/23 18:15	1
Hexachlorobutadiene	<0.896		10.4	0.896	ug/L		03/27/23 09:25	03/28/23 18:15	1
Hexachlorocyclopentadiene	<5.31		10.4	5.31	ug/L		03/27/23 09:25	03/28/23 18:15	1
Hexachloroethane	<1.01		10.4	1.01	ug/L		03/27/23 09:25	03/28/23 18:15	1
Hexachloropropene	<2.71		10.4	2.71	ug/L		03/27/23 09:25	03/29/23 12:46	1
Indeno[1,2,3-cd]pyrene	<4.38		10.4	4.38	ug/L		03/27/23 09:25	03/28/23 18:15	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-26_23_03
Lab Sample ID: 310-252084-6
Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<4.90		10.4	4.90	ug/L		03/27/23 09:25	03/29/23 12:46	1
Isophorone	<0.969		10.4	0.969	ug/L		03/27/23 09:25	03/28/23 18:15	1
Isosafrole	<2.40		10.4	2.40	ug/L		03/27/23 09:25	03/29/23 12:46	1
Kepone	<1.04		10.4	1.04	ug/L		03/27/23 09:25	03/29/23 12:46	1
Methapyrilene	<0.792		10.4	0.792	ug/L		03/27/23 09:25	03/29/23 12:46	1
Methyl methanesulfonate	<3.44		10.4	3.44	ug/L		03/27/23 09:25	03/29/23 12:46	1
Methyl parathion	<2.40		10.4	2.40	ug/L		03/27/23 09:25	03/29/23 12:46	1
Nitrobenzene	<0.833		10.4	0.833	ug/L		03/27/23 09:25	03/28/23 18:15	1
N-Nitrosodiethylamine	<3.54		10.4	3.54	ug/L		03/27/23 09:25	03/29/23 12:46	1
N-Nitrosodimethylamine	<0.750		10.4	0.750	ug/L		03/27/23 09:25	03/28/23 18:15	1
N-Nitrosodi-n-butylamine	<4.06		10.4	4.06	ug/L		03/27/23 09:25	03/29/23 12:46	1
N-Nitrosodi-n-propylamine	<0.958		10.4	0.958	ug/L		03/27/23 09:25	03/28/23 18:15	1
N-Nitrosodiphenylamine	<0.781		10.4	0.781	ug/L		03/27/23 09:25	03/28/23 18:15	1
N-Nitrosomethylethylamine	<5.10		10.4	5.10	ug/L		03/27/23 09:25	03/29/23 12:46	1
N-Nitrosopiperidine	<2.81		10.4	2.81	ug/L		03/27/23 09:25	03/29/23 12:46	1
N-Nitrosopyrrolidine	<3.75		10.4	3.75	ug/L		03/27/23 09:25	03/29/23 12:46	1
o,o',o''-Triethylphosphorothioate	<3.33		10.4	3.33	ug/L		03/27/23 09:25	03/29/23 12:46	1
o-Toluidine	<3.02		10.4	3.02	ug/L		03/27/23 09:25	03/29/23 12:46	1
p-Dimethylamino azobenzene	<2.29		10.4	2.29	ug/L		03/27/23 09:25	03/29/23 12:46	1
Pentachlorobenzene	<2.92		10.4	2.92	ug/L		03/27/23 09:25	03/29/23 12:46	1
Pentachloronitrobenzene	<6.04		10.4	6.04	ug/L		03/27/23 09:25	03/29/23 12:46	1
Pentachlorophenol	<10.0		10.4	10.0	ug/L		03/27/23 09:25	03/28/23 18:15	1
Phenacetin	<1.98		10.4	1.98	ug/L		03/27/23 09:25	03/29/23 12:46	1
Phenanthrene	<0.823		10.4	0.823	ug/L		03/27/23 09:25	03/28/23 18:15	1
Phenol	<1.15		10.4	1.15	ug/L		03/27/23 09:25	03/28/23 18:15	1
Phorate	<3.33		10.4	3.33	ug/L		03/27/23 09:25	03/29/23 12:46	1
Pronamide	<2.81		10.4	2.81	ug/L		03/27/23 09:25	03/29/23 12:46	1
Pyrene	<0.823		10.4	0.823	ug/L		03/27/23 09:25	03/28/23 18:15	1
Safrole	<2.92		10.4	2.92	ug/L		03/27/23 09:25	03/29/23 12:46	1
Thionazin	<3.65		10.4	3.65	ug/L		03/27/23 09:25	03/29/23 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*66*		*13 - 110*	*03/27/23 09:25*	*03/28/23 18:15*	*1*
Phenol-d5 (Surr)	*57*		*12 - 110*	*03/27/23 09:25*	*03/28/23 18:15*	*1*
Nitrobenzene-d5 (Surr)	*86*		*27 - 115*	*03/27/23 09:25*	*03/28/23 18:15*	*1*
2-Fluorobiphenyl (Surr)	*76*		*28 - 110*	*03/27/23 09:25*	*03/28/23 18:15*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*15 - 121*	*03/27/23 09:25*	*03/28/23 18:15*	*1*
Terphenyl-d14 (Surr)	*73*		*10 - 125*	*03/27/23 09:25*	*03/28/23 18:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.570		10.0	0.570	mg/L			03/27/23 12:37	1
Isobutanol	<0.550		10.0	0.550	mg/L			03/27/23 12:37	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0281		0.0667	0.0281	ug/L		03/27/23 08:07	03/30/23 17:45	1
4,4'-DDE	<0.0281		0.0667	0.0281	ug/L		03/27/23 08:07	03/30/23 17:45	1
4,4'-DDT	<0.0438		0.0667	0.0438	ug/L		03/27/23 08:07	03/30/23 17:45	1
Aldrin	<0.0333		0.0667	0.0333	ug/L		03/27/23 08:07	03/30/23 17:45	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-26_23_03
Lab Sample ID: 310-252084-6
Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0302		0.0667	0.0302	ug/L		03/27/23 08:07	03/30/23 17:45	1
beta-BHC	<0.0385		0.0667	0.0385	ug/L		03/27/23 08:07	03/30/23 17:45	1
Chlordane (technical)	<0.844		2.08	0.844	ug/L		03/27/23 08:07	03/30/23 17:45	1
delta-BHC	<0.0281		0.0667	0.0281	ug/L		03/27/23 08:07	03/30/23 17:45	1
Dieldrin	<0.0271		0.0667	0.0271	ug/L		03/27/23 08:07	03/30/23 17:45	1
Endosulfan I	<0.0344		0.0667	0.0344	ug/L		03/27/23 08:07	03/30/23 17:45	1
Endosulfan II	<0.0302		0.0667	0.0302	ug/L		03/27/23 08:07	03/30/23 17:45	1
Endosulfan sulfate	<0.0313		0.0667	0.0313	ug/L		03/27/23 08:07	03/30/23 17:45	1
Endrin	<0.0271		0.0667	0.0271	ug/L		03/27/23 08:07	03/30/23 17:45	1
Endrin aldehyde	<0.0302		0.0667	0.0302	ug/L		03/27/23 08:07	03/30/23 17:45	1
gamma-BHC (Lindane)	<0.0375		0.0667	0.0375	ug/L		03/27/23 08:07	03/30/23 17:45	1
Heptachlor	<0.0344		0.0667	0.0344	ug/L		03/27/23 08:07	03/30/23 17:45	1
Heptachlor epoxide	<0.0302		0.0667	0.0302	ug/L		03/27/23 08:07	03/30/23 17:45	1
Methoxychlor	<0.0427		0.0667	0.0427	ug/L		03/27/23 08:07	03/30/23 17:45	1
Toxaphene	<0.719		2.08	0.719	ug/L		03/27/23 08:07	03/30/23 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*44*		*10 - 136*	*03/27/23 08:07*	*03/30/23 17:45*	*1*
Tetrachloro-m-xylene	*74*		*10 - 130*	*03/27/23 08:07*	*03/30/23 17:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.177		0.833	0.177	ug/L		03/27/23 08:07	03/30/23 17:45	1
PCB-1221	<0.177		0.833	0.177	ug/L		03/27/23 08:07	03/30/23 17:45	1
PCB-1232	<0.177		0.833	0.177	ug/L		03/27/23 08:07	03/30/23 17:45	1
PCB-1242	<0.177		0.833	0.177	ug/L		03/27/23 08:07	03/30/23 17:45	1
PCB-1248	<0.115		0.833	0.115	ug/L		03/27/23 08:07	03/30/23 17:45	1
PCB-1254	<0.115		0.833	0.115	ug/L		03/27/23 08:07	03/30/23 17:45	1
PCB-1260	<0.115		0.833	0.115	ug/L		03/27/23 08:07	03/30/23 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*44*		*10 - 136*	*03/27/23 08:07*	*03/30/23 17:45*	*1*
Tetrachloro-m-xylene	*74*		*10 - 130*	*03/27/23 08:07*	*03/30/23 17:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 15:51	1
Arsenic	**0.00149**	**J**	0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 15:51	1
Barium	**0.131**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 15:51	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 15:51	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 15:51	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:51	1
Cobalt	**0.000334**	**J**	0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 15:51	1
Copper	**0.00213**	**J**	0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 15:51	1
Lead	**0.000286**	**J**	0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 15:51	1
Nickel	<0.00190		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 15:51	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 15:51	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 15:51	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 15:51	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 15:51	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-26_23_03
Lab Sample ID: 310-252084-6
Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:51	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 15:51	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		03/28/23 12:24	03/29/23 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00430		0.0100	0.00430	mg/L		03/28/23 10:17	03/30/23 23:08	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		03/28/23 18:06	03/29/23 04:39	1
Total Suspended Solids (USGS I-3765-85)	**12.8**		3.75	1.28	mg/L			03/28/23 10:08	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 02:17	1
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 02:17	1
2,4-D	<2.0		2.0		ug/L		03/28/23 00:00	04/06/23 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*68.6*		*31 - 116*	*03/28/23 00:00*	*04/06/23 02:17*	*1*

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-32_23_03

Date Collected: 03/22/23 16:25
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 15:32	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 15:32	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 15:32	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 15:32	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 15:32	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 15:32	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 15:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 15:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 15:32	1
1,2-Dichlorobenzene	**0.481**	**J**	1.00	0.370	ug/L			03/27/23 15:32	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 15:32	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 15:32	1
1,4-Dichlorobenzene	**2.32**		1.00	0.230	ug/L			03/27/23 15:32	1
2-Butanone (MEK)	**2.38**	**J**	10.0	2.10	ug/L			03/27/23 15:32	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 15:32	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 15:32	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 15:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 15:32	1
Benzene	**0.384**	**J**	0.500	0.220	ug/L			03/27/23 15:32	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 15:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 15:32	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 15:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 15:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 15:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 15:32	1
Chlorobenzene	**8.93**		1.00	0.400	ug/L			03/27/23 15:32	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 15:32	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 15:32	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 15:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 15:32	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 15:32	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 15:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 15:32	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 15:32	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 15:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 15:32	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 15:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 15:32	1
Toluene	**0.503**	**J**	1.00	0.430	ug/L			03/27/23 15:32	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 15:32	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 15:32	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 15:32	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 15:32	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 15:32	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 15:32	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 15:32	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*03/27/23 15:32*	*1*

Client Sample ID: MW-32_23_03
Lab Sample ID: 310-252084-7

Date Collected: 03/22/23 16:25
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 15:32*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 15:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	**7.57**	**J**	10.9	5.98	ug/L		03/27/23 09:25	03/28/23 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*93*		*27 - 115*	*03/27/23 09:25*	*03/28/23 18:42*	*1*
2-Fluorobiphenyl (Surr)	*79*		*28 - 110*	*03/27/23 09:25*	*03/28/23 18:42*	*1*
Terphenyl-d14 (Surr)	*44*		*10 - 125*	*03/27/23 09:25*	*03/28/23 18:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 15:55	1
Arsenic	**0.135**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 15:55	1
Barium	**0.695**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 15:55	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 15:55	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 15:55	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:55	1
Cobalt	**0.00354**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 15:55	1
Copper	**0.00222**	**J**	0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 15:55	1
Lead	**0.000534**		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 15:55	1
Nickel	**0.0285**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 15:55	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 15:55	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 15:55	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 15:55	1
Vanadium	**0.00156**	**J**	0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:55	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 15:55	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 15:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**47.0**		15.0	5.10	mg/L			03/28/23 07:19	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*109*		*31 - 116*	*03/28/23 00:00*	*04/06/23 02:49*	*1*

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-33_23_03
Date Collected: 03/22/23 17:35
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 15:53	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 15:53	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 15:53	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 15:53	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 15:53	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 15:53	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 15:53	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 15:53	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 15:53	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 15:53	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 15:53	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 15:53	1
1,4-Dichlorobenzene	**0.676**	**J**	1.00	0.230	ug/L			03/27/23 15:53	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 15:53	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 15:53	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 15:53	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 15:53	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 15:53	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 15:53	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 15:53	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 15:53	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 15:53	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 15:53	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 15:53	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 15:53	1
Chlorobenzene	**4.04**		1.00	0.400	ug/L			03/27/23 15:53	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 15:53	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 15:53	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 15:53	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 15:53	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 15:53	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 15:53	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 15:53	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 15:53	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 15:53	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 15:53	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 15:53	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 15:53	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 15:53	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 15:53	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 15:53	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 15:53	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 15:53	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 15:53	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 15:53	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 15:53	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*03/27/23 15:53*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-33_23_03
Lab Sample ID: 310-252084-8
Date Collected: 03/22/23 17:35
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/23 15:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 15:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<6.11		11.1	6.11	ug/L		03/27/23 09:25	03/28/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*64*		*27 - 115*	*03/27/23 09:25*	*03/28/23 19:09*	*1*
2-Fluorobiphenyl (Surr)	*54*		*28 - 110*	*03/27/23 09:25*	*03/28/23 19:09*	*1*
Terphenyl-d14 (Surr)	*34*		*10 - 125*	*03/27/23 09:25*	*03/28/23 19:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 15:58	1
Arsenic	**0.0399**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 15:58	1
Barium	**0.449**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 15:58	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 15:58	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 15:58	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:58	1
Cobalt	**0.00104**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 15:58	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 15:58	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 15:58	1
Nickel	**0.00555**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 15:58	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 15:58	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 15:58	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 15:58	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 15:58	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 15:58	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 15:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**9.00**		5.00	1.70	mg/L			03/28/23 07:19	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-37_23_03
Lab Sample ID: 310-252084-9
Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 16:14	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 16:14	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 16:14	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 16:14	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 16:14	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 16:14	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			03/27/23 16:14	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 16:14	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			03/27/23 16:14	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 16:14	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 16:14	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 16:14	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 16:14	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 16:14	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 16:14	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			03/27/23 16:14	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 16:14	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			03/27/23 16:14	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 16:14	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 16:14	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 16:14	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 16:14	1
Acrolein	<3.60		10.0	3.60	ug/L			03/27/23 16:14	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 16:14	1
Allyl chloride	<0.700		2.00	0.700	ug/L			03/27/23 16:14	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 16:14	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 16:14	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 16:14	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 16:14	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 16:14	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 16:14	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 16:14	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 16:14	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 16:14	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 16:14	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 16:14	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 16:14	1
Chloroprene	<0.230		1.00	0.230	ug/L			03/27/23 16:14	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 16:14	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 16:14	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 16:14	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			03/27/23 16:14	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			03/27/23 16:14	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 16:14	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 16:14	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			03/27/23 16:14	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			03/27/23 16:14	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			03/27/23 16:14	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 16:14	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-37_23_03
Lab Sample ID: 310-252084-9
Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			03/27/23 16:14	1
o-Xylene	<0.400		1.00	0.400	ug/L			03/27/23 16:14	1
Propionitrile	<3.40		10.0	3.40	ug/L			03/27/23 16:14	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 16:14	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 16:14	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 16:14	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 16:14	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 16:14	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 16:14	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 16:14	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 16:14	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 16:14	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 16:14	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 128*		*03/27/23 16:14*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 16:14*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 16:14*	*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	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 19:35	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 13:11	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/28/23 19:35	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:11	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 13:11	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		03/27/23 09:25	03/29/23 13:11	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		03/27/23 09:25	03/28/23 19:35	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 13:11	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		03/27/23 09:25	03/28/23 19:35	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 19:35	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		03/27/23 09:25	03/28/23 19:35	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		03/27/23 09:25	03/28/23 19:35	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		03/27/23 09:25	03/29/23 13:11	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		03/27/23 09:25	03/28/23 19:35	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		03/27/23 09:25	03/28/23 19:35	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		03/27/23 09:25	03/28/23 19:35	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		03/27/23 09:25	03/29/23 13:11	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		03/27/23 09:25	03/29/23 13:11	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/28/23 19:35	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		03/27/23 09:25	03/28/23 19:35	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-37_23_03
Lab Sample ID: 310-252084-9
Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 13:11	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 19:35	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		03/27/23 09:25	03/28/23 19:35	1
4-Chloroaniline	<0.620	*1	10.0	0.620	ug/L		03/27/23 09:25	03/28/23 19:35	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 19:35	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 19:35	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		03/27/23 09:25	03/28/23 19:35	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		03/27/23 09:25	03/28/23 19:35	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 13:11	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 13:11	1
Acenaphthene	<0.640		10.0	0.640	ug/L		03/27/23 09:25	03/28/23 19:35	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		03/27/23 09:25	03/28/23 19:35	1
Acetophenone	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 19:35	1
Anthracene	<0.870		10.0	0.870	ug/L		03/27/23 09:25	03/28/23 19:35	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		03/27/23 09:25	03/28/23 19:35	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		03/27/23 09:25	03/28/23 19:35	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		03/27/23 09:25	03/28/23 19:35	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		03/27/23 09:25	03/28/23 19:35	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/28/23 19:35	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		03/27/23 09:25	03/28/23 19:35	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		03/27/23 09:25	03/28/23 19:35	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		03/27/23 09:25	03/28/23 19:35	1
2,2'-oxybis[1-chloropropane]	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 19:35	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		03/27/23 09:25	03/28/23 19:35	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		03/27/23 09:25	03/28/23 19:35	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:11	1
Chrysene	<0.870		10.0	0.870	ug/L		03/27/23 09:25	03/28/23 19:35	1
Diallate	<4.00		10.0	4.00	ug/L		03/27/23 09:25	03/29/23 13:11	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		03/27/23 09:25	03/28/23 19:35	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		03/27/23 09:25	03/28/23 19:35	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		03/27/23 09:25	03/28/23 19:35	1
Dimethoate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:11	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		03/27/23 09:25	03/28/23 19:35	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		03/27/23 09:25	03/28/23 19:35	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		03/27/23 09:25	03/28/23 19:35	1
Dinoseb	<2.40		10.0	2.40	ug/L		03/27/23 09:25	03/29/23 13:11	1
Diphenylamine	<6.00		10.0	6.00	ug/L		03/27/23 09:25	03/28/23 19:35	1
Disulfoton	<2.40		10.0	2.40	ug/L		03/27/23 09:25	03/29/23 13:11	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:11	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 13:11	1
Famphur	<3.80		10.0	3.80	ug/L		03/27/23 09:25	03/29/23 13:11	1
Fluoranthene	<1.70		10.0	1.70	ug/L		03/27/23 09:25	03/28/23 19:35	1
Fluorene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 19:35	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 19:35	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		03/27/23 09:25	03/28/23 19:35	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		03/27/23 09:25	03/28/23 19:35	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		03/27/23 09:25	03/28/23 19:35	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		03/27/23 09:25	03/29/23 13:11	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		03/27/23 09:25	03/28/23 19:35	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-37_23_03
Lab Sample ID: 310-252084-9
Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<4.70		10.0	4.70	ug/L		03/27/23 09:25	03/29/23 13:11	1
Isophorone	<0.930		10.0	0.930	ug/L		03/27/23 09:25	03/28/23 19:35	1
Isosafrole	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 13:11	1
Kepone	<1.00		10.0	1.00	ug/L		03/27/23 09:25	03/29/23 13:11	1
Methapyrilene	<0.760		10.0	0.760	ug/L		03/27/23 09:25	03/29/23 13:11	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		03/27/23 09:25	03/29/23 13:11	1
Methyl parathion	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 13:11	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		03/27/23 09:25	03/28/23 19:35	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		03/27/23 09:25	03/29/23 13:11	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		03/27/23 09:25	03/28/23 19:35	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		03/27/23 09:25	03/29/23 13:11	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		03/27/23 09:25	03/28/23 19:35	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		03/27/23 09:25	03/28/23 19:35	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		03/27/23 09:25	03/29/23 13:11	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 13:11	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:11	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/29/23 13:11	1
o-Toluidine	<2.90		10.0	2.90	ug/L		03/27/23 09:25	03/29/23 13:11	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 13:11	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 13:11	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		03/27/23 09:25	03/29/23 13:11	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		03/27/23 09:25	03/28/23 19:35	1
Phenacetin	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 13:11	1
Phenanthrene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 19:35	1
Phenol	<1.10		10.0	1.10	ug/L		03/27/23 09:25	03/28/23 19:35	1
Phorate	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/29/23 13:11	1
Pronamide	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 13:11	1
Pyrene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 19:35	1
Safrole	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 13:11	1
Thionazin	<3.50		10.0	3.50	ug/L		03/27/23 09:25	03/29/23 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*75*		*13 - 110*	*03/27/23 09:25*	*03/28/23 19:35*	*1*
Phenol-d5 (Surr)	*62*		*12 - 110*	*03/27/23 09:25*	*03/28/23 19:35*	*1*
Nitrobenzene-d5 (Surr)	*96*		*27 - 115*	*03/27/23 09:25*	*03/28/23 19:35*	*1*
2-Fluorobiphenyl (Surr)	*82*		*28 - 110*	*03/27/23 09:25*	*03/28/23 19:35*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*15 - 121*	*03/27/23 09:25*	*03/28/23 19:35*	*1*
Terphenyl-d14 (Surr)	*88*		*10 - 125*	*03/27/23 09:25*	*03/28/23 19:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.570		10.0	0.570	mg/L			03/27/23 12:56	1
Isobutanol	<0.550		10.0	0.550	mg/L			03/27/23 12:56	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0293		0.0696	0.0293	ug/L		03/27/23 08:07	03/30/23 17:58	1
4,4'-DDE	<0.0293		0.0696	0.0293	ug/L		03/27/23 08:07	03/30/23 17:58	1
4,4'-DDT	<0.0457		0.0696	0.0457	ug/L		03/27/23 08:07	03/30/23 17:58	1
Aldrin	<0.0348		0.0696	0.0348	ug/L		03/27/23 08:07	03/30/23 17:58	1

Client Sample ID: MW-37_23_03
Lab Sample ID: 310-252084-9

Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0315		0.0696	0.0315	ug/L		03/27/23 08:07	03/30/23 17:58	1
beta-BHC	<0.0402		0.0696	0.0402	ug/L		03/27/23 08:07	03/30/23 17:58	1
Chlordane (technical)	<0.880		2.17	0.880	ug/L		03/27/23 08:07	03/30/23 17:58	1
delta-BHC	<0.0293		0.0696	0.0293	ug/L		03/27/23 08:07	03/30/23 17:58	1
Dieldrin	<0.0283		0.0696	0.0283	ug/L		03/27/23 08:07	03/30/23 17:58	1
Endosulfan I	<0.0359		0.0696	0.0359	ug/L		03/27/23 08:07	03/30/23 17:58	1
Endosulfan II	<0.0315		0.0696	0.0315	ug/L		03/27/23 08:07	03/30/23 17:58	1
Endosulfan sulfate	<0.0326		0.0696	0.0326	ug/L		03/27/23 08:07	03/30/23 17:58	1
Endrin	<0.0283		0.0696	0.0283	ug/L		03/27/23 08:07	03/30/23 17:58	1
Endrin aldehyde	<0.0315		0.0696	0.0315	ug/L		03/27/23 08:07	03/30/23 17:58	1
gamma-BHC (Lindane)	<0.0391		0.0696	0.0391	ug/L		03/27/23 08:07	03/30/23 17:58	1
Heptachlor	<0.0359		0.0696	0.0359	ug/L		03/27/23 08:07	03/30/23 17:58	1
Heptachlor epoxide	<0.0315		0.0696	0.0315	ug/L		03/27/23 08:07	03/30/23 17:58	1
Methoxychlor	<0.0446		0.0696	0.0446	ug/L		03/27/23 08:07	03/30/23 17:58	1
Toxaphene	<0.750		2.17	0.750	ug/L		03/27/23 08:07	03/30/23 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*53*		*10 - 136*	*03/27/23 08:07*	*03/30/23 17:58*	*1*
Tetrachloro-m-xylene	*79*		*10 - 130*	*03/27/23 08:07*	*03/30/23 17:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.185		0.870	0.185	ug/L		03/27/23 08:07	03/30/23 17:58	1
PCB-1221	<0.185		0.870	0.185	ug/L		03/27/23 08:07	03/30/23 17:58	1
PCB-1232	<0.185		0.870	0.185	ug/L		03/27/23 08:07	03/30/23 17:58	1
PCB-1242	<0.185		0.870	0.185	ug/L		03/27/23 08:07	03/30/23 17:58	1
PCB-1248	<0.120		0.870	0.120	ug/L		03/27/23 08:07	03/30/23 17:58	1
PCB-1254	<0.120		0.870	0.120	ug/L		03/27/23 08:07	03/30/23 17:58	1
PCB-1260	<0.120		0.870	0.120	ug/L		03/27/23 08:07	03/30/23 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*53*		*10 - 136*	*03/27/23 08:07*	*03/30/23 17:58*	*1*
Tetrachloro-m-xylene	*79*		*10 - 130*	*03/27/23 08:07*	*03/30/23 17:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 16:01	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 16:01	1
Barium	**0.0286**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 16:01	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 16:01	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 16:01	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 16:01	1
Cobalt	<0.000190		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 16:01	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 16:01	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 16:01	1
Nickel	<0.00190		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 16:01	1
Selenium	**0.00104**	**J**	0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 16:01	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 16:01	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 16:01	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 16:01	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-37_23_03
Lab Sample ID: 310-252084-9
Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 16:01	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 16:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		03/28/23 12:24	03/29/23 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00430		0.0100	0.00430	mg/L		03/28/23 10:17	03/30/23 23:06	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		03/28/23 18:10	03/29/23 04:53	1
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			03/28/23 10:08	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 03:22	1
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 03:22	1
2,4-D	<2.0		2.0		ug/L		03/28/23 00:00	04/06/23 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*68.8*		*31 - 116*	*03/28/23 00:00*	*04/06/23 03:22*	*1*

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-38_23_03

Date Collected: 03/22/23 11:25
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 16:35	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 16:35	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 16:35	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 16:35	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 16:35	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 16:35	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 16:35	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 16:35	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 16:35	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 16:35	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 16:35	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 16:35	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 16:35	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 16:35	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 16:35	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 16:35	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 16:35	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 16:35	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 16:35	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 16:35	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 16:35	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 16:35	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 16:35	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 16:35	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 16:35	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 16:35	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 16:35	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 16:35	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 16:35	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 16:35	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 16:35	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 16:35	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 16:35	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 16:35	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 16:35	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 16:35	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 16:35	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 16:35	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 16:35	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 16:35	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 16:35	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 16:35	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 16:35	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 16:35	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 16:35	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 16:35	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*03/27/23 16:35*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-38_23_03
Lab Sample ID: 310-252084-10
Date Collected: 03/22/23 11:25
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 16:35*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 16:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.85		10.6	5.85	ug/L		03/27/23 09:25	03/28/23 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*86*		*27 - 115*	*03/27/23 09:25*	*03/28/23 20:02*	*1*
2-Fluorobiphenyl (Surr)	*73*		*28 - 110*	*03/27/23 09:25*	*03/28/23 20:02*	*1*
Terphenyl-d14 (Surr)	*34*		*10 - 125*	*03/27/23 09:25*	*03/28/23 20:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 16:05	1
Arsenic	**0.00122**	**J**	0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 16:05	1
Barium	**0.0415**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 16:05	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 16:05	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 16:05	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 16:05	1
Cobalt	<0.000190		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 16:05	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 16:05	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 16:05	1
Nickel	<0.00190		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 16:05	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 16:05	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 16:05	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 16:05	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 16:05	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 16:05	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			03/28/23 08:38	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101A_23_03
Lab Sample ID: 310-252084-11
Date Collected: 03/22/23 13:50
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 16:56	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 16:56	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 16:56	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 16:56	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 16:56	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 16:56	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			03/27/23 16:56	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 16:56	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			03/27/23 16:56	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 16:56	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 16:56	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 16:56	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 16:56	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 16:56	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 16:56	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			03/27/23 16:56	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 16:56	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			03/27/23 16:56	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 16:56	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 16:56	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 16:56	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 16:56	1
Acrolein	<3.60		10.0	3.60	ug/L			03/27/23 16:56	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 16:56	1
Allyl chloride	<0.700		2.00	0.700	ug/L			03/27/23 16:56	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 16:56	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 16:56	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 16:56	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 16:56	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 16:56	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 16:56	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 16:56	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 16:56	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 16:56	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 16:56	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 16:56	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 16:56	1
Chloroprene	<0.230		1.00	0.230	ug/L			03/27/23 16:56	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 16:56	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 16:56	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 16:56	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			03/27/23 16:56	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			03/27/23 16:56	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 16:56	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 16:56	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			03/27/23 16:56	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			03/27/23 16:56	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			03/27/23 16:56	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 16:56	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101A_23_03
Lab Sample ID: 310-252084-11
Date Collected: 03/22/23 13:50
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			03/27/23 16:56	1
o-Xylene	<0.400		1.00	0.400	ug/L			03/27/23 16:56	1
Propionitrile	<3.40		10.0	3.40	ug/L			03/27/23 16:56	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 16:56	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 16:56	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 16:56	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 16:56	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 16:56	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 16:56	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 16:56	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 16:56	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 16:56	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 16:56	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 128*		*03/27/23 16:56*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 16:56*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 16:56*	*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	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 20:28	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 13:35	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/28/23 20:28	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:35	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 13:35	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		03/27/23 09:25	03/29/23 13:35	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		03/27/23 09:25	03/28/23 20:28	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 13:35	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		03/27/23 09:25	03/28/23 20:28	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 20:28	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		03/27/23 09:25	03/28/23 20:28	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		03/27/23 09:25	03/28/23 20:28	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		03/27/23 09:25	03/29/23 13:35	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		03/27/23 09:25	03/28/23 20:28	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		03/27/23 09:25	03/28/23 20:28	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		03/27/23 09:25	03/28/23 20:28	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		03/27/23 09:25	03/29/23 13:35	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		03/27/23 09:25	03/29/23 13:35	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/28/23 20:28	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		03/27/23 09:25	03/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101A_23_03
Lab Sample ID: 310-252084-11
Date Collected: 03/22/23 13:50
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 13:35	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 20:28	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		03/27/23 09:25	03/28/23 20:28	1
4-Chloroaniline	<0.620	*1	10.0	0.620	ug/L		03/27/23 09:25	03/28/23 20:28	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 20:28	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 20:28	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		03/27/23 09:25	03/28/23 20:28	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		03/27/23 09:25	03/28/23 20:28	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 13:35	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 13:35	1
Acenaphthene	<0.640		10.0	0.640	ug/L		03/27/23 09:25	03/28/23 20:28	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		03/27/23 09:25	03/28/23 20:28	1
Acetophenone	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 20:28	1
Anthracene	<0.870		10.0	0.870	ug/L		03/27/23 09:25	03/28/23 20:28	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		03/27/23 09:25	03/28/23 20:28	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		03/27/23 09:25	03/28/23 20:28	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		03/27/23 09:25	03/28/23 20:28	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		03/27/23 09:25	03/28/23 20:28	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/28/23 20:28	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		03/27/23 09:25	03/28/23 20:28	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		03/27/23 09:25	03/28/23 20:28	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		03/27/23 09:25	03/28/23 20:28	1
2,2'-oxybis[1-chloropropane]	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 20:28	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		03/27/23 09:25	03/28/23 20:28	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		03/27/23 09:25	03/28/23 20:28	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:35	1
Chrysene	<0.870		10.0	0.870	ug/L		03/27/23 09:25	03/28/23 20:28	1
Diallate	<4.00		10.0	4.00	ug/L		03/27/23 09:25	03/29/23 13:35	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		03/27/23 09:25	03/28/23 20:28	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		03/27/23 09:25	03/28/23 20:28	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		03/27/23 09:25	03/28/23 20:28	1
Dimethoate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:35	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		03/27/23 09:25	03/28/23 20:28	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		03/27/23 09:25	03/28/23 20:28	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		03/27/23 09:25	03/28/23 20:28	1
Dinoseb	<2.40		10.0	2.40	ug/L		03/27/23 09:25	03/29/23 13:35	1
Diphenylamine	<6.00		10.0	6.00	ug/L		03/27/23 09:25	03/28/23 20:28	1
Disulfoton	<2.40		10.0	2.40	ug/L		03/27/23 09:25	03/29/23 13:35	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:35	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 13:35	1
Famphur	<3.80		10.0	3.80	ug/L		03/27/23 09:25	03/29/23 13:35	1
Fluoranthene	<1.70		10.0	1.70	ug/L		03/27/23 09:25	03/28/23 20:28	1
Fluorene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 20:28	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 20:28	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		03/27/23 09:25	03/28/23 20:28	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		03/27/23 09:25	03/28/23 20:28	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		03/27/23 09:25	03/28/23 20:28	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		03/27/23 09:25	03/29/23 13:35	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		03/27/23 09:25	03/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101A_23_03
Lab Sample ID: 310-252084-11
Date Collected: 03/22/23 13:50
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<4.70		10.0	4.70	ug/L		03/27/23 09:25	03/29/23 13:35	1
Isophorone	<0.930		10.0	0.930	ug/L		03/27/23 09:25	03/28/23 20:28	1
Isosafrole	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 13:35	1
Kepone	<1.00		10.0	1.00	ug/L		03/27/23 09:25	03/29/23 13:35	1
Methapyrilene	<0.760		10.0	0.760	ug/L		03/27/23 09:25	03/29/23 13:35	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		03/27/23 09:25	03/29/23 13:35	1
Methyl parathion	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 13:35	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		03/27/23 09:25	03/28/23 20:28	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		03/27/23 09:25	03/29/23 13:35	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		03/27/23 09:25	03/28/23 20:28	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		03/27/23 09:25	03/29/23 13:35	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		03/27/23 09:25	03/28/23 20:28	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		03/27/23 09:25	03/28/23 20:28	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		03/27/23 09:25	03/29/23 13:35	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 13:35	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 13:35	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/29/23 13:35	1
o-Toluidine	<2.90		10.0	2.90	ug/L		03/27/23 09:25	03/29/23 13:35	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 13:35	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 13:35	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		03/27/23 09:25	03/29/23 13:35	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		03/27/23 09:25	03/28/23 20:28	1
Phenacetin	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 13:35	1
Phenanthrene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 20:28	1
Phenol	<1.10		10.0	1.10	ug/L		03/27/23 09:25	03/28/23 20:28	1
Phorate	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/29/23 13:35	1
Pronamide	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 13:35	1
Pyrene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 20:28	1
Safrole	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 13:35	1
Thionazin	<3.50		10.0	3.50	ug/L		03/27/23 09:25	03/29/23 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*59*		*13 - 110*	*03/27/23 09:25*	*03/28/23 20:28*	*1*
Phenol-d5 (Surr)	*51*		*12 - 110*	*03/27/23 09:25*	*03/28/23 20:28*	*1*
Nitrobenzene-d5 (Surr)	*92*		*27 - 115*	*03/27/23 09:25*	*03/28/23 20:28*	*1*
2-Fluorobiphenyl (Surr)	*78*		*28 - 110*	*03/27/23 09:25*	*03/28/23 20:28*	*1*
2,4,6-Tribromophenol (Surr)	*79*		*15 - 121*	*03/27/23 09:25*	*03/28/23 20:28*	*1*
Terphenyl-d14 (Surr)	*83*		*10 - 125*	*03/27/23 09:25*	*03/28/23 20:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.570		10.0	0.570	mg/L			03/27/23 13:15	1
Isobutanol	<0.550		10.0	0.550	mg/L			03/27/23 13:15	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		03/27/23 08:07	03/30/23 18:11	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		03/27/23 08:07	03/30/23 18:11	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		03/27/23 08:07	03/30/23 18:11	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		03/27/23 08:07	03/30/23 18:11	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-101A_23_03

Date Collected: 03/22/23 13:50
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-11

Matrix: 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		03/27/23 08:07	03/30/23 18:11	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		03/27/23 08:07	03/30/23 18:11	1
Chlordane (technical)	<0.810		2.00	0.810	ug/L		03/27/23 08:07	03/30/23 18:11	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		03/27/23 08:07	03/30/23 18:11	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		03/27/23 08:07	03/30/23 18:11	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		03/27/23 08:07	03/30/23 18:11	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/30/23 18:11	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		03/27/23 08:07	03/30/23 18:11	1
Endrin	<0.0260		0.0640	0.0260	ug/L		03/27/23 08:07	03/30/23 18:11	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/30/23 18:11	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		03/27/23 08:07	03/30/23 18:11	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		03/27/23 08:07	03/30/23 18:11	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/30/23 18:11	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		03/27/23 08:07	03/30/23 18:11	1
Toxaphene	<0.690		2.00	0.690	ug/L		03/27/23 08:07	03/30/23 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*46*		*10 - 136*	*03/27/23 08:07*	*03/30/23 18:11*	*1*
Tetrachloro-m-xylene	*59*		*10 - 130*	*03/27/23 08:07*	*03/30/23 18:11*	*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		03/27/23 08:07	03/30/23 18:11	1
PCB-1221	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/30/23 18:11	1
PCB-1232	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/30/23 18:11	1
PCB-1242	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/30/23 18:11	1
PCB-1248	<0.110		0.800	0.110	ug/L		03/27/23 08:07	03/30/23 18:11	1
PCB-1254	<0.110		0.800	0.110	ug/L		03/27/23 08:07	03/30/23 18:11	1
PCB-1260	<0.110		0.800	0.110	ug/L		03/27/23 08:07	03/30/23 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*46*		*10 - 136*	*03/27/23 08:07*	*03/30/23 18:11*	*1*
Tetrachloro-m-xylene	*59*		*10 - 130*	*03/27/23 08:07*	*03/30/23 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 22:28	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 22:28	1
Barium	**0.141**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 22:28	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 22:28	1
Cadmium	**0.000111**		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 22:28	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 22:28	1
Cobalt	**0.000419**	**J**	0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 22:28	1
Copper	**0.00284**	**J**	0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 22:28	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 22:28	1
Nickel	**0.00534**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 22:28	1
Selenium	**0.00137**	**J**	0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 22:28	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 22:28	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 22:28	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 22:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101A_23_03
Lab Sample ID: 310-252084-11
Date Collected: 03/22/23 13:50
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.00154**	**J**	0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 22:28	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 22:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		03/28/23 12:24	03/29/23 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00430		0.0100	0.00430	mg/L		03/28/23 10:17	03/30/23 23:01	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		03/28/23 18:20	03/29/23 05:37	1
Total Suspended Solids (USGS I-3765-85)	**12.6**		1.88	0.638	mg/L			03/28/23 10:08	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 03:55	1
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 03:55	1
2,4-D	<2.0		2.0		ug/L		03/28/23 00:00	04/06/23 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*93.5*		*31 - 116*	*03/28/23 00:00*	*04/06/23 03:55*	*1*

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-101B_23_03

Date Collected: 03/22/23 14:55
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 17:17	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 17:17	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 17:17	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 17:17	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 17:17	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 17:17	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 17:17	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 17:17	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 17:17	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 17:17	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 17:17	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 17:17	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 17:17	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 17:17	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 17:17	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 17:17	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 17:17	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 17:17	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 17:17	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 17:17	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 17:17	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 17:17	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 17:17	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 17:17	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 17:17	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 17:17	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 17:17	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 17:17	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 17:17	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 17:17	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 17:17	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 17:17	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 17:17	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 17:17	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 17:17	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 17:17	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 17:17	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 17:17	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 17:17	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 17:17	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 17:17	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 17:17	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 17:17	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 17:17	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 17:17	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 17:17	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*03/27/23 17:17*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101B_23_03
Lab Sample ID: 310-252084-12
Date Collected: 03/22/23 14:55
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 17:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 17:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.85		10.6	5.85	ug/L		03/27/23 09:25	03/28/23 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*66*		*27 - 115*	*03/27/23 09:25*	*03/28/23 20:54*	*1*
2-Fluorobiphenyl (Surr)	*57*		*28 - 110*	*03/27/23 09:25*	*03/28/23 20:54*	*1*
Terphenyl-d14 (Surr)	*26*		*10 - 125*	*03/27/23 09:25*	*03/28/23 20:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 22:31	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 22:31	1
Barium	**0.114**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 22:31	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 22:31	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 22:31	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 22:31	1
Cobalt	**0.000382**	**J**	0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 22:31	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 22:31	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 22:31	1
Nickel	**0.00305**	**J**	0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 22:31	1
Selenium	**0.00236**	**J**	0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 22:31	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 22:31	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 22:31	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 22:31	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 22:31	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 22:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			03/28/23 07:19	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-109B_23_03

Date Collected: 03/23/23 15:20
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 17:38	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 17:38	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 17:38	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 17:38	1
1,1-Dichloroethane	**0.959**	**J**	1.00	0.220	ug/L			03/27/23 17:38	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 17:38	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 17:38	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 17:38	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 17:38	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 17:38	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 17:38	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 17:38	1
1,4-Dichlorobenzene	**1.72**		1.00	0.230	ug/L			03/27/23 17:38	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 17:38	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 17:38	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 17:38	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 17:38	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 17:38	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 17:38	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 17:38	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 17:38	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 17:38	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 17:38	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 17:38	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 17:38	1
Chlorobenzene	**7.41**		1.00	0.400	ug/L			03/27/23 17:38	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 17:38	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 17:38	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 17:38	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 17:38	1
cis-1,2-Dichloroethene	**0.423**	**J**	1.00	0.210	ug/L			03/27/23 17:38	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 17:38	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 17:38	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 17:38	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 17:38	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 17:38	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 17:38	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 17:38	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 17:38	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 17:38	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 17:38	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 17:38	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 17:38	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 17:38	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 17:38	1
Vinyl chloride	**0.267**	**J**	1.00	0.180	ug/L			03/27/23 17:38	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*03/27/23 17:38*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-109B_23_03
Lab Sample ID: 310-252084-13
Date Collected: 03/23/23 15:20
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/23 17:38*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/27/23 17:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 22:35	1
Arsenic	**0.0202**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 22:35	1
Barium	**0.633**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 22:35	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 22:35	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 22:35	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 22:35	1
Cobalt	**0.0173**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 22:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 22:35	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 22:35	1
Nickel	**0.0366**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 22:35	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 22:35	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 22:35	1
Thallium	**0.00515**		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 22:35	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 22:35	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 22:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**11.0**		5.00	1.70	mg/L			03/28/23 10:08	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: FD-1_23_03

Date Collected: 03/23/23 00:00
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 18:00	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 18:00	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 18:00	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 18:00	1
1,1-Dichloroethane	**1.97**		1.00	0.220	ug/L			03/27/23 18:00	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 18:00	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 18:00	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 18:00	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 18:00	1
1,2-Dichlorobenzene	**2.18**		1.00	0.370	ug/L			03/27/23 18:00	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 18:00	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 18:00	1
1,4-Dichlorobenzene	**14.2**		1.00	0.230	ug/L			03/27/23 18:00	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 18:00	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 18:00	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 18:00	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 18:00	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 18:00	1
Benzene	**3.67**		0.500	0.220	ug/L			03/27/23 18:00	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 18:00	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 18:00	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 18:00	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 18:00	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 18:00	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 18:00	1
Chlorobenzene	**4.16**		1.00	0.400	ug/L			03/27/23 18:00	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 18:00	1
Chloroethane	**2.00**	**J**	4.00	0.790	ug/L			03/27/23 18:00	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 18:00	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 18:00	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 18:00	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 18:00	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 18:00	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 18:00	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 18:00	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 18:00	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 18:00	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 18:00	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 18:00	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 18:00	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 18:00	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 18:00	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 18:00	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 18:00	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 18:00	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 18:00	1
Xylenes, Total	**0.415**	**J**	3.00	0.400	ug/L			03/27/23 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 128*		*03/27/23 18:00*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FD-1_23_03
Lab Sample ID: 310-252084-14

Date Collected: 03/23/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 18:00*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*03/27/23 18:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 23:07	1
Arsenic	**0.0447**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 23:07	1
Barium	**0.906**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 23:07	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 23:07	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 23:07	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 23:07	1
Cobalt	**0.00173**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 23:07	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 23:07	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 23:07	1
Nickel	**0.0117**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 23:07	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 23:07	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 23:07	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 23:07	1
Vanadium	**0.00146**	**J**	0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 23:07	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 23:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**165**		15.0	5.10	mg/L			03/28/23 07:19	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: FD-2_23_03

Date Collected: 03/23/23 00:00
Date Received: 03/24/23 14:45

Lab Sample ID: 310-252084-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 18:20	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 18:20	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 18:20	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 18:20	1
1,1-Dichloroethane	**0.910**	**J**	1.00	0.220	ug/L			03/27/23 18:20	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 18:20	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 18:20	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 18:20	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 18:20	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 18:20	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 18:20	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 18:20	1
1,4-Dichlorobenzene	**1.81**		1.00	0.230	ug/L			03/27/23 18:20	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 18:20	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 18:20	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 18:20	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 18:20	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 18:20	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 18:20	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 18:20	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 18:20	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 18:20	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 18:20	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 18:20	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 18:20	1
Chlorobenzene	**7.43**		1.00	0.400	ug/L			03/27/23 18:20	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 18:20	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 18:20	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 18:20	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 18:20	1
cis-1,2-Dichloroethene	**0.428**	**J**	1.00	0.210	ug/L			03/27/23 18:20	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 18:20	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 18:20	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 18:20	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 18:20	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 18:20	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 18:20	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 18:20	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 18:20	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 18:20	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 18:20	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 18:20	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 18:20	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 18:20	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 18:20	1
Vinyl chloride	**0.277**	**J**	1.00	0.180	ug/L			03/27/23 18:20	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*03/27/23 18:20*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FD-2_23_03
Lab Sample ID: 310-252084-15
Date Collected: 03/23/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 18:20*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/27/23 18:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 23:10	1
Arsenic	**0.0194**		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 23:10	1
Barium	**0.615**		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 23:10	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 23:10	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 23:10	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 23:10	1
Cobalt	**0.0167**		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 23:10	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 23:10	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 23:10	1
Nickel	**0.0355**		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 23:10	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 23:10	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 23:10	1
Thallium	**0.00495**		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 23:10	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 23:10	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 23:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**8.33**		5.00	1.70	mg/L			03/28/23 08:38	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 11:58	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 11:58	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 11:58	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 11:58	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 11:58	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 11:58	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			03/27/23 11:58	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 11:58	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			03/27/23 11:58	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 11:58	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 11:58	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 11:58	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 11:58	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 11:58	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 11:58	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			03/27/23 11:58	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 11:58	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			03/27/23 11:58	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 11:58	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 11:58	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 11:58	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 11:58	1
Acrolein	<3.60		10.0	3.60	ug/L			03/27/23 11:58	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 11:58	1
Allyl chloride	<0.700		2.00	0.700	ug/L			03/27/23 11:58	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 11:58	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 11:58	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 11:58	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 11:58	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 11:58	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 11:58	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 11:58	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 11:58	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 11:58	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 11:58	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 11:58	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 11:58	1
Chloroprene	<0.230		1.00	0.230	ug/L			03/27/23 11:58	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 11:58	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 11:58	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 11:58	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			03/27/23 11:58	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			03/27/23 11:58	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 11:58	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 11:58	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			03/27/23 11:58	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			03/27/23 11:58	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			03/27/23 11:58	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 11:58	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			03/27/23 11:58	1
o-Xylene	<0.400		1.00	0.400	ug/L			03/27/23 11:58	1
Propionitrile	<3.40		10.0	3.40	ug/L			03/27/23 11:58	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 11:58	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 11:58	1
Toluene	**0.597**	**J**	1.00	0.430	ug/L			03/27/23 11:58	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 11:58	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 11:58	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 11:58	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 11:58	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 11:58	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 11:58	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 11:58	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*03/27/23 11:58*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/23 11:58*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/27/23 11:58*	*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	<0.587		10.9	0.587	ug/L		03/27/23 09:25	03/28/23 21:20	1
1,3,5-Trinitrobenzene	<2.50		10.9	2.50	ug/L		03/27/23 09:25	03/29/23 14:00	1
1,3-Dinitrobenzene	<3.48		10.9	3.48	ug/L		03/27/23 09:25	03/28/23 21:20	1
1,4-Naphthoquinone	<3.91		10.9	3.91	ug/L		03/27/23 09:25	03/29/23 14:00	1
1,4-phenylenediamine	<2.07		10.9	2.07	ug/L		03/27/23 09:25	03/29/23 14:00	1
1-Naphthylamine	<2.72		10.9	2.72	ug/L		03/27/23 09:25	03/29/23 14:00	1
2,3,4,6-Tetrachlorophenol	<5.76		10.9	5.76	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,4,5-Trichlorophenol	<5.76		10.9	5.76	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,4,6-Trichlorophenol	<5.43		10.9	5.43	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,4-Dichlorophenol	<0.924		10.9	0.924	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,4-Dimethylphenol	<0.630		10.9	0.630	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,4-Dinitrophenol	<14.1		21.7	14.1	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,4-Dinitrotoluene	<6.96		10.9	6.96	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,6-Dichlorophenol	<0.750		10.9	0.750	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,6-Dinitrotoluene	<0.565		10.9	0.565	ug/L		03/27/23 09:25	03/28/23 21:20	1
2-Acetylaminofluorene	<2.93		10.9	2.93	ug/L		03/27/23 09:25	03/29/23 14:00	1
2-Chloronaphthalene	<0.696		10.9	0.696	ug/L		03/27/23 09:25	03/28/23 21:20	1
2-Chlorophenol	<0.587		10.9	0.587	ug/L		03/27/23 09:25	03/28/23 21:20	1
2-Methylnaphthalene	<0.641		10.9	0.641	ug/L		03/27/23 09:25	03/28/23 21:20	1
2-Methylphenol	<0.707		10.9	0.707	ug/L		03/27/23 09:25	03/28/23 21:20	1
2-Naphthylamine	<2.28		10.9	2.28	ug/L		03/27/23 09:25	03/29/23 14:00	1
2-Nitroaniline	<6.41		10.9	6.41	ug/L		03/27/23 09:25	03/28/23 21:20	1
2-Nitrophenol	<7.39		10.9	7.39	ug/L		03/27/23 09:25	03/28/23 21:20	1
3,3'-Dichlorobenzidine	<1.52		10.9	1.52	ug/L		03/27/23 09:25	03/28/23 21:20	1
3,3'-Dimethylbenzidine	<1.63		10.9	1.63	ug/L		03/27/23 09:25	03/29/23 14:00	1
3-Methylcholanthrene	<0.348		10.9	0.348	ug/L		03/27/23 09:25	03/29/23 14:00	1
3-Nitroaniline	<2.93		10.9	2.93	ug/L		03/27/23 09:25	03/28/23 21:20	1
4,6-Dinitro-2-methylphenol	<7.50		10.9	7.50	ug/L		03/27/23 09:25	03/28/23 21:20	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.39		10.9	2.39	ug/L		03/27/23 09:25	03/29/23 14:00	1
4-Bromophenyl phenyl ether	<0.761		10.9	0.761	ug/L		03/27/23 09:25	03/28/23 21:20	1
4-Chloro-3-methylphenol	<0.913		10.9	0.913	ug/L		03/27/23 09:25	03/28/23 21:20	1
4-Chloroaniline	<0.674	*1	10.9	0.674	ug/L		03/27/23 09:25	03/28/23 21:20	1
4-Chlorophenyl phenyl ether	<0.750		10.9	0.750	ug/L		03/27/23 09:25	03/28/23 21:20	1
Methylphenol, 3 & 4	<0.761		10.9	0.761	ug/L		03/27/23 09:25	03/28/23 21:20	1
4-Nitroaniline	<1.41		10.9	1.41	ug/L		03/27/23 09:25	03/28/23 21:20	1
4-Nitrophenol	<8.26		10.9	8.26	ug/L		03/27/23 09:25	03/28/23 21:20	1
5-Nitro-o-toluidine	<3.04		10.9	3.04	ug/L		03/27/23 09:25	03/29/23 14:00	1
7,12-Dimethylbenz(a)anthracene	<2.07		10.9	2.07	ug/L		03/27/23 09:25	03/29/23 14:00	1
Acenaphthene	<0.696		10.9	0.696	ug/L		03/27/23 09:25	03/28/23 21:20	1
Acenaphthylene	<0.783		10.9	0.783	ug/L		03/27/23 09:25	03/28/23 21:20	1
Acetophenone	<0.750		10.9	0.750	ug/L		03/27/23 09:25	03/28/23 21:20	1
Anthracene	<0.946		10.9	0.946	ug/L		03/27/23 09:25	03/28/23 21:20	1
Benzo[a]anthracene	<0.924		10.9	0.924	ug/L		03/27/23 09:25	03/28/23 21:20	1
Benzo[a]pyrene	<8.80		10.9	8.80	ug/L		03/27/23 09:25	03/28/23 21:20	1
Benzo[b]fluoranthene	<5.33		10.9	5.33	ug/L		03/27/23 09:25	03/28/23 21:20	1
Benzo[g,h,i]perylene	<6.85		10.9	6.85	ug/L		03/27/23 09:25	03/28/23 21:20	1
Benzo[k]fluoranthene	<2.39		10.9	2.39	ug/L		03/27/23 09:25	03/28/23 21:20	1
Benzyl alcohol	<1.41		10.9	1.41	ug/L		03/27/23 09:25	03/28/23 21:20	1
Bis(2-chloroethoxy)methane	<0.826		10.9	0.826	ug/L		03/27/23 09:25	03/28/23 21:20	1
Bis(2-chloroethyl)ether	<0.891		10.9	0.891	ug/L		03/27/23 09:25	03/28/23 21:20	1
2,2'-oxybis[1-chloropropane]	<0.587		10.9	0.587	ug/L		03/27/23 09:25	03/28/23 21:20	1
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		03/27/23 09:25	03/28/23 21:20	1
Butyl benzyl phthalate	<5.87		10.9	5.87	ug/L		03/27/23 09:25	03/28/23 21:20	1
Chlorobenzilate	<3.91		10.9	3.91	ug/L		03/27/23 09:25	03/29/23 14:00	1
Chrysene	<0.946		10.9	0.946	ug/L		03/27/23 09:25	03/28/23 21:20	1
Diallate	<4.35		10.9	4.35	ug/L		03/27/23 09:25	03/29/23 14:00	1
Dibenzo(a,h)anthracene	<4.24		10.9	4.24	ug/L		03/27/23 09:25	03/28/23 21:20	1
Dibenzofuran	<0.804		10.9	0.804	ug/L		03/27/23 09:25	03/28/23 21:20	1
Diethyl phthalate	<1.85		10.9	1.85	ug/L		03/27/23 09:25	03/28/23 21:20	1
Dimethoate	<3.91		10.9	3.91	ug/L		03/27/23 09:25	03/29/23 14:00	1
Dimethyl phthalate	<1.09		10.9	1.09	ug/L		03/27/23 09:25	03/28/23 21:20	1
Di-n-butyl phthalate	<6.09		10.9	6.09	ug/L		03/27/23 09:25	03/28/23 21:20	1
Di-n-octyl phthalate	<7.61		21.7	7.61	ug/L		03/27/23 09:25	03/28/23 21:20	1
Dinoseb	<2.61		10.9	2.61	ug/L		03/27/23 09:25	03/29/23 14:00	1
Diphenylamine	<6.52		10.9	6.52	ug/L		03/27/23 09:25	03/28/23 21:20	1
Disulfoton	<2.61		10.9	2.61	ug/L		03/27/23 09:25	03/29/23 14:00	1
Ethyl methanesulfonate	<3.91		10.9	3.91	ug/L		03/27/23 09:25	03/29/23 14:00	1
Ethyl Parathion	<2.39		10.9	2.39	ug/L		03/27/23 09:25	03/29/23 14:00	1
Famphur	<4.13		10.9	4.13	ug/L		03/27/23 09:25	03/29/23 14:00	1
Fluoranthene	<1.85		10.9	1.85	ug/L		03/27/23 09:25	03/28/23 21:20	1
Fluorene	<0.859		10.9	0.859	ug/L		03/27/23 09:25	03/28/23 21:20	1
Hexachlorobenzene	<0.761		10.9	0.761	ug/L		03/27/23 09:25	03/28/23 21:20	1
Hexachlorobutadiene	<0.935		10.9	0.935	ug/L		03/27/23 09:25	03/28/23 21:20	1
Hexachlorocyclopentadiene	<5.54		10.9	5.54	ug/L		03/27/23 09:25	03/28/23 21:20	1
Hexachloroethane	<1.05		10.9	1.05	ug/L		03/27/23 09:25	03/28/23 21:20	1
Hexachloropropene	<2.83		10.9	2.83	ug/L		03/27/23 09:25	03/29/23 14:00	1
Indeno[1,2,3-cd]pyrene	<4.57		10.9	4.57	ug/L		03/27/23 09:25	03/28/23 21:20	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<5.11		10.9	5.11	ug/L		03/27/23 09:25	03/29/23 14:00	1
Isophorone	<1.01		10.9	1.01	ug/L		03/27/23 09:25	03/28/23 21:20	1
Isosafrole	<2.50		10.9	2.50	ug/L		03/27/23 09:25	03/29/23 14:00	1
Kepone	<1.09		10.9	1.09	ug/L		03/27/23 09:25	03/29/23 14:00	1
Methapyrilene	<0.826		10.9	0.826	ug/L		03/27/23 09:25	03/29/23 14:00	1
Methyl methanesulfonate	<3.59		10.9	3.59	ug/L		03/27/23 09:25	03/29/23 14:00	1
Methyl parathion	<2.50		10.9	2.50	ug/L		03/27/23 09:25	03/29/23 14:00	1
Nitrobenzene	<0.870		10.9	0.870	ug/L		03/27/23 09:25	03/28/23 21:20	1
N-Nitrosodiethylamine	<3.70		10.9	3.70	ug/L		03/27/23 09:25	03/29/23 14:00	1
N-Nitrosodimethylamine	<0.783		10.9	0.783	ug/L		03/27/23 09:25	03/28/23 21:20	1
N-Nitrosodi-n-butylamine	<4.24		10.9	4.24	ug/L		03/27/23 09:25	03/29/23 14:00	1
N-Nitrosodi-n-propylamine	<1.00		10.9	1.00	ug/L		03/27/23 09:25	03/28/23 21:20	1
N-Nitrosodiphenylamine	<0.815		10.9	0.815	ug/L		03/27/23 09:25	03/28/23 21:20	1
N-Nitrosomethylethylamine	<5.33		10.9	5.33	ug/L		03/27/23 09:25	03/29/23 14:00	1
N-Nitrosopiperidine	<2.93		10.9	2.93	ug/L		03/27/23 09:25	03/29/23 14:00	1
N-Nitrosopyrrolidine	<3.91		10.9	3.91	ug/L		03/27/23 09:25	03/29/23 14:00	1
o,o',o''-Triethylphosphorothioate	<3.48		10.9	3.48	ug/L		03/27/23 09:25	03/29/23 14:00	1
o-Toluidine	<3.15		10.9	3.15	ug/L		03/27/23 09:25	03/29/23 14:00	1
p-Dimethylamino azobenzene	<2.39		10.9	2.39	ug/L		03/27/23 09:25	03/29/23 14:00	1
Pentachlorobenzene	<3.04		10.9	3.04	ug/L		03/27/23 09:25	03/29/23 14:00	1
Pentachloronitrobenzene	<6.30		10.9	6.30	ug/L		03/27/23 09:25	03/29/23 14:00	1
Pentachlorophenol	<10.4		10.9	10.4	ug/L		03/27/23 09:25	03/28/23 21:20	1
Phenacetin	<2.07		10.9	2.07	ug/L		03/27/23 09:25	03/29/23 14:00	1
Phenanthrene	<0.859		10.9	0.859	ug/L		03/27/23 09:25	03/28/23 21:20	1
Phenol	<1.20		10.9	1.20	ug/L		03/27/23 09:25	03/28/23 21:20	1
Phorate	<3.48		10.9	3.48	ug/L		03/27/23 09:25	03/29/23 14:00	1
Pronamide	<2.93		10.9	2.93	ug/L		03/27/23 09:25	03/29/23 14:00	1
Pyrene	<0.859		10.9	0.859	ug/L		03/27/23 09:25	03/28/23 21:20	1
Safrole	<3.04		10.9	3.04	ug/L		03/27/23 09:25	03/29/23 14:00	1
Thionazin	<3.80		10.9	3.80	ug/L		03/27/23 09:25	03/29/23 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*67*		*13 - 110*	*03/27/23 09:25*	*03/28/23 21:20*	*1*
Phenol-d5 (Surr)	*56*		*12 - 110*	*03/27/23 09:25*	*03/28/23 21:20*	*1*
Nitrobenzene-d5 (Surr)	*87*		*27 - 115*	*03/27/23 09:25*	*03/28/23 21:20*	*1*
2-Fluorobiphenyl (Surr)	*79*		*28 - 110*	*03/27/23 09:25*	*03/28/23 21:20*	*1*
2,4,6-Tribromophenol (Surr)	*87*		*15 - 121*	*03/27/23 09:25*	*03/28/23 21:20*	*1*
Terphenyl-d14 (Surr)	*86*		*10 - 125*	*03/27/23 09:25*	*03/28/23 21:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.570		10.0	0.570	mg/L			03/27/23 13:33	1
Isobutanol	<0.550		10.0	0.550	mg/L			03/27/23 13:33	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0300		0.0711	0.0300	ug/L		03/27/23 08:07	03/30/23 18:24	1
4,4'-DDE	<0.0300		0.0711	0.0300	ug/L		03/27/23 08:07	03/30/23 18:24	1
4,4'-DDT	<0.0467		0.0711	0.0467	ug/L		03/27/23 08:07	03/30/23 18:24	1
Aldrin	<0.0356		0.0711	0.0356	ug/L		03/27/23 08:07	03/30/23 18:24	1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0322		0.0711	0.0322	ug/L		03/27/23 08:07	03/30/23 18:24	1
beta-BHC	<0.0411		0.0711	0.0411	ug/L		03/27/23 08:07	03/30/23 18:24	1
Chlordane (technical)	<0.900		2.22	0.900	ug/L		03/27/23 08:07	03/30/23 18:24	1
delta-BHC	<0.0300		0.0711	0.0300	ug/L		03/27/23 08:07	03/30/23 18:24	1
Dieldrin	<0.0289		0.0711	0.0289	ug/L		03/27/23 08:07	03/30/23 18:24	1
Endosulfan I	<0.0367		0.0711	0.0367	ug/L		03/27/23 08:07	03/30/23 18:24	1
Endosulfan II	<0.0322		0.0711	0.0322	ug/L		03/27/23 08:07	03/30/23 18:24	1
Endosulfan sulfate	<0.0333		0.0711	0.0333	ug/L		03/27/23 08:07	03/30/23 18:24	1
Endrin	<0.0289		0.0711	0.0289	ug/L		03/27/23 08:07	03/30/23 18:24	1
Endrin aldehyde	<0.0322		0.0711	0.0322	ug/L		03/27/23 08:07	03/30/23 18:24	1
gamma-BHC (Lindane)	<0.0400		0.0711	0.0400	ug/L		03/27/23 08:07	03/30/23 18:24	1
Heptachlor	<0.0367		0.0711	0.0367	ug/L		03/27/23 08:07	03/30/23 18:24	1
Heptachlor epoxide	<0.0322		0.0711	0.0322	ug/L		03/27/23 08:07	03/30/23 18:24	1
Methoxychlor	<0.0456		0.0711	0.0456	ug/L		03/27/23 08:07	03/30/23 18:24	1
Toxaphene	<0.767		2.22	0.767	ug/L		03/27/23 08:07	03/30/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*10 - 136*	*03/27/23 08:07*	*03/30/23 18:24*	*1*
Tetrachloro-m-xylene	*95*		*10 - 130*	*03/27/23 08:07*	*03/30/23 18:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.189		0.889	0.189	ug/L		03/27/23 08:07	03/30/23 18:24	1
PCB-1221	<0.189		0.889	0.189	ug/L		03/27/23 08:07	03/30/23 18:24	1
PCB-1232	<0.189		0.889	0.189	ug/L		03/27/23 08:07	03/30/23 18:24	1
PCB-1242	<0.189		0.889	0.189	ug/L		03/27/23 08:07	03/30/23 18:24	1
PCB-1248	<0.122		0.889	0.122	ug/L		03/27/23 08:07	03/30/23 18:24	1
PCB-1254	<0.122		0.889	0.122	ug/L		03/27/23 08:07	03/30/23 18:24	1
PCB-1260	<0.122		0.889	0.122	ug/L		03/27/23 08:07	03/30/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*10 - 136*	*03/27/23 08:07*	*03/30/23 18:24*	*1*
Tetrachloro-m-xylene	*95*		*10 - 130*	*03/27/23 08:07*	*03/30/23 18:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 23:14	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 23:14	1
Barium	<0.000880		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 23:14	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 23:14	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 23:14	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 23:14	1
Cobalt	<0.000190		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 23:14	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 23:14	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 23:14	1
Nickel	<0.00190		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 23:14	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 23:14	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 23:14	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 23:14	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 23:14	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 23:14	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 23:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		03/28/23 12:24	03/29/23 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00430		0.0100	0.00430	mg/L		03/28/23 10:17	03/30/23 22:50	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		03/28/23 18:23	03/29/23 05:51	1
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			03/28/23 10:08	1

Method: 8151 - SW846 8151 Herbicide

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 04:27	1
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/06/23 04:27	1
2,4-D	<2.0		2.0		ug/L		03/28/23 00:00	04/06/23 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*56.1*		*31 - 116*	*03/28/23 00:00*	*04/06/23 04:27*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: TB-1_23_03
Lab Sample ID: 310-252084-17
Date Collected: 03/22/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 12:19	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 12:19	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 12:19	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 12:19	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 12:19	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 12:19	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			03/27/23 12:19	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 12:19	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			03/27/23 12:19	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 12:19	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 12:19	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 12:19	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 12:19	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 12:19	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 12:19	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			03/27/23 12:19	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 12:19	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			03/27/23 12:19	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 12:19	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 12:19	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 12:19	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 12:19	1
Acrolein	<3.60		10.0	3.60	ug/L			03/27/23 12:19	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 12:19	1
Allyl chloride	<0.700		2.00	0.700	ug/L			03/27/23 12:19	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 12:19	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 12:19	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 12:19	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 12:19	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 12:19	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 12:19	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 12:19	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 12:19	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 12:19	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 12:19	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 12:19	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 12:19	1
Chloroprene	<0.230		1.00	0.230	ug/L			03/27/23 12:19	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 12:19	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 12:19	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 12:19	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			03/27/23 12:19	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			03/27/23 12:19	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 12:19	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 12:19	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			03/27/23 12:19	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			03/27/23 12:19	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			03/27/23 12:19	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 12:19	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: TB-1_23_03
Lab Sample ID: 310-252084-17
Date Collected: 03/22/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.00		5.00	3.00	ug/L			03/27/23 12:19	1
o-Xylene	<0.400		1.00	0.400	ug/L			03/27/23 12:19	1
Propionitrile	<3.40		10.0	3.40	ug/L			03/27/23 12:19	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 12:19	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 12:19	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 12:19	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 12:19	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 12:19	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 12:19	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 12:19	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 12:19	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 12:19	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 12:19	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*03/27/23 12:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/23 12:19*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 12:19*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)
310-252084-1	MW-12_23_03	102	100	101
310-252084-1 MS	MW-12_23_03	100	102	100
310-252084-1 MSD	MW-12_23_03	99	101	101
310-252084-2	MW-13_23_03	96	99	100
310-252084-3	MW-14_23_03	101	99	101
310-252084-4	MW-16_23_03	97	99	101
310-252084-5	MW-17_23_03	98	99	102
310-252084-6	MW-26_23_03	98	98	101
310-252084-7	MW-32_23_03	98	98	101
310-252084-8	MW-33_23_03	97	100	101
310-252084-9	MW-37_23_03	100	98	101
310-252084-10	MW-38_23_03	102	98	101
310-252084-11	MW-101A_23_03	100	98	101
310-252084-12	MW-101B_23_03	102	98	101
310-252084-13	MW-109B_23_03	103	99	102
310-252084-14	FD-1_23_03	99	98	100
310-252084-15	FD-2_23_03	96	98	102
310-252084-16	FB-1_23_03	95	99	102
310-252084-17	TB-1_23_03	95	99	101
LCS 310-382264/6	Lab Control Sample	96	100	101
LCS 310-382264/7	Lab Control Sample	96	99	102
MB 310-382264/5	Method Blank	96	98	101

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	FBP	TPHL	2FP	PHL	TBP
Lab Sample ID	Client Sample ID	(27-115)	(28-110)	(10-125)	(13-110)	(12-110)	(15-121)
310-252084-5	MW-17_23_03	83	68	39			
310-252084-6	MW-26_23_03	86	76	73	66	57	86
310-252084-7	MW-32_23_03	93	79	44			
310-252084-8	MW-33_23_03	64	54	34			
310-252084-9	MW-37_23_03	96	82	88	75	62	85
310-252084-10	MW-38_23_03	86	73	34			
310-252084-11	MW-101A_23_03	92	78	83	59	51	79
310-252084-12	MW-101B_23_03	66	57	26			
310-252084-16	FB-1_23_03	87	79	86	67	56	87
LCS 310-382259/2-A	Lab Control Sample	86	80	85	71	58	93
LCSD 310-382259/3-A	Lab Control Sample Dup	97	89	96	78	67	101
MB 310-382259/1-A	Method Blank	85	74	93	69	59	94

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-252084-1	MW-12_23_03	59	76
LCS 310-382246/4-A	Lab Control Sample	61	81
LCSD 310-382246/5-A	Lab Control Sample Dup	71	83

Surrogate Legend
DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-252084-6	MW-26_23_03	44	74
310-252084-9	MW-37_23_03	53	79
310-252084-11	MW-101A_23_03	46	59
310-252084-16	FB-1_23_03	68	95
MB 310-382246/1-A	Method Blank	69	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)
310-252084-6	MW-26_23_03	44	74
310-252084-9	MW-37_23_03	53	79
310-252084-11	MW-101A_23_03	46	59
310-252084-16	FB-1_23_03	68	95
LCS 310-382246/2-A	Lab Control Sample	64	76
LCSD 310-382246/3-A	Lab Control Sample Dup	58	75
MB 310-382246/1-A	Method Blank	69	75

Surrogate Legend
DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8151 - SW846 8151 Herbicide

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		ılorobenzı	ılorobenzı
Lab Sample ID	Client Sample ID	(31-116)	(31-116)
1GC1491-BLK1	Method Blank	52.2	52.2

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Method: 8151 - SW846 8151 Herbicide (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	ılorobenz (31-116)	ılorobenz (31-116)								
1GC1491-BS1	Lab Control Sample	78.2	78.2								
1GC1491-MS1	Matrix Spike	95.9	95.9								
1GC1491-MSD1	Matrix Spike Duplicate	93.7	93.7								
310-252084-2	MW-13_23_03	108	108								
310-252084-4	MW-16_23_03	112	112								
310-252084-5	MW-17_23_03	32.4	32.4								
310-252084-6	MW-26_23_03	68.6	68.6								
310-252084-7	MW-32_23_03	109	109								
310-252084-9	MW-37_23_03	68.8	68.8								
310-252084-11	MW-101A_23_03	93.5	93.5								
310-252084-16	FB-1_23_03	56.1	56.1								

Surrogate Legend

2,5-Dichlorobenzoic Acid = 2,5-Dichlorobenzoic Acid

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

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

Lab Sample ID: MB 310-382264/5
Matrix: Water
Analysis Batch: 382264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			03/27/23 10:33	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			03/27/23 10:33	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			03/27/23 10:33	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			03/27/23 10:33	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			03/27/23 10:33	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			03/27/23 10:33	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			03/27/23 10:33	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			03/27/23 10:33	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			03/27/23 10:33	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			03/27/23 10:33	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			03/27/23 10:33	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			03/27/23 10:33	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			03/27/23 10:33	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			03/27/23 10:33	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			03/27/23 10:33	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			03/27/23 10:33	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			03/27/23 10:33	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			03/27/23 10:33	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			03/27/23 10:33	1
2-Hexanone	<2.00		10.0	2.00	ug/L			03/27/23 10:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			03/27/23 10:33	1
Acetone	<3.10		10.0	3.10	ug/L			03/27/23 10:33	1
Acrolein	<3.60		10.0	3.60	ug/L			03/27/23 10:33	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			03/27/23 10:33	1
Allyl chloride	<0.700		2.00	0.700	ug/L			03/27/23 10:33	1
Benzene	<0.220		0.500	0.220	ug/L			03/27/23 10:33	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			03/27/23 10:33	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			03/27/23 10:33	1
Bromoform	<0.780		5.00	0.780	ug/L			03/27/23 10:33	1
Bromomethane	<1.10		4.00	1.10	ug/L			03/27/23 10:33	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			03/27/23 10:33	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			03/27/23 10:33	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			03/27/23 10:33	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			03/27/23 10:33	1
Chloroethane	<0.790		4.00	0.790	ug/L			03/27/23 10:33	1
Chloroform	<1.30		3.00	1.30	ug/L			03/27/23 10:33	1
Chloromethane	<0.610		3.00	0.610	ug/L			03/27/23 10:33	1
Chloroprene	<0.230		1.00	0.230	ug/L			03/27/23 10:33	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			03/27/23 10:33	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			03/27/23 10:33	1
Dibromomethane	<0.330		1.00	0.330	ug/L			03/27/23 10:33	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			03/27/23 10:33	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			03/27/23 10:33	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			03/27/23 10:33	1
Iodomethane	<7.00		10.0	7.00	ug/L			03/27/23 10:33	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			03/27/23 10:33	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			03/27/23 10:33	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			03/27/23 10:33	1

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

Lab Sample ID: MB 310-382264/5
Matrix: Water
Analysis Batch: 382264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<1.70		5.00	1.70	ug/L			03/27/23 10:33	1
Naphthalene	<3.00		5.00	3.00	ug/L			03/27/23 10:33	1
o-Xylene	<0.400		1.00	0.400	ug/L			03/27/23 10:33	1
Propionitrile	<3.40		10.0	3.40	ug/L			03/27/23 10:33	1
Styrene	<0.370		1.00	0.370	ug/L			03/27/23 10:33	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			03/27/23 10:33	1
Toluene	<0.430		1.00	0.430	ug/L			03/27/23 10:33	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			03/27/23 10:33	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			03/27/23 10:33	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			03/27/23 10:33	1
Trichloroethene	<0.430		1.00	0.430	ug/L			03/27/23 10:33	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			03/27/23 10:33	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			03/27/23 10:33	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			03/27/23 10:33	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			03/27/23 10:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*03/27/23 10:33*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/27/23 10:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/27/23 10:33*	*1*

Lab Sample ID: LCS 310-382264/6
Matrix: Water
Analysis Batch: 382264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.45		ug/L		97	68 - 123
1,1,1-Trichloroethane	20.0	19.41		ug/L		97	71 - 128
1,1,2,2-Tetrachloroethane	20.0	21.09		ug/L		105	64 - 124
1,1,2-Trichloroethane	20.0	20.52		ug/L		103	70 - 124
1,1-Dichloroethane	20.0	19.01		ug/L		95	71 - 123
1,1-Dichloroethene	20.0	17.61		ug/L		88	61 - 129
1,1-Dichloropropene	20.0	19.06		ug/L		95	70 - 131
1,2,3-Trichloropropane	20.0	20.00		ug/L		100	64 - 125
1,2,4-Trichlorobenzene	20.0	17.64		ug/L		88	61 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.27		ug/L		96	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.61		ug/L		98	73 - 125
1,2-Dichlorobenzene	20.0	18.90		ug/L		95	68 - 120
1,2-Dichloroethane	20.0	19.16		ug/L		96	70 - 124
1,2-Dichloropropane	20.0	20.18		ug/L		101	73 - 121
1,3-Dichlorobenzene	20.0	17.58		ug/L		88	67 - 123
1,3-Dichloropropane	20.0	19.84		ug/L		99	72 - 124
1,4-Dichlorobenzene	20.0	18.38		ug/L		92	67 - 120
2,2-Dichloropropane	20.0	19.19		ug/L		96	50 - 150
2-Butanone (MEK)	40.0	42.94		ug/L		107	50 - 150
2-Hexanone	40.0	43.06		ug/L		108	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	42.61		ug/L		107	62 - 130
Acetone	40.0	40.55		ug/L		101	50 - 150

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

Lab Sample ID: LCS 310-382264/6
Matrix: Water
Analysis Batch: 382264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	94.8	94.11		ug/L		99	12 - 150
Acrylonitrile	200	190.0		ug/L		95	50 - 150
Allyl chloride	20.0	20.48		ug/L		102	50 - 150
Benzene	20.0	19.32		ug/L		97	73 - 122
Bromochloromethane	20.0	18.13		ug/L		91	68 - 132
Bromodichloromethane	20.0	20.13		ug/L		101	72 - 121
Bromoform	20.0	19.19		ug/L		96	55 - 129
Carbon disulfide	20.0	17.04		ug/L		85	58 - 131
Carbon tetrachloride	20.0	18.52		ug/L		93	67 - 132
Chlorobenzene	20.0	18.70		ug/L		93	69 - 121
Chlorodibromomethane	20.0	19.53		ug/L		98	69 - 122
Chloroform	20.0	18.44		ug/L		92	72 - 120
Chloroprene	20.0	20.09		ug/L		100	67 - 131
cis-1,2-Dichloroethene	20.0	18.45		ug/L		92	74 - 120
cis-1,3-Dichloropropene	20.0	19.23		ug/L		96	71 - 126
Dibromomethane	20.0	19.11		ug/L		96	72 - 123
Ethyl methacrylate	20.0	20.97		ug/L		105	64 - 131
Ethylbenzene	20.0	18.75		ug/L		94	69 - 122
Iodomethane	20.0	14.01		ug/L		70	10 - 150
Methacrylonitrile	200	203.4		ug/L		102	70 - 126
Methyl methacrylate	40.0	41.09		ug/L		103	68 - 127
Methylene Chloride	20.0	19.81		ug/L		99	50 - 150
Naphthalene	20.0	19.05		ug/L		95	50 - 150
Propionitrile	200	199.7		ug/L		100	66 - 125
Styrene	20.0	19.26		ug/L		96	67 - 125
Tetrachloroethene	20.0	17.96		ug/L		90	69 - 131
Toluene	20.0	19.20		ug/L		96	72 - 121
trans-1,2-Dichloroethene	20.0	18.80		ug/L		94	68 - 125
trans-1,3-Dichloropropene	20.0	19.39		ug/L		97	68 - 124
trans-1,4-Dichloro-2-butene	20.0	20.11		ug/L		101	48 - 150
Trichloroethene	20.0	18.85		ug/L		94	73 - 126
Vinyl acetate	40.0	34.64		ug/L		87	50 - 150
Xylenes, Total	40.0	36.55		ug/L		91	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: LCS 310-382264/7
Matrix: Water
Analysis Batch: 382264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.23		ug/L		86	24 - 150
Chloroethane	20.0	15.90		ug/L		80	51 - 137
Chloromethane	20.0	17.03		ug/L		85	37 - 150
Dichlorodifluoromethane	20.0	16.93		ug/L		85	37 - 150

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

Lab Sample ID: LCS 310-382264/7
Matrix: Water
Analysis Batch: 382264

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	16.39		ug/L		82	56 - 144
Vinyl chloride	20.0	17.48		ug/L		87	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 310-252084-1 MS
Matrix: Water
Analysis Batch: 382264

Client Sample ID: MW-12_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	<0.380		25.0	22.22		ug/L		89	52 - 130
1,1,1-Trichloroethane	<0.190		25.0	22.68		ug/L		91	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		25.0	25.38		ug/L		102	51 - 130
1,1,2-Trichloroethane	<0.450		25.0	23.35		ug/L		93	56 - 130
1,1-Dichloroethane	4.57		25.0	25.08		ug/L		82	53 - 130
1,1-Dichloroethene	<0.560		25.0	20.48		ug/L		82	39 - 130
1,1-Dichloropropene	<0.430		25.0	22.68		ug/L		91	50 - 131
1,2,3-Trichloropropane	<0.590		25.0	23.92		ug/L		96	50 - 130
1,2,4-Trichlorobenzene	<0.750		25.0	22.96		ug/L		92	45 - 130
1,2-Dibromo-3-Chloropropane	<1.20		25.0	23.86		ug/L		95	45 - 150
1,2-Dibromoethane (EDB)	<0.340		25.0	21.74		ug/L		87	59 - 130
1,2-Dichlorobenzene	2.28		25.0	25.40		ug/L		92	53 - 130
1,2-Dichloroethane	<0.390		25.0	22.22		ug/L		89	57 - 130
1,2-Dichloropropane	<0.270		25.0	23.59		ug/L		94	60 - 130
1,3-Dichlorobenzene	<0.300		25.0	22.02		ug/L		88	54 - 130
1,3-Dichloropropane	<0.400		25.0	22.42		ug/L		90	57 - 130
1,4-Dichlorobenzene	5.99		25.0	27.99		ug/L		88	53 - 130
2,2-Dichloropropane	<0.690		25.0	21.78		ug/L		87	28 - 150
2-Butanone (MEK)	<2.10		50.0	56.44		ug/L		98	47 - 150
2-Hexanone	<2.00		50.0	48.06		ug/L		96	45 - 132
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	49.41		ug/L		99	46 - 132
Acetone	<3.10		50.0	47.05		ug/L		94	35 - 150
Acrolein	<3.60		119	104.6		ug/L		88	10 - 150
Acrylonitrile	<2.20		250	214.4		ug/L		86	50 - 150
Allyl chloride	<0.700		25.0	21.39		ug/L		86	35 - 150
Benzene	0.918		25.0	22.49		ug/L		86	47 - 130
Bromochloromethane	<0.540		25.0	20.31		ug/L		81	54 - 132
Bromodichloromethane	<0.390		25.0	23.07		ug/L		92	58 - 130
Bromoform	<0.780		25.0	21.62		ug/L		86	42 - 130
Carbon disulfide	<0.450		25.0	20.60		ug/L		82	39 - 131
Carbon tetrachloride	<0.650		25.0	22.40		ug/L		90	45 - 132
Chlorobenzene	4.12		25.0	25.07		ug/L		84	54 - 130
Chlorodibromomethane	<0.750		25.0	22.13		ug/L		89	53 - 130
Chloroform	<1.30		25.0	20.86		ug/L		83	55 - 130
Chloroprene	<0.230		25.0	23.65		ug/L		95	47 - 131

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

Lab Sample ID: 310-252084-1 MS
Matrix: Water
Analysis Batch: 382264

Client Sample ID: MW-12_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	3.67		25.0	23.95		ug/L		81	52 - 130
cis-1,3-Dichloropropene	<0.250		25.0	21.50		ug/L		86	55 - 130
Dibromomethane	<0.330		25.0	21.32		ug/L		85	61 - 130
Ethyl methacrylate	<0.680		25.0	24.05		ug/L		96	50 - 131
Ethylbenzene	<0.310		25.0	21.81		ug/L		87	48 - 130
Iodomethane	<7.00		25.0	11.57		ug/L		46	10 - 150
Methacrylonitrile	<3.30		250	241.9		ug/L		97	57 - 130
Methyl methacrylate	<0.760		50.0	46.88		ug/L		94	50 - 131
Methylene Chloride	<1.70		25.0	22.10		ug/L		88	50 - 150
Naphthalene	<3.00		25.0	24.76		ug/L		99	33 - 150
Propionitrile	<3.40		250	230.6		ug/L		92	53 - 130
Styrene	<0.370		25.0	22.43		ug/L		90	46 - 130
Tetrachloroethene	<0.480		25.0	20.61		ug/L		82	42 - 131
Toluene	<0.430		25.0	21.26		ug/L		85	48 - 130
trans-1,2-Dichloroethene	<0.270		25.0	21.55		ug/L		86	54 - 130
trans-1,3-Dichloropropene	<0.560		25.0	21.36		ug/L		85	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		25.0	24.20		ug/L		97	33 - 150
Trichloroethene	<0.430		25.0	21.87		ug/L		87	55 - 130
Vinyl acetate	<2.50		50.0	38.51		ug/L		77	34 - 150
Xylenes, Total	<0.400		50.0	43.03		ug/L		86	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Lab Sample ID: 310-252084-1 MSD
Matrix: Water
Analysis Batch: 382264

Client Sample ID: MW-12_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.380		25.0	21.65		ug/L		87	52 - 130	3	20
1,1,1-Trichloroethane	<0.190		25.0	22.01		ug/L		88	49 - 130	3	20
1,1,2,2-Tetrachloroethane	<0.470		25.0	24.10		ug/L		96	51 - 130	5	20
1,1,2-Trichloroethane	<0.450		25.0	22.46		ug/L		90	56 - 130	4	20
1,1-Dichloroethane	4.57		25.0	24.60		ug/L		80	53 - 130	2	20
1,1-Dichloroethene	<0.560		25.0	19.82		ug/L		79	39 - 130	3	28
1,1-Dichloropropene	<0.430		25.0	22.10		ug/L		88	50 - 131	3	20
1,2,3-Trichloropropane	<0.590		25.0	23.32		ug/L		93	50 - 130	3	20
1,2,4-Trichlorobenzene	<0.750		25.0	23.02		ug/L		92	45 - 130	0	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	23.05		ug/L		92	45 - 150	3	20
1,2-Dibromoethane (EDB)	<0.340		25.0	21.58		ug/L		86	59 - 130	1	20
1,2-Dichlorobenzene	2.28		25.0	24.73		ug/L		90	53 - 130	3	20
1,2-Dichloroethane	<0.390		25.0	21.70		ug/L		87	57 - 130	2	21
1,2-Dichloropropane	<0.270		25.0	22.85		ug/L		91	60 - 130	3	31
1,3-Dichlorobenzene	<0.300		25.0	21.57		ug/L		86	54 - 130	2	20
1,3-Dichloropropane	<0.400		25.0	22.13		ug/L		89	57 - 130	1	20
1,4-Dichlorobenzene	5.99		25.0	27.10		ug/L		84	53 - 130	3	20

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

Lab Sample ID: 310-252084-1 MSD
Matrix: Water
Analysis Batch: 382264

Client Sample ID: MW-12_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,2-Dichloropropane	<0.690		25.0	21.35		ug/L		85	28 - 150	2	20
2-Butanone (MEK)	<2.10		50.0	52.87		ug/L		91	47 - 150	7	20
2-Hexanone	<2.00		50.0	46.19		ug/L		92	45 - 132	4	20
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	48.46		ug/L		97	46 - 132	2	20
Acetone	<3.10		50.0	46.94		ug/L		94	35 - 150	0	26
Acrolein	<3.60		119	103.5		ug/L		87	10 - 150	1	27
Acrylonitrile	<2.20		250	210.2		ug/L		84	50 - 150	2	21
Allyl chloride	<0.700		25.0	20.53		ug/L		82	35 - 150	4	35
Benzene	0.918		25.0	21.97		ug/L		84	47 - 130	2	20
Bromochloromethane	<0.540		25.0	19.74		ug/L		79	54 - 132	3	20
Bromodichloromethane	<0.390		25.0	23.18		ug/L		93	58 - 130	0	20
Bromoform	<0.780		25.0	21.09		ug/L		84	42 - 130	2	20
Carbon disulfide	<0.450		25.0	19.58		ug/L		78	39 - 131	5	32
Carbon tetrachloride	<0.650		25.0	22.20		ug/L		89	45 - 132	1	20
Chlorobenzene	4.12		25.0	24.24		ug/L		80	54 - 130	3	20
Chlorodibromomethane	<0.750		25.0	21.68		ug/L		87	53 - 130	2	20
Chloroform	<1.30		25.0	20.53		ug/L		82	55 - 130	2	20
Chloroprene	<0.230		25.0	22.78		ug/L		91	47 - 131	4	20
cis-1,2-Dichloroethene	3.67		25.0	23.77		ug/L		80	52 - 130	1	20
cis-1,3-Dichloropropene	<0.250		25.0	21.16		ug/L		85	55 - 130	2	20
Dibromomethane	<0.330		25.0	20.97		ug/L		84	61 - 130	2	20
Ethyl methacrylate	<0.680		25.0	23.06		ug/L		92	50 - 131	4	20
Ethylbenzene	<0.310		25.0	21.23		ug/L		85	48 - 130	3	20
Iodomethane	<7.00		25.0	13.26		ug/L		53	10 - 150	14	35
Methacrylonitrile	<3.30		250	237.9		ug/L		95	57 - 130	2	20
Methyl methacrylate	<0.760		50.0	45.59		ug/L		91	50 - 131	3	20
Methylene Chloride	<1.70		25.0	21.62		ug/L		86	50 - 150	2	24
Naphthalene	<3.00		25.0	24.59		ug/L		98	33 - 150	1	30
Propionitrile	<3.40		250	224.1		ug/L		90	53 - 130	3	20
Styrene	<0.370		25.0	21.76		ug/L		87	46 - 130	3	20
Tetrachloroethene	<0.480		25.0	20.25		ug/L		81	42 - 131	2	20
Toluene	<0.430		25.0	20.59		ug/L		82	48 - 130	3	20
trans-1,2-Dichloroethene	<0.270		25.0	20.89		ug/L		84	54 - 130	3	24
trans-1,3-Dichloropropene	<0.560		25.0	21.40		ug/L		86	51 - 130	0	20
trans-1,4-Dichloro-2-butene	<1.10		25.0	22.75		ug/L		91	33 - 150	6	20
Trichloroethene	<0.430		25.0	21.34		ug/L		85	55 - 130	2	20
Vinyl acetate	<2.50		50.0	38.33		ug/L		77	34 - 150	0	27
Xylenes, Total	<0.400		50.0	41.68		ug/L		83	44 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 310-382259/1-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382259

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		03/27/23 09:25	03/28/23 13:21	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		03/27/23 09:25	03/28/23 13:21	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		03/27/23 09:25	03/28/23 13:21	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 13:21	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		03/27/23 09:25	03/28/23 13:21	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		03/27/23 09:25	03/28/23 13:21	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		03/27/23 09:25	03/28/23 13:21	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		03/27/23 09:25	03/28/23 13:21	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		03/27/23 09:25	03/28/23 13:21	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/28/23 13:21	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		03/27/23 09:25	03/28/23 13:21	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 13:21	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		03/27/23 09:25	03/28/23 13:21	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		03/27/23 09:25	03/28/23 13:21	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 13:21	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 13:21	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		03/27/23 09:25	03/28/23 13:21	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		03/27/23 09:25	03/28/23 13:21	1
Acenaphthene	<0.640		10.0	0.640	ug/L		03/27/23 09:25	03/28/23 13:21	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		03/27/23 09:25	03/28/23 13:21	1
Acetophenone	<0.690		10.0	0.690	ug/L		03/27/23 09:25	03/28/23 13:21	1
Anthracene	<0.870		10.0	0.870	ug/L		03/27/23 09:25	03/28/23 13:21	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		03/27/23 09:25	03/28/23 13:21	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		03/27/23 09:25	03/28/23 13:21	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		03/27/23 09:25	03/28/23 13:21	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		03/27/23 09:25	03/28/23 13:21	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/28/23 13:21	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		03/27/23 09:25	03/28/23 13:21	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		03/27/23 09:25	03/28/23 13:21	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		03/27/23 09:25	03/28/23 13:21	1
2,2'-oxybis[1-chloropropane]	<0.540		10.0	0.540	ug/L		03/27/23 09:25	03/28/23 13:21	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		03/27/23 09:25	03/28/23 13:21	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		03/27/23 09:25	03/28/23 13:21	1
Chrysene	<0.870		10.0	0.870	ug/L		03/27/23 09:25	03/28/23 13:21	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		03/27/23 09:25	03/28/23 13:21	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		03/27/23 09:25	03/28/23 13:21	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		03/27/23 09:25	03/28/23 13:21	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		03/27/23 09:25	03/28/23 13:21	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		03/27/23 09:25	03/28/23 13:21	1

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

Lab Sample ID: MB 310-382259/1-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		03/27/23 09:25	03/28/23 13:21	1
Diphenylamine	<6.00		10.0	6.00	ug/L		03/27/23 09:25	03/28/23 13:21	1
Fluoranthene	<1.70		10.0	1.70	ug/L		03/27/23 09:25	03/28/23 13:21	1
Fluorene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 13:21	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		03/27/23 09:25	03/28/23 13:21	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		03/27/23 09:25	03/28/23 13:21	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		03/27/23 09:25	03/28/23 13:21	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		03/27/23 09:25	03/28/23 13:21	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		03/27/23 09:25	03/28/23 13:21	1
Isophorone	<0.930		10.0	0.930	ug/L		03/27/23 09:25	03/28/23 13:21	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		03/27/23 09:25	03/28/23 13:21	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		03/27/23 09:25	03/28/23 13:21	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		03/27/23 09:25	03/28/23 13:21	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		03/27/23 09:25	03/28/23 13:21	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		03/27/23 09:25	03/28/23 13:21	1
Phenanthrene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 13:21	1
Phenol	<1.10		10.0	1.10	ug/L		03/27/23 09:25	03/28/23 13:21	1
Pyrene	<0.790		10.0	0.790	ug/L		03/27/23 09:25	03/28/23 13:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*69*		*13 - 110*	*03/27/23 09:25*	*03/28/23 13:21*	*1*
Phenol-d5 (Surr)	*59*		*12 - 110*	*03/27/23 09:25*	*03/28/23 13:21*	*1*
Nitrobenzene-d5 (Surr)	*85*		*27 - 115*	*03/27/23 09:25*	*03/28/23 13:21*	*1*
2-Fluorobiphenyl (Surr)	*74*		*28 - 110*	*03/27/23 09:25*	*03/28/23 13:21*	*1*
2,4,6-Tribromophenol (Surr)	*94*		*15 - 121*	*03/27/23 09:25*	*03/28/23 13:21*	*1*
Terphenyl-d14 (Surr)	*93*		*10 - 125*	*03/27/23 09:25*	*03/28/23 13:21*	*1*

Lab Sample ID: MB 310-382259/1-A
Matrix: Water
Analysis Batch: 382563

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 11:33	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 11:33	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 11:33	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		03/27/23 09:25	03/29/23 11:33	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 11:33	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		03/27/23 09:25	03/29/23 11:33	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		03/27/23 09:25	03/29/23 11:33	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		03/27/23 09:25	03/29/23 11:33	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 11:33	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 11:33	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 11:33	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 11:33	1
Diallate	<4.00		10.0	4.00	ug/L		03/27/23 09:25	03/29/23 11:33	1
Dimethoate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 11:33	1
Dinoseb	<2.40		10.0	2.40	ug/L		03/27/23 09:25	03/29/23 11:33	1
Disulfoton	<2.40		10.0	2.40	ug/L		03/27/23 09:25	03/29/23 11:33	1

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

Lab Sample ID: MB 310-382259/1-A
Matrix: Water
Analysis Batch: 382563

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 11:33	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 11:33	1
Famphur	<3.80		10.0	3.80	ug/L		03/27/23 09:25	03/29/23 11:33	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		03/27/23 09:25	03/29/23 11:33	1
Isodrin	<4.70		10.0	4.70	ug/L		03/27/23 09:25	03/29/23 11:33	1
Isosafrole	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 11:33	1
Kepone	<1.00		10.0	1.00	ug/L		03/27/23 09:25	03/29/23 11:33	1
Methapyrilene	<0.760		10.0	0.760	ug/L		03/27/23 09:25	03/29/23 11:33	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		03/27/23 09:25	03/29/23 11:33	1
Methyl parathion	<2.30		10.0	2.30	ug/L		03/27/23 09:25	03/29/23 11:33	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		03/27/23 09:25	03/29/23 11:33	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		03/27/23 09:25	03/29/23 11:33	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		03/27/23 09:25	03/29/23 11:33	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 11:33	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		03/27/23 09:25	03/29/23 11:33	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/29/23 11:33	1
o-Toluidine	<2.90		10.0	2.90	ug/L		03/27/23 09:25	03/29/23 11:33	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		03/27/23 09:25	03/29/23 11:33	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 11:33	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		03/27/23 09:25	03/29/23 11:33	1
Phenacetin	<1.90		10.0	1.90	ug/L		03/27/23 09:25	03/29/23 11:33	1
Phorate	<3.20		10.0	3.20	ug/L		03/27/23 09:25	03/29/23 11:33	1
Pronamide	<2.70		10.0	2.70	ug/L		03/27/23 09:25	03/29/23 11:33	1
Safrole	<2.80		10.0	2.80	ug/L		03/27/23 09:25	03/29/23 11:33	1
Thionazin	<3.50		10.0	3.50	ug/L		03/27/23 09:25	03/29/23 11:33	1

Lab Sample ID: LCS 310-382259/2-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	100	65.41		ug/L		65	25 - 110
1,3-Dinitrobenzene	100	93.03		ug/L		93	29 - 119
2,3,4,6-Tetrachlorophenol	100	97.22		ug/L		97	15 - 116
2,4,5-Trichlorophenol	100	100.9		ug/L		101	25 - 113
2,4,6-Trichlorophenol	100	99.12		ug/L		99	21 - 117
2,4-Dichlorophenol	100	88.79		ug/L		89	31 - 110
2,4-Dimethylphenol	100	96.01		ug/L		96	22 - 110
2,4-Dinitrophenol	200	153.0		ug/L		76	10 - 110
2,4-Dinitrotoluene	100	97.92		ug/L		98	36 - 115
2,6-Dichlorophenol	100	82.95		ug/L		83	24 - 112
2,6-Dinitrotoluene	100	97.37		ug/L		97	35 - 117
2-Chloronaphthalene	100	78.68		ug/L		79	24 - 110
2-Chlorophenol	100	81.16		ug/L		81	32 - 110
2-Methylnaphthalene	100	61.98		ug/L		62	26 - 110
2-Methylphenol	100	83.90		ug/L		84	29 - 110
2-Nitroaniline	100	100.3		ug/L		100	33 - 115
2-Nitrophenol	100	94.20		ug/L		94	28 - 112
3-Nitroaniline	100	99.36		ug/L		99	20 - 119

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

Lab Sample ID: LCS 310-382259/2-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,6-Dinitro-2-methylphenol	200	168.9		ug/L		84	10 - 125
4-Bromophenyl phenyl ether	100	83.37		ug/L		83	33 - 110
4-Chloro-3-methylphenol	100	94.15		ug/L		94	34 - 115
4-Chloroaniline	100	88.69		ug/L		89	10 - 121
4-Chlorophenyl phenyl ether	100	78.58		ug/L		79	31 - 110
Methylphenol, 3 & 4	100	85.23		ug/L		85	24 - 110
4-Nitroaniline	100	97.51		ug/L		98	18 - 118
4-Nitrophenol	200	138.4		ug/L		69	10 - 110
Acenaphthene	100	77.41		ug/L		77	26 - 110
Acenaphthylene	100	80.67		ug/L		81	20 - 110
Acetophenone	100	84.83		ug/L		85	35 - 110
Anthracene	100	88.15		ug/L		88	30 - 113
Benzo[a]anthracene	100	100.5		ug/L		100	38 - 110
Benzo[a]pyrene	100	88.50		ug/L		88	15 - 126
Benzo[b]fluoranthene	100	92.52		ug/L		93	35 - 114
Benzo[g,h,i]perylene	100	101.6		ug/L		102	30 - 114
Benzo[k]fluoranthene	100	87.59		ug/L		88	39 - 111
Benzyl alcohol	100	87.91		ug/L		88	28 - 110
Bis(2-chloroethoxy)methane	100	84.18		ug/L		84	31 - 110
Bis(2-chloroethyl)ether	100	83.93		ug/L		84	30 - 110
2,2'-oxybis[1-chloropropane]	100	76.40		ug/L		76	27 - 110
Bis(2-ethylhexyl) phthalate	100	86.20		ug/L		86	29 - 126
Butyl benzyl phthalate	100	87.51		ug/L		88	31 - 121
Chrysene	100	97.55		ug/L		98	40 - 110
Dibenzo(a,h)anthracene	100	107.4		ug/L		107	31 - 122
Dibenzofuran	100	81.85		ug/L		82	31 - 110
Diethyl phthalate	100	84.54		ug/L		85	36 - 113
Dimethyl phthalate	100	90.93		ug/L		91	23 - 117
Di-n-butyl phthalate	100	90.95		ug/L		91	39 - 119
Di-n-octyl phthalate	100	81.26		ug/L		81	25 - 139
Fluoranthene	100	97.31		ug/L		97	39 - 111
Fluorene	100	81.18		ug/L		81	32 - 110
Hexachlorobenzene	100	85.61		ug/L		86	35 - 110
Hexachlorobutadiene	100	57.73		ug/L		58	21 - 110
Hexachlorocyclopentadiene	100	69.66		ug/L		70	10 - 110
Hexachloroethane	100	60.13		ug/L		60	17 - 110
Indeno[1,2,3-cd]pyrene	100	116.8		ug/L		117	26 - 124
Isophorone	100	88.18		ug/L		88	33 - 111
Nitrobenzene	100	82.42		ug/L		82	31 - 110
N-Nitrosodimethylamine	100	74.14		ug/L		74	24 - 110
N-Nitrosodi-n-propylamine	100	87.64		ug/L		88	32 - 114
N-Nitrosodiphenylamine	100	92.08		ug/L		92	22 - 119
Pentachlorophenol	200	162.8		ug/L		81	10 - 116
Phenanthrene	100	85.04		ug/L		85	37 - 110
Phenol	100	59.68		ug/L		60	20 - 110
Pyrene	100	92.65		ug/L		93	35 - 115

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

Lab Sample ID: LCS 310-382259/2-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382259

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol (Surr)	71		13 - 110
Phenol-d5 (Surr)	58		12 - 110
Nitrobenzene-d5 (Surr)	86		27 - 115
2-Fluorobiphenyl (Surr)	80		28 - 110
2,4,6-Tribromophenol (Surr)	93		15 - 121
Terphenyl-d14 (Surr)	85		10 - 125

Lab Sample ID: LCSD 310-382259/3-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 382259

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			100	69.34		ug/L		69	25 - 110	6	35
1,3-Dinitrobenzene			100	92.90		ug/L		93	29 - 119	0	35
2,3,4,6-Tetrachlorophenol			100	93.85		ug/L		94	15 - 116	4	35
2,4,5-Trichlorophenol			100	100.5		ug/L		100	25 - 113	0	35
2,4,6-Trichlorophenol			100	101.2		ug/L		101	21 - 117	2	35
2,4-Dichlorophenol			100	90.68		ug/L		91	31 - 110	2	35
2,4-Dimethylphenol			100	101.0		ug/L		101	22 - 110	5	35
2,4-Dinitrophenol			200	168.1		ug/L		84	10 - 110	9	35
2,4-Dinitrotoluene			100	99.06		ug/L		99	36 - 115	1	35
2,6-Dichlorophenol			100	84.09		ug/L		84	24 - 112	1	35
2,6-Dinitrotoluene			100	96.69		ug/L		97	35 - 117	1	35
2-Chloronaphthalene			100	81.12		ug/L		81	24 - 110	3	35
2-Chlorophenol			100	84.33		ug/L		84	32 - 110	4	35
2-Methylnaphthalene			100	63.65		ug/L		64	26 - 110	3	35
2-Methylphenol			100	88.88		ug/L		89	29 - 110	6	35
2-Nitroaniline			100	97.65		ug/L		98	33 - 115	3	35
2-Nitrophenol			100	94.92		ug/L		95	28 - 112	1	35
3-Nitroaniline			100	79.10		ug/L		79	20 - 119	23	35
4,6-Dinitro-2-methylphenol			200	185.3		ug/L		93	10 - 125	9	35
4-Bromophenyl phenyl ether			100	83.12		ug/L		83	33 - 110	0	35
4-Chloro-3-methylphenol			100	93.62		ug/L		94	34 - 115	1	35
4-Chloroaniline			100	58.26	*1	ug/L		58	10 - 121	41	35
4-Chlorophenyl phenyl ether			100	77.18		ug/L		77	31 - 110	2	35
Methylphenol, 3 & 4			100	89.15		ug/L		89	24 - 110	5	35
4-Nitroaniline			100	81.93		ug/L		82	18 - 118	17	35
4-Nitrophenol			200	129.9		ug/L		65	10 - 110	6	35
Acenaphthene			100	78.77		ug/L		79	26 - 110	2	35
Acenaphthylene			100	80.29		ug/L		80	20 - 110	0	35
Acetophenone			100	86.39		ug/L		86	35 - 110	2	35
Anthracene			100	86.18		ug/L		86	30 - 113	2	35
Benzo[a]anthracene			100	99.45		ug/L		99	38 - 110	1	35
Benzo[a]pyrene			100	86.94		ug/L		87	15 - 126	2	35
Benzo[b]fluoranthene			100	90.52		ug/L		91	35 - 114	2	35
Benzo[g,h,i]perylene			100	96.29		ug/L		96	30 - 114	5	35
Benzo[k]fluoranthene			100	84.78		ug/L		85	39 - 111	3	35
Benzyl alcohol			100	91.38		ug/L		91	28 - 110	4	35

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

Lab Sample ID: LCSD 310-382259/3-A
Matrix: Water
Analysis Batch: 382466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 382259

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane			100	86.67		ug/L		87	31 - 110	3	35
Bis(2-chloroethyl)ether			100	83.79		ug/L		84	30 - 110	0	35
2,2'-oxybis[1-chloropropane]			100	76.67		ug/L		77	27 - 110	0	35
Bis(2-ethylhexyl) phthalate			100	86.88		ug/L		87	29 - 126	1	35
Butyl benzyl phthalate			100	88.17		ug/L		88	31 - 121	1	35
Chrysene			100	97.46		ug/L		97	40 - 110	0	35
Dibenzo(a,h)anthracene			100	109.2		ug/L		109	31 - 122	2	35
Dibenzofuran			100	80.49		ug/L		80	31 - 110	2	35
Diethyl phthalate			100	83.54		ug/L		84	36 - 113	1	35
Dimethyl phthalate			100	90.10		ug/L		90	23 - 117	1	35
Di-n-butyl phthalate			100	90.13		ug/L		90	39 - 119	1	35
Di-n-octyl phthalate			100	83.85		ug/L		84	25 - 139	3	35
Fluoranthene			100	92.59		ug/L		93	39 - 111	5	35
Fluorene			100	78.83		ug/L		79	32 - 110	3	35
Hexachlorobenzene			100	85.99		ug/L		86	35 - 110	0	35
Hexachlorobutadiene			100	64.55		ug/L		65	21 - 110	11	35
Hexachlorocyclopentadiene			100	82.63		ug/L		83	10 - 110	17	35
Hexachloroethane			100	65.32		ug/L		65	17 - 110	8	35
Indeno[1,2,3-cd]pyrene			100	109.4		ug/L		109	26 - 124	7	35
Isophorone			100	90.12		ug/L		90	33 - 111	2	35
Nitrobenzene			100	83.43		ug/L		83	31 - 110	1	35
N-Nitrosodimethylamine			100	75.25		ug/L		75	24 - 110	1	35
N-Nitrosodi-n-propylamine			100	91.73		ug/L		92	32 - 114	5	35
N-Nitrosodiphenylamine			100	91.57		ug/L		92	22 - 119	1	35
Pentachlorophenol			200	162.6		ug/L		81	10 - 116	0	35
Phenanthrene			100	84.14		ug/L		84	37 - 110	1	35
Phenol			100	60.29		ug/L		60	20 - 110	1	35
Pyrene			100	95.55		ug/L		96	35 - 115	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*78*		*13 - 110*
Phenol-d5 (Surr)	*67*		*12 - 110*
Nitrobenzene-d5 (Surr)	*97*		*27 - 115*
2-Fluorobiphenyl (Surr)	*89*		*28 - 110*
2,4,6-Tribromophenol (Surr)	*101*		*15 - 121*
Terphenyl-d14 (Surr)	*96*		*10 - 125*

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

Lab Sample ID: MB 310-382240/4
Matrix: Water
Analysis Batch: 382240

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<0.570		10.0	0.570	mg/L			03/27/23 09:12	1
Isobutanol	<0.550		10.0	0.550	mg/L			03/27/23 09:12	1

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

Lab Sample ID: LCS 310-382240/5
Matrix: Water
Analysis Batch: 382240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	102	107.0		mg/L		105	66 - 122
Isobutanol	105	107.3		mg/L		102	77 - 120

Lab Sample ID: 310-252084-6 MS
Matrix: Water
Analysis Batch: 382240

Client Sample ID: MW-26_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	<0.570		102	109.6		mg/L		107	58 - 129
Isobutanol	<0.550		105	109.7		mg/L		104	60 - 130

Lab Sample ID: 310-252084-6 MSD
Matrix: Water
Analysis Batch: 382240

Client Sample ID: MW-26_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetonitrile	<0.570		102	108.6		mg/L		106	58 - 129	1	35
Isobutanol	<0.550		105	109.1		mg/L		104	60 - 130	1	35

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-382246/1-A
Matrix: Water
Analysis Batch: 382503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0270		0.0640	0.0270	ug/L		03/27/23 08:07	03/29/23 17:24	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		03/27/23 08:07	03/29/23 17:24	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		03/27/23 08:07	03/29/23 17:24	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		03/27/23 08:07	03/29/23 17:24	1
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/29/23 17:24	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		03/27/23 08:07	03/29/23 17:24	1
Chlordane (technical)	<0.810		2.00	0.810	ug/L		03/27/23 08:07	03/29/23 17:24	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		03/27/23 08:07	03/29/23 17:24	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		03/27/23 08:07	03/29/23 17:24	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		03/27/23 08:07	03/29/23 17:24	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/29/23 17:24	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		03/27/23 08:07	03/29/23 17:24	1
Endrin	<0.0260		0.0640	0.0260	ug/L		03/27/23 08:07	03/29/23 17:24	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/29/23 17:24	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		03/27/23 08:07	03/29/23 17:24	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		03/27/23 08:07	03/29/23 17:24	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		03/27/23 08:07	03/29/23 17:24	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		03/27/23 08:07	03/29/23 17:24	1
Toxaphene	<0.690		2.00	0.690	ug/L		03/27/23 08:07	03/29/23 17:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*10 - 136*	*03/27/23 08:07*	*03/29/23 17:24*	*1*
Tetrachloro-m-xylene	*75*		*10 - 130*	*03/27/23 08:07*	*03/29/23 17:24*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCS 310-382246/4-A
Matrix: Water
Analysis Batch: 382692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382246

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4,4'-DDD			1.00	0.9549		ug/L		95	36 - 149		
4,4'-DDE			1.00	0.7716		ug/L		77	34 - 130		
4,4'-DDT			1.00	0.4615		ug/L		46	23 - 150		
Aldrin			1.00	0.5674		ug/L		57	13 - 120		
alpha-BHC			1.00	0.7665		ug/L		77	36 - 127		
beta-BHC			1.00	0.8255		ug/L		83	37 - 136		
delta-BHC			1.00	0.7972		ug/L		80	33 - 134		
Dieldrin			1.00	0.7818		ug/L		78	39 - 130		
Endosulfan I			1.00	0.5463		ug/L		55	10 - 120		
Endosulfan II			1.00	0.6411		ug/L		64	14 - 120		
Endosulfan sulfate			1.00	0.7859		ug/L		79	36 - 147		
Endrin			1.00	0.7757		ug/L		78	39 - 140		
Endrin aldehyde			1.00	0.6701		ug/L		67	32 - 137		
gamma-BHC (Lindane)			1.00	0.7668		ug/L		77	36 - 132		
Heptachlor			1.00	0.6596		ug/L		66	27 - 120		
Heptachlor epoxide			1.00	0.7943		ug/L		79	38 - 133		
Methoxychlor			1.00	0.5518		ug/L		55	10 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*61*		*10 - 136*
Tetrachloro-m-xylene	*81*		*10 - 130*

Lab Sample ID: LCSD 310-382246/5-A
Matrix: Water
Analysis Batch: 382692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 382246

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			1.00	1.074		ug/L		107	36 - 149	12	35
4,4'-DDE			1.00	0.8231		ug/L		82	34 - 130	6	35
4,4'-DDT			1.00	0.4538		ug/L		45	23 - 150	2	35
Aldrin			1.00	0.5776		ug/L		58	13 - 120	2	35
alpha-BHC			1.00	0.7816		ug/L		78	36 - 127	2	35
beta-BHC			1.00	0.8327		ug/L		83	37 - 136	1	35
delta-BHC			1.00	0.8044		ug/L		80	33 - 134	1	35
Dieldrin			1.00	0.8312		ug/L		83	39 - 130	6	35
Endosulfan I			1.00	0.5773		ug/L		58	10 - 120	6	35
Endosulfan II			1.00	0.7261		ug/L		73	14 - 120	12	35
Endosulfan sulfate			1.00	0.8925		ug/L		89	36 - 147	13	35
Endrin			1.00	0.8169		ug/L		82	39 - 140	5	35
Endrin aldehyde			1.00	0.7811		ug/L		78	32 - 137	15	35
gamma-BHC (Lindane)			1.00	0.7712		ug/L		77	36 - 132	1	35
Heptachlor			1.00	0.6799		ug/L		68	27 - 120	3	35
Heptachlor epoxide			1.00	0.8261		ug/L		83	38 - 133	4	35
Methoxychlor			1.00	0.5165		ug/L		52	10 - 150	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*71*		*10 - 136*
Tetrachloro-m-xylene	*83*		*10 - 130*

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

Lab Sample ID: MB 310-382246/1-A
Matrix: Water
Analysis Batch: 382574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/29/23 17:24	1
PCB-1221	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/29/23 17:24	1
PCB-1232	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/29/23 17:24	1
PCB-1242	<0.170		0.800	0.170	ug/L		03/27/23 08:07	03/29/23 17:24	1
PCB-1248	<0.110		0.800	0.110	ug/L		03/27/23 08:07	03/29/23 17:24	1
PCB-1254	<0.110		0.800	0.110	ug/L		03/27/23 08:07	03/29/23 17:24	1
PCB-1260	<0.110		0.800	0.110	ug/L		03/27/23 08:07	03/29/23 17:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*10 - 136*	*03/27/23 08:07*	*03/29/23 17:24*	*1*
Tetrachloro-m-xylene	*75*		*10 - 130*	*03/27/23 08:07*	*03/29/23 17:24*	*1*

Lab Sample ID: LCS 310-382246/2-A
Matrix: Water
Analysis Batch: 382574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382246

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			10.0	9.351		ug/L		94	30 - 133		
PCB-1260			10.0	8.870		ug/L		89	31 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*64*		*10 - 136*
Tetrachloro-m-xylene	*76*		*10 - 130*

Lab Sample ID: LCSD 310-382246/3-A
Matrix: Water
Analysis Batch: 382574

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 382246

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			10.0	8.675		ug/L		87	30 - 133	7	35
PCB-1260			10.0	7.646		ug/L		76	31 - 133	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*58*		*10 - 136*
Tetrachloro-m-xylene	*75*		*10 - 130*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-382511/1-A
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 12:22	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 12:22	1
Barium	<0.000880		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 12:22	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 12:22	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 12:22	1

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

Lab Sample ID: MB 310-382511/1-A
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382511

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 12:22	1
Cobalt	<0.000190		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 12:22	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 12:22	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 12:22	1
Nickel	<0.00190		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 12:22	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 12:22	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 12:22	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 12:22	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 12:22	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 12:22	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 12:22	1

Lab Sample ID: LCS 310-382511/2-A
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382511

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2048		mg/L		102	80 - 120
Arsenic	0.200	0.2047		mg/L		102	80 - 120
Barium	0.100	0.09698		mg/L		97	80 - 120
Beryllium	0.100	0.1011		mg/L		101	80 - 120
Cadmium	0.100	0.09855		mg/L		99	80 - 120
Chromium	0.100	0.1044		mg/L		104	80 - 120
Cobalt	0.100	0.1034		mg/L		103	80 - 120
Copper	0.200	0.2102		mg/L		105	80 - 120
Lead	0.200	0.2012		mg/L		101	80 - 120
Nickel	0.200	0.2051		mg/L		103	80 - 120
Selenium	0.400	0.3941		mg/L		99	80 - 120
Silver	0.100	0.1014		mg/L		101	80 - 120
Thallium	0.200	0.2101		mg/L		105	80 - 120
Vanadium	0.100	0.09938		mg/L		99	80 - 120
Tin	0.200	0.1936		mg/L		97	80 - 120
Zinc	0.200	0.1992		mg/L		100	80 - 120

Lab Sample ID: 310-252106-A-1-B MS
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 382511

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.000690		0.200	0.2097		mg/L		105	75 - 125
Arsenic	0.00246		0.200	0.2137		mg/L		106	75 - 125
Barium	0.111		0.100	0.2089		mg/L		98	75 - 125
Beryllium	<0.000270		0.100	0.1043		mg/L		104	75 - 125
Cadmium	0.000137		0.100	0.09929		mg/L		99	75 - 125
Chromium	<0.00110		0.100	0.1049		mg/L		105	75 - 125
Cobalt	<0.000190		0.100	0.1009		mg/L		101	75 - 125
Copper	<0.00180		0.200	0.2062		mg/L		103	75 - 125
Lead	0.000307	J	0.200	0.1998		mg/L		100	75 - 125
Nickel	<0.00190		0.200	0.1976		mg/L		99	75 - 125

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

Lab Sample ID: 310-252106-A-1-B MS
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 382511

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.00161	J	0.400	0.4136		mg/L		103	75 - 125
Silver	0.00138		0.100	0.1007		mg/L		99	75 - 125
Thallium	0.000895	J	0.200	0.2082		mg/L		104	75 - 125
Vanadium	<0.00110		0.100	0.09995		mg/L		100	75 - 125
Tin	<0.00300		0.200	0.1976		mg/L		99	75 - 125
Zinc	<0.0100		0.200	0.1993		mg/L		100	75 - 125

Lab Sample ID: 310-252106-A-1-C MSD
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 382511

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.000690		0.200	0.2133		mg/L		107	75 - 125	2	20
Arsenic	0.00246		0.200	0.2123		mg/L		105	75 - 125	1	20
Barium	0.111		0.100	0.2102		mg/L		99	75 - 125	1	20
Beryllium	<0.000270		0.100	0.1084		mg/L		108	75 - 125	4	20
Cadmium	0.000137		0.100	0.1004		mg/L		100	75 - 125	1	20
Chromium	<0.00110		0.100	0.1018		mg/L		102	75 - 125	3	20
Cobalt	<0.000190		0.100	0.1014		mg/L		101	75 - 125	0	20
Copper	<0.00180		0.200	0.2042		mg/L		102	75 - 125	1	20
Lead	0.000307	J	0.200	0.2022		mg/L		101	75 - 125	1	20
Nickel	<0.00190		0.200	0.2017		mg/L		101	75 - 125	2	20
Selenium	0.00161	J	0.400	0.4123		mg/L		103	75 - 125	0	20
Silver	0.00138		0.100	0.1038		mg/L		102	75 - 125	3	20
Thallium	0.000895	J	0.200	0.2118		mg/L		105	75 - 125	2	20
Vanadium	<0.00110		0.100	0.09993		mg/L		100	75 - 125	0	20
Tin	<0.00300		0.200	0.1737		mg/L		87	75 - 125	13	20
Zinc	<0.0100		0.200	0.1989		mg/L		99	75 - 125	0	20

Lab Sample ID: 310-252106-A-11-B DU
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 382511

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.000690		<0.000690		mg/L		NC	20
Arsenic	0.0200		0.02054		mg/L		3	20
Barium	0.455		0.4558		mg/L		0.2	20
Beryllium	<0.000270		<0.000270		mg/L		NC	20
Cadmium	<0.0000550		<0.0000550		mg/L		NC	20
Chromium	<0.00110		<0.00110		mg/L		NC	20
Cobalt	0.000518		0.0004900	J	mg/L		6	20
Copper	<0.00180		<0.00180		mg/L		NC	20
Lead	<0.000240		<0.000240		mg/L		NC	20
Nickel	0.00478	J	0.004675	J	mg/L		2	20
Selenium	<0.000960		<0.000960		mg/L		NC	20
Silver	<0.000490		<0.000490		mg/L		NC	20
Thallium	<0.000260		<0.000260		mg/L		NC	20
Vanadium	<0.00110		<0.00110		mg/L		NC	20
Tin	<0.00300		<0.00300		mg/L		NC	20

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

Lab Sample ID: 310-252106-A-11-B DU
Matrix: Water
Analysis Batch: 382773

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 382511

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Zinc	<0.0100		<0.0100		mg/L		NC	20

Lab Sample ID: MB 310-382513/1-A
Matrix: Water
Analysis Batch: 382841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0007570	J	0.00200	0.000690	mg/L		03/29/23 10:20	03/30/23 14:58	1
Arsenic	<0.000750		0.00200	0.000750	mg/L		03/29/23 10:20	03/30/23 14:58	1
Barium	<0.000880		0.00200	0.000880	mg/L		03/29/23 10:20	03/30/23 14:58	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		03/29/23 10:20	03/30/23 14:58	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		03/29/23 10:20	03/30/23 14:58	1
Chromium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 14:58	1
Cobalt	<0.000190		0.000500	0.000190	mg/L		03/29/23 10:20	03/30/23 14:58	1
Copper	<0.00180		0.00500	0.00180	mg/L		03/29/23 10:20	03/30/23 14:58	1
Lead	<0.000240		0.000500	0.000240	mg/L		03/29/23 10:20	03/30/23 14:58	1
Nickel	<0.00190		0.00500	0.00190	mg/L		03/29/23 10:20	03/30/23 14:58	1
Selenium	<0.000960		0.00500	0.000960	mg/L		03/29/23 10:20	03/30/23 14:58	1
Silver	<0.000490		0.00100	0.000490	mg/L		03/29/23 10:20	03/30/23 14:58	1
Thallium	<0.000260		0.00100	0.000260	mg/L		03/29/23 10:20	03/30/23 14:58	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		03/29/23 10:20	03/30/23 14:58	1
Tin	<0.00300		0.00500	0.00300	mg/L		03/29/23 10:20	03/30/23 14:58	1
Zinc	<0.0100		0.0200	0.0100	mg/L		03/29/23 10:20	03/30/23 14:58	1

Lab Sample ID: LCS 310-382513/2-A
Matrix: Water
Analysis Batch: 382841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2030		mg/L		101	80 - 120
Arsenic	0.200	0.2074		mg/L		104	80 - 120
Barium	0.100	0.09774		mg/L		98	80 - 120
Beryllium	0.100	0.1027		mg/L		103	80 - 120
Cadmium	0.100	0.09512		mg/L		95	80 - 120
Chromium	0.100	0.1042		mg/L		104	80 - 120
Cobalt	0.100	0.1045		mg/L		105	80 - 120
Copper	0.200	0.2134		mg/L		107	80 - 120
Lead	0.200	0.1965		mg/L		98	80 - 120
Nickel	0.200	0.2075		mg/L		104	80 - 120
Selenium	0.400	0.4021		mg/L		101	80 - 120
Silver	0.100	0.09906		mg/L		99	80 - 120
Thallium	0.200	0.2068		mg/L		103	80 - 120
Vanadium	0.100	0.09872		mg/L		99	80 - 120
Tin	0.200	0.1651		mg/L		83	80 - 120
Zinc	0.200	0.1970		mg/L		98	80 - 120

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

Lab Sample ID: 310-252084-3 MS
Matrix: Water
Analysis Batch: 382841

Client Sample ID: MW-14_23_03
Prep Type: Total/NA
Prep Batch: 382513

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.000736	J B	0.200	0.2166		mg/L		108	75 - 125
Arsenic	0.00844		0.200	0.2176		mg/L		105	75 - 125
Barium	0.283		0.100	0.3725		mg/L		90	75 - 125
Beryllium	<0.000270		0.100	0.1013		mg/L		101	75 - 125
Cadmium	0.000135		0.100	0.08560		mg/L		85	75 - 125
Chromium	<0.00110		0.100	0.09545		mg/L		95	75 - 125
Cobalt	0.000698		0.100	0.09758		mg/L		97	75 - 125
Copper	<0.00180		0.200	0.1996		mg/L		100	75 - 125
Lead	0.000397	J	0.200	0.2026		mg/L		101	75 - 125
Nickel	0.0156		0.200	0.2058		mg/L		95	75 - 125
Selenium	0.00163	J	0.400	0.4088		mg/L		102	75 - 125
Silver	0.00164		0.100	0.09864		mg/L		97	75 - 125
Thallium	0.000975	J	0.200	0.2112		mg/L		105	75 - 125
Vanadium	<0.00110		0.100	0.09745		mg/L		97	75 - 125
Tin	<0.00300		0.200	0.1661		mg/L		83	75 - 125
Zinc	<0.0100		0.200	0.1847		mg/L		92	75 - 125

Lab Sample ID: 310-252084-3 MSD
Matrix: Water
Analysis Batch: 382841

Client Sample ID: MW-14_23_03
Prep Type: Total/NA
Prep Batch: 382513

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.000736	J B	0.200	0.2228		mg/L		111	75 - 125	3	20
Arsenic	0.00844		0.200	0.2167		mg/L		104	75 - 125	0	20
Barium	0.283		0.100	0.3801		mg/L		97	75 - 125	2	20
Beryllium	<0.000270		0.100	0.1009		mg/L		101	75 - 125	0	20
Cadmium	0.000135		0.100	0.08508		mg/L		85	75 - 125	1	20
Chromium	<0.00110		0.100	0.09510		mg/L		95	75 - 125	0	20
Cobalt	0.000698		0.100	0.09708		mg/L		96	75 - 125	1	20
Copper	<0.00180		0.200	0.1942		mg/L		97	75 - 125	3	20
Lead	0.000397	J	0.200	0.2013		mg/L		100	75 - 125	1	20
Nickel	0.0156		0.200	0.2065		mg/L		95	75 - 125	0	20
Selenium	0.00163	J	0.400	0.4104		mg/L		102	75 - 125	0	20
Silver	0.00164		0.100	0.1024		mg/L		101	75 - 125	4	20
Thallium	0.000975	J	0.200	0.2083		mg/L		104	75 - 125	1	20
Vanadium	<0.00110		0.100	0.09714		mg/L		97	75 - 125	0	20
Tin	<0.00300		0.200	0.1657		mg/L		83	75 - 125	0	20
Zinc	<0.0100		0.200	0.1848		mg/L		92	75 - 125	0	20

Lab Sample ID: 310-252084-13 DU
Matrix: Water
Analysis Batch: 382841

Client Sample ID: MW-109B_23_03
Prep Type: Total/NA
Prep Batch: 382513

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.000690		<0.000690		mg/L		NC	20
Arsenic	0.0202		0.02009		mg/L		0.4	20
Barium	0.633		0.6439		mg/L		2	20
Beryllium	<0.000270		<0.000270		mg/L		NC	20
Cadmium	<0.0000550		<0.0000550		mg/L		NC	20

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

Lab Sample ID: 310-252084-13 DU
Matrix: Water
Analysis Batch: 382841

Client Sample ID: MW-109B_23_03
Prep Type: Total/NA
Prep Batch: 382513

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium	<0.00110		<0.00110		mg/L		NC	20
Cobalt	0.0173		0.01735		mg/L		0.5	20
Copper	<0.00180		<0.00180		mg/L		NC	20
Lead	<0.000240		<0.000240		mg/L		NC	20
Nickel	0.0366		0.03655		mg/L		0.2	20
Selenium	<0.000960		<0.000960		mg/L		NC	20
Silver	<0.000490		<0.000490		mg/L		NC	20
Thallium	0.00515		0.005183		mg/L		0.7	20
Vanadium	<0.00110		<0.00110		mg/L		NC	20
Tin	<0.00300		<0.00300		mg/L		NC	20
Zinc	<0.0100		<0.0100		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-382465/1-A
Matrix: Water
Analysis Batch: 382628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		03/28/23 12:24	03/29/23 12:22	1

Lab Sample ID: LCS 310-382465/2-A
Matrix: Water
Analysis Batch: 382628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001856		mg/L		111	80 - 120

Lab Sample ID: 310-251996-A-6-E MS
Matrix: Water
Analysis Batch: 382628

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 382465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000140	F1 F2	0.00167	0.001162	F1	mg/L		70	80 - 120

Lab Sample ID: 310-251996-A-6-F MSD
Matrix: Water
Analysis Batch: 382628

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 382465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000140	F1 F2	0.00167	0.001565	F2	mg/L		94	80 - 120	30	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-382448/1-A
Matrix: Water
Analysis Batch: 382797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.00430		0.0100	0.00430	mg/L		03/28/23 10:17	03/30/23 22:47	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 310-382448/2-A
Matrix: Water
Analysis Batch: 382797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382448

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.200	0.1882		mg/L		94	90 - 110		

Lab Sample ID: 310-252062-B-1-B MS
Matrix: Water
Analysis Batch: 382797

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 382448

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	<0.00430		0.200	0.1860		mg/L		93	59 - 126		

Lab Sample ID: 310-252062-B-1-C MSD
Matrix: Water
Analysis Batch: 382797

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 382448

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.00430		0.200	0.1818		mg/L		91	59 - 126	2	35

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-704691/1-A
Matrix: Water
Analysis Batch: 704693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 704691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.231		1.00	0.231	mg/L		03/28/23 18:00	03/29/23 04:10	1

Lab Sample ID: LCS 500-704691/2-A
Matrix: Water
Analysis Batch: 704693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 704691

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			2.73	2.976		mg/L		109	80 - 120		

Lab Sample ID: 310-252084-9 MS
Matrix: Water
Analysis Batch: 704693

Client Sample ID: MW-37_23_03
Prep Type: Total/NA
Prep Batch: 704691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide	<0.231		6.83	6.680		mg/L		98	75 - 125		

Lab Sample ID: 310-252084-9 MSD
Matrix: Water
Analysis Batch: 704693

Client Sample ID: MW-37_23_03
Prep Type: Total/NA
Prep Batch: 704691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<0.231		6.83	7.560		mg/L		111	75 - 125	12	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-382392/1
Matrix: Water
Analysis Batch: 382392

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	<1.70		5.00	1.70	mg/L			03/28/23 07:19	1

Lab Sample ID: LCS 310-382392/2
Matrix: Water
Analysis Batch: 382392

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: 310-252084-14 DU
Matrix: Water
Analysis Batch: 382392

Client Sample ID: FD-1_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	165		166.0		mg/L		0.6	35

Lab Sample ID: MB 310-382416/1
Matrix: Water
Analysis Batch: 382416

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	<1.70		5.00	1.70	mg/L			03/28/23 08:38	1

Lab Sample ID: LCS 310-382416/2
Matrix: Water
Analysis Batch: 382416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	96.00		mg/L		96	75 - 116

Lab Sample ID: 310-252084-2 DU
Matrix: Water
Analysis Batch: 382416

Client Sample ID: MW-13_23_03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	154		154.0		mg/L		0	35

Lab Sample ID: MB 310-382445/1
Matrix: Water
Analysis Batch: 382445

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	<1.70		5.00	1.70	mg/L			03/28/23 10:08	1

Lab Sample ID: LCS 310-382445/2
Matrix: Water
Analysis Batch: 382445

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	92.00		mg/L		92	75 - 116

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: 310-252104-B-8 DU
Matrix: Water
Analysis Batch: 382445

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	154		151.0		mg/L		2	35

Method: 8151 - SW846 8151 Herbicide

Lab Sample ID: 1GC1491-BLK1
Matrix: Water
Analysis Batch: 1GC1491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1GC1491_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.5		0.5		ug/L		03/28/23 00:00	04/05/23 19:44	1
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/05/23 19:44	1
2,4,5-TP (Silvex)	<0.5		0.5		ug/L		03/28/23 00:00	04/05/23 19:44	1
2,4-D	<2.0		2.0		ug/L		03/28/23 00:00	04/05/23 19:44	1
Dinoseb	<0.5		0.5		ug/L		03/28/23 00:00	04/05/23 19:44	1

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,5-Dichlorobenzoic Acid	*52.2*		*31 - 116*	*03/28/23 00:00*	*04/05/23 19:44*	*1*
2,5-Dichlorobenzoic Acid	*52.2*		*31 - 116*	*03/28/23 00:00*	*04/05/23 19:44*	*1*

Lab Sample ID: 1GC1491-BS1
Matrix: Water
Analysis Batch: 1GC1491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1GC1491_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	0.575000	<0.5		ug/L		70.4	54 - 149
2,4,5-TP (Silvex)	0.575000	0.50		ug/L		86.1	35 - 141
2,4,5-TP (Silvex)	0.575000	0.50		ug/L		86.1	35 - 141
2,4-D	1.15000	<2.0		ug/L		70.9	16 - 161
Dinoseb	1.15000	0.70		ug/L		60.9	10 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,5-Dichlorobenzoic Acid	*78.2*		*31 - 116*
2,5-Dichlorobenzoic Acid	*78.2*		*31 - 116*

Lab Sample ID: 1GC1491-MS1
Matrix: Water
Analysis Batch: 1GC1491

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 1GC1491_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	<0.5		0.611702	0.58		ug/L		94.8	50 - 123
2,4,5-TP (Silvex)	<0.5		0.611702	0.66		ug/L		109	50 - 129
2,4,5-TP (Silvex)	<0.5		0.611702	0.66		ug/L		109	50 - 129
2,4-D	<2.0		1.22340	<2.0		ug/L		82.2	50 - 131
Dinoseb	<0.5		1.22340	0.71		ug/L		58.3	50 - 138

Surrogate	*Matrix Spike %Recovery*	*Matrix Spike Qualifier*	*Limits*
2,5-Dichlorobenzoic Acid	*95.9*		*31 - 116*
2,5-Dichlorobenzoic Acid	*95.9*		*31 - 116*

Method: 8151 - SW846 8151 Herbicide

Lab Sample ID: 1GC1491-MSD1
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 1GC1491
Prep Batch: 1GC1491_P

Analyte	Sample Result	Sample Qualifier	Spike Added	ix Spike Dup Result	Matrix Spike D Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T	<0.5		0.638889	0.56		ug/L		87.8	50 - 123	3.27	30
2,4,5-TP (Silvex)	<0.5		0.638889	0.68		ug/L		106	50 - 129	1.92	30
2,4,5-TP (Silvex)	<0.5		0.638889	0.68		ug/L		106	50 - 129	1.92	30
2,4-D	<2.0		1.27778	<2.0		ug/L		76.5	50 - 131	2.78	30
Dinoseb	<0.5		1.27778	0.76		ug/L		59.1	50 - 138	5.83	30

Surrogate	*latrix Spike Dup %Recovery*	*Matrix Spike Du Qualifier*	*Limits*
2,5-Dichlorobenzoic Acid	*93.7*		*31 - 116*
2,5-Dichlorobenzoic Acid	*93.7*		*31 - 116*

GC/MS VOA

Analysis Batch: 382264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-1	MW-12_23_03	Total/NA	Water	8260D	
310-252084-2	MW-13_23_03	Total/NA	Water	8260D	
310-252084-3	MW-14_23_03	Total/NA	Water	8260D	
310-252084-4	MW-16_23_03	Total/NA	Water	8260D	
310-252084-5	MW-17_23_03	Total/NA	Water	8260D	
310-252084-6	MW-26_23_03	Total/NA	Water	8260D	
310-252084-7	MW-32_23_03	Total/NA	Water	8260D	
310-252084-8	MW-33_23_03	Total/NA	Water	8260D	
310-252084-9	MW-37_23_03	Total/NA	Water	8260D	
310-252084-10	MW-38_23_03	Total/NA	Water	8260D	
310-252084-11	MW-101A_23_03	Total/NA	Water	8260D	
310-252084-12	MW-101B_23_03	Total/NA	Water	8260D	
310-252084-13	MW-109B_23_03	Total/NA	Water	8260D	
310-252084-14	FD-1_23_03	Total/NA	Water	8260D	
310-252084-15	FD-2_23_03	Total/NA	Water	8260D	
310-252084-16	FB-1_23_03	Total/NA	Water	8260D	
310-252084-17	TB-1_23_03	Total/NA	Water	8260D	
MB 310-382264/5	Method Blank	Total/NA	Water	8260D	
LCS 310-382264/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-382264/7	Lab Control Sample	Total/NA	Water	8260D	
310-252084-1 MS	MW-12_23_03	Total/NA	Water	8260D	
310-252084-1 MSD	MW-12_23_03	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 382259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-5	MW-17_23_03	Total/NA	Water	3510C	
310-252084-6	MW-26_23_03	Total/NA	Water	3510C	
310-252084-7	MW-32_23_03	Total/NA	Water	3510C	
310-252084-8	MW-33_23_03	Total/NA	Water	3510C	
310-252084-9	MW-37_23_03	Total/NA	Water	3510C	
310-252084-10	MW-38_23_03	Total/NA	Water	3510C	
310-252084-11	MW-101A_23_03	Total/NA	Water	3510C	
310-252084-12	MW-101B_23_03	Total/NA	Water	3510C	
310-252084-16	FB-1_23_03	Total/NA	Water	3510C	
MB 310-382259/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-382259/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-382259/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 382466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-5	MW-17_23_03	Total/NA	Water	8270E	382259
310-252084-6	MW-26_23_03	Total/NA	Water	8270E	382259
310-252084-7	MW-32_23_03	Total/NA	Water	8270E	382259
310-252084-8	MW-33_23_03	Total/NA	Water	8270E	382259
310-252084-9	MW-37_23_03	Total/NA	Water	8270E	382259
310-252084-10	MW-38_23_03	Total/NA	Water	8270E	382259
310-252084-11	MW-101A_23_03	Total/NA	Water	8270E	382259
310-252084-12	MW-101B_23_03	Total/NA	Water	8270E	382259
310-252084-16	FB-1_23_03	Total/NA	Water	8270E	382259

GC/MS Semi VOA (Continued)

Analysis Batch: 382466 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-382259/1-A	Method Blank	Total/NA	Water	8270E	382259
LCS 310-382259/2-A	Lab Control Sample	Total/NA	Water	8270E	382259
LCSD 310-382259/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	382259

Analysis Batch: 382563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	8270E	382259
310-252084-9	MW-37_23_03	Total/NA	Water	8270E	382259
310-252084-11	MW-101A_23_03	Total/NA	Water	8270E	382259
310-252084-16	FB-1_23_03	Total/NA	Water	8270E	382259
MB 310-382259/1-A	Method Blank	Total/NA	Water	8270E	382259

GC Semi VOA

Analysis Batch: 382240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	8015C	
310-252084-9	MW-37_23_03	Total/NA	Water	8015C	
310-252084-11	MW-101A_23_03	Total/NA	Water	8015C	
310-252084-16	FB-1_23_03	Total/NA	Water	8015C	
MB 310-382240/4	Method Blank	Total/NA	Water	8015C	
LCS 310-382240/5	Lab Control Sample	Total/NA	Water	8015C	
310-252084-6 MS	MW-26_23_03	Total/NA	Water	8015C	
310-252084-6 MSD	MW-26_23_03	Total/NA	Water	8015C	

Prep Batch: 382246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-1	MW-12_23_03	Total/NA	Water	3510C	
310-252084-6	MW-26_23_03	Total/NA	Water	3510C	
310-252084-9	MW-37_23_03	Total/NA	Water	3510C	
310-252084-11	MW-101A_23_03	Total/NA	Water	3510C	
310-252084-16	FB-1_23_03	Total/NA	Water	3510C	
MB 310-382246/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-382246/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 310-382246/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-382246/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 310-382246/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 382503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-382246/1-A	Method Blank	Total/NA	Water	8081B	382246

Analysis Batch: 382574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-382246/1-A	Method Blank	Total/NA	Water	8082A	382246
LCS 310-382246/2-A	Lab Control Sample	Total/NA	Water	8082A	382246
LCSD 310-382246/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	382246

Analysis Batch: 382688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	8081B	382246

GC Semi VOA (Continued)

Analysis Batch: 382688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-9	MW-37_23_03	Total/NA	Water	8081B	382246
310-252084-11	MW-101A_23_03	Total/NA	Water	8081B	382246
310-252084-16	FB-1_23_03	Total/NA	Water	8081B	382246

Analysis Batch: 382691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	8082A	382246
310-252084-9	MW-37_23_03	Total/NA	Water	8082A	382246
310-252084-11	MW-101A_23_03	Total/NA	Water	8082A	382246
310-252084-16	FB-1_23_03	Total/NA	Water	8082A	382246

Analysis Batch: 382692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-1	MW-12_23_03	Total/NA	Water	8081B	382246
LCS 310-382246/4-A	Lab Control Sample	Total/NA	Water	8081B	382246
LCSD 310-382246/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	382246

Metals

Prep Batch: 382465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	7470A	
310-252084-9	MW-37_23_03	Total/NA	Water	7470A	
310-252084-11	MW-101A_23_03	Total/NA	Water	7470A	
310-252084-16	FB-1_23_03	Total/NA	Water	7470A	
MB 310-382465/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-382465/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-251996-A-6-E MS	Matrix Spike	Total/NA	Water	7470A	
310-251996-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 382511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-1	MW-12_23_03	Total/NA	Water	3005A	
310-252084-2	MW-13_23_03	Total/NA	Water	3005A	
MB 310-382511/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-382511/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-252106-A-1-B MS	Matrix Spike	Total/NA	Water	3005A	
310-252106-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-252106-A-11-B DU	Duplicate	Total/NA	Water	3005A	

Prep Batch: 382513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-3	MW-14_23_03	Total/NA	Water	3005A	
310-252084-4	MW-16_23_03	Total/NA	Water	3005A	
310-252084-5	MW-17_23_03	Total/NA	Water	3005A	
310-252084-6	MW-26_23_03	Total/NA	Water	3005A	
310-252084-7	MW-32_23_03	Total/NA	Water	3005A	
310-252084-8	MW-33_23_03	Total/NA	Water	3005A	
310-252084-9	MW-37_23_03	Total/NA	Water	3005A	
310-252084-10	MW-38_23_03	Total/NA	Water	3005A	
310-252084-11	MW-101A_23_03	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 382513 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-12	MW-101B_23_03	Total/NA	Water	3005A	
310-252084-13	MW-109B_23_03	Total/NA	Water	3005A	
310-252084-14	FD-1_23_03	Total/NA	Water	3005A	
310-252084-15	FD-2_23_03	Total/NA	Water	3005A	
310-252084-16	FB-1_23_03	Total/NA	Water	3005A	
MB 310-382513/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-382513/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-252084-3 MS	MW-14_23_03	Total/NA	Water	3005A	
310-252084-3 MSD	MW-14_23_03	Total/NA	Water	3005A	
310-252084-13 DU	MW-109B_23_03	Total/NA	Water	3005A	

Analysis Batch: 382628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	7470A	382465
310-252084-9	MW-37_23_03	Total/NA	Water	7470A	382465
310-252084-11	MW-101A_23_03	Total/NA	Water	7470A	382465
310-252084-16	FB-1_23_03	Total/NA	Water	7470A	382465
MB 310-382465/1-A	Method Blank	Total/NA	Water	7470A	382465
LCS 310-382465/2-A	Lab Control Sample	Total/NA	Water	7470A	382465
310-251996-A-6-E MS	Matrix Spike	Total/NA	Water	7470A	382465
310-251996-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	382465

Analysis Batch: 382773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-1	MW-12_23_03	Total/NA	Water	6020B	382511
310-252084-2	MW-13_23_03	Total/NA	Water	6020B	382511
MB 310-382511/1-A	Method Blank	Total/NA	Water	6020B	382511
LCS 310-382511/2-A	Lab Control Sample	Total/NA	Water	6020B	382511
310-252106-A-1-B MS	Matrix Spike	Total/NA	Water	6020B	382511
310-252106-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	382511
310-252106-A-11-B DU	Duplicate	Total/NA	Water	6020B	382511

Analysis Batch: 382841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-3	MW-14_23_03	Total/NA	Water	6020B	382513
310-252084-4	MW-16_23_03	Total/NA	Water	6020B	382513
310-252084-5	MW-17_23_03	Total/NA	Water	6020B	382513
310-252084-6	MW-26_23_03	Total/NA	Water	6020B	382513
310-252084-7	MW-32_23_03	Total/NA	Water	6020B	382513
310-252084-8	MW-33_23_03	Total/NA	Water	6020B	382513
310-252084-9	MW-37_23_03	Total/NA	Water	6020B	382513
310-252084-10	MW-38_23_03	Total/NA	Water	6020B	382513
310-252084-11	MW-101A_23_03	Total/NA	Water	6020B	382513
310-252084-12	MW-101B_23_03	Total/NA	Water	6020B	382513
310-252084-13	MW-109B_23_03	Total/NA	Water	6020B	382513
310-252084-14	FD-1_23_03	Total/NA	Water	6020B	382513
310-252084-15	FD-2_23_03	Total/NA	Water	6020B	382513
310-252084-16	FB-1_23_03	Total/NA	Water	6020B	382513
MB 310-382513/1-A	Method Blank	Total/NA	Water	6020B	382513
LCS 310-382513/2-A	Lab Control Sample	Total/NA	Water	6020B	382513
310-252084-3 MS	MW-14_23_03	Total/NA	Water	6020B	382513

Metals (Continued)

Analysis Batch: 382841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-3 MSD	MW-14_23_03	Total/NA	Water	6020B	382513
310-252084-13 DU	MW-109B_23_03	Total/NA	Water	6020B	382513

General Chemistry

Analysis Batch: 382392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-3	MW-14_23_03	Total/NA	Water	I-3765-85	
310-252084-4	MW-16_23_03	Total/NA	Water	I-3765-85	
310-252084-5	MW-17_23_03	Total/NA	Water	I-3765-85	
310-252084-7	MW-32_23_03	Total/NA	Water	I-3765-85	
310-252084-8	MW-33_23_03	Total/NA	Water	I-3765-85	
310-252084-12	MW-101B_23_03	Total/NA	Water	I-3765-85	
310-252084-14	FD-1_23_03	Total/NA	Water	I-3765-85	
MB 310-382392/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-382392/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-252084-14 DU	FD-1_23_03	Total/NA	Water	I-3765-85	

Analysis Batch: 382416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-1	MW-12_23_03	Total/NA	Water	I-3765-85	
310-252084-2	MW-13_23_03	Total/NA	Water	I-3765-85	
310-252084-10	MW-38_23_03	Total/NA	Water	I-3765-85	
310-252084-15	FD-2_23_03	Total/NA	Water	I-3765-85	
MB 310-382416/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-382416/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-252084-2 DU	MW-13_23_03	Total/NA	Water	I-3765-85	

Analysis Batch: 382445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	I-3765-85	
310-252084-9	MW-37_23_03	Total/NA	Water	I-3765-85	
310-252084-11	MW-101A_23_03	Total/NA	Water	I-3765-85	
310-252084-13	MW-109B_23_03	Total/NA	Water	I-3765-85	
310-252084-16	FB-1_23_03	Total/NA	Water	I-3765-85	
MB 310-382445/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-382445/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-252104-B-8 DU	Duplicate	Total/NA	Water	I-3765-85	

Prep Batch: 382448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	9012B	
310-252084-9	MW-37_23_03	Total/NA	Water	9012B	
310-252084-11	MW-101A_23_03	Total/NA	Water	9012B	
310-252084-16	FB-1_23_03	Total/NA	Water	9012B	
MB 310-382448/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-382448/2-A	Lab Control Sample	Total/NA	Water	9012B	
310-252062-B-1-B MS	Matrix Spike	Total/NA	Water	9012B	
310-252062-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

General Chemistry

Analysis Batch: 382797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	9012B	382448
310-252084-9	MW-37_23_03	Total/NA	Water	9012B	382448
310-252084-11	MW-101A_23_03	Total/NA	Water	9012B	382448
310-252084-16	FB-1_23_03	Total/NA	Water	9012B	382448
MB 310-382448/1-A	Method Blank	Total/NA	Water	9012B	382448
LCS 310-382448/2-A	Lab Control Sample	Total/NA	Water	9012B	382448
310-252062-B-1-B MS	Matrix Spike	Total/NA	Water	9012B	382448
310-252062-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	382448

Prep Batch: 704691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	9030B	
310-252084-9	MW-37_23_03	Total/NA	Water	9030B	
310-252084-11	MW-101A_23_03	Total/NA	Water	9030B	
310-252084-16	FB-1_23_03	Total/NA	Water	9030B	
MB 500-704691/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-704691/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-252084-9 MS	MW-37_23_03	Total/NA	Water	9030B	
310-252084-9 MSD	MW-37_23_03	Total/NA	Water	9030B	

Analysis Batch: 704693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-6	MW-26_23_03	Total/NA	Water	9034	704691
310-252084-9	MW-37_23_03	Total/NA	Water	9034	704691
310-252084-11	MW-101A_23_03	Total/NA	Water	9034	704691
310-252084-16	FB-1_23_03	Total/NA	Water	9034	704691
MB 500-704691/1-A	Method Blank	Total/NA	Water	9034	704691
LCS 500-704691/2-A	Lab Control Sample	Total/NA	Water	9034	704691
310-252084-9 MS	MW-37_23_03	Total/NA	Water	9034	704691
310-252084-9 MSD	MW-37_23_03	Total/NA	Water	9034	704691

Subcontract

Analysis Batch: 1GC1491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-2	MW-13_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-4	MW-16_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-5	MW-17_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-6	MW-26_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-7	MW-32_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-9	MW-37_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-11	MW-101A_23_03	Total/NA	Water	8151	1GC1491_P
310-252084-16	FB-1_23_03	Total/NA	Water	8151	1GC1491_P
1GC1491-BLK1	Method Blank	Total/NA	Water	8151	1GC1491_P
1GC1491-BLK1	Method Blank	Total/NA	Water	8151	1GC1491_P
1GC1491-BS1	Lab Control Sample	Total/NA	Water	8151	1GC1491_P
1GC1491-BS1	Lab Control Sample	Total/NA	Water	8151	1GC1491_P
1GC1491-MS1	Matrix Spike	Total/NA	Water	8151	1GC1491_P
1GC1491-MS1	Matrix Spike	Total/NA	Water	8151	1GC1491_P
1GC1491-MSD1	Matrix Spike Duplicate	Total/NA	Water	8151	1GC1491_P
1GC1491-MSD1	Matrix Spike Duplicate	Total/NA	Water	8151	1GC1491_P

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Subcontract

Prep Batch: 1GC1491_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-252084-2	MW-13_23_03	Total/NA	Water	EPA 8151A	
310-252084-4	MW-16_23_03	Total/NA	Water	EPA 8151A	
310-252084-5	MW-17_23_03	Total/NA	Water	EPA 8151A	
310-252084-6	MW-26_23_03	Total/NA	Water	EPA 8151A	
310-252084-7	MW-32_23_03	Total/NA	Water	EPA 8151A	
310-252084-9	MW-37_23_03	Total/NA	Water	EPA 8151A	
310-252084-11	MW-101A_23_03	Total/NA	Water	EPA 8151A	
310-252084-16	FB-1_23_03	Total/NA	Water	EPA 8151A	
1GC1491-BLK1	Method Blank	Total/NA	Water	EPA 8151A	
1GC1491-BLK1	Method Blank	Total/NA	Water	EPA 8151A	
1GC1491-BS1	Lab Control Sample	Total/NA	Water	EPA 8151A	
1GC1491-BS1	Lab Control Sample	Total/NA	Water	EPA 8151A	
1GC1491-MS1	Matrix Spike	Total/NA	Water	EPA 8151A	
1GC1491-MS1	Matrix Spike	Total/NA	Water	EPA 8151A	
1GC1491-MSD1	Matrix Spike Duplicate	Total/NA	Water	EPA 8151A	
1GC1491-MSD1	Matrix Spike Duplicate	Total/NA	Water	EPA 8151A	

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-12_23_03

Lab Sample ID: 310-252084-1
Matrix: Water
Date Collected: 03/23/23 13:00
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 13:23
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8081B		1	382692	BW2O	EET CF	03/30/23 17:30
Total/NA	Prep	3005A			382511	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382773	A6US	EET CF	03/30/23 14:34
Total/NA	Analysis	I-3765-85		1	382416	DGU1	EET CF	03/28/23 08:38

Client Sample ID: MW-13_23_03

Lab Sample ID: 310-252084-2
Matrix: Water
Date Collected: 03/23/23 10:10
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 13:45
Total/NA	Prep	3005A			382511	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382773	A6US	EET CF	03/30/23 14:37
Total/NA	Analysis	I-3765-85		1	382416	DGU1	EET CF	03/28/23 08:38
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 00:39

Client Sample ID: MW-14_23_03

Lab Sample ID: 310-252084-3
Matrix: Water
Date Collected: 03/23/23 11:35
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 14:06
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 15:04
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19

Client Sample ID: MW-16_23_03

Lab Sample ID: 310-252084-4
Matrix: Water
Date Collected: 03/24/23 10:10
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 14:28
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 15:21
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 01:11

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-17_23_03

Lab Sample ID: 310-252084-5

Date Collected: 03/24/23 09:15
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 14:49
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 17:48
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 15:24
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 01:44

Client Sample ID: MW-26_23_03

Lab Sample ID: 310-252084-6

Date Collected: 03/23/23 13:55
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 15:10
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382563	L0FS	EET CF	03/29/23 12:46
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 18:15
Total/NA	Analysis	8015C		1	382240	V7YZ	EET CF	03/27/23 12:37
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8081B		1	382688	BW2O	EET CF	03/30/23 17:45
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8082A		1	382691	BW2O	EET CF	03/30/23 17:45
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 15:51
Total/NA	Prep	7470A			382465	XXW3	EET CF	03/28/23 12:24
Total/NA	Analysis	7470A		1	382628	XXW3	EET CF	03/29/23 12:49
Total/NA	Prep	9012B			382448	ENB7	EET CF	03/28/23 10:17
Total/NA	Analysis	9012B		1	382797	ZJX4	EET CF	03/30/23 23:08
Total/NA	Prep	9030B			704691	CLB	EET CHI	03/28/23 18:06 - 03/28/23 18:10 [1]
Total/NA	Analysis	9034		1	704693	CLB	EET CHI	03/29/23 04:39 - 03/29/23 04:53 [1]
Total/NA	Analysis	I-3765-85		1	382445	DGU1	EET CF	03/28/23 10:08
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 02:17

Client Sample ID: MW-32_23_03

Lab Sample ID: 310-252084-7

Date Collected: 03/22/23 16:25
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 15:32
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 18:42

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA Site 1

Job ID: 310-252084-1

Client Sample ID: MW-32_23_03

Lab Sample ID: 310-252084-7

Date Collected: 03/22/23 16:25
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 15:55
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 02:49

Client Sample ID: MW-33_23_03

Lab Sample ID: 310-252084-8

Date Collected: 03/22/23 17:35
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 15:53
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 19:09
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 15:58
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19

Client Sample ID: MW-37_23_03

Lab Sample ID: 310-252084-9

Date Collected: 03/22/23 11:45
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 16:14
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382563	L0FS	EET CF	03/29/23 13:11
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 19:35
Total/NA	Analysis	8015C		1	382240	V7YZ	EET CF	03/27/23 12:56
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8081B		1	382688	BW2O	EET CF	03/30/23 17:58
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8082A		1	382691	BW2O	EET CF	03/30/23 17:58
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 16:01
Total/NA	Prep	7470A			382465	XXW3	EET CF	03/28/23 12:24
Total/NA	Analysis	7470A		1	382628	XXW3	EET CF	03/29/23 12:52
Total/NA	Prep	9012B			382448	ENB7	EET CF	03/28/23 10:17
Total/NA	Analysis	9012B		1	382797	ZJX4	EET CF	03/30/23 23:06
Total/NA	Prep	9030B			704691	CLB	EET CHI	03/28/23 18:10 - 03/28/23 18:13 [1]
Total/NA	Analysis	9034		1	704693	CLB	EET CHI	03/29/23 04:53 - 03/29/23 05:08 [1]
Total/NA	Analysis	I-3765-85		1	382445	DGU1	EET CF	03/28/23 10:08
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 03:22

Client Sample ID: MW-38_23_03
Lab Sample ID: 310-252084-10
Date Collected: 03/22/23 11:25
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 16:35
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 20:02
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 16:05
Total/NA	Analysis	I-3765-85		1	382416	DGU1	EET CF	03/28/23 08:38

Client Sample ID: MW-101A_23_03
Lab Sample ID: 310-252084-11
Date Collected: 03/22/23 13:50
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 16:56
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382563	L0FS	EET CF	03/29/23 13:35
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 20:28
Total/NA	Analysis	8015C		1	382240	V7YZ	EET CF	03/27/23 13:15
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8081B		1	382688	BW2O	EET CF	03/30/23 18:11
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8082A		1	382691	BW2O	EET CF	03/30/23 18:11
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 22:28
Total/NA	Prep	7470A			382465	XXW3	EET CF	03/28/23 12:24
Total/NA	Analysis	7470A		1	382628	XXW3	EET CF	03/29/23 12:54
Total/NA	Prep	9012B			382448	ENB7	EET CF	03/28/23 10:17
Total/NA	Analysis	9012B		1	382797	ZJX4	EET CF	03/30/23 23:01
Total/NA	Prep	9030B			704691	CLB	EET CHI	03/28/23 18:20 - 03/28/23 18:23 [1]
Total/NA	Analysis	9034		1	704693	CLB	EET CHI	03/29/23 05:37 - 03/29/23 05:51 [1]
Total/NA	Analysis	I-3765-85		1	382445	DGU1	EET CF	03/28/23 10:08
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 03:55

Client Sample ID: MW-101B_23_03
Lab Sample ID: 310-252084-12
Date Collected: 03/22/23 14:55
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 17:17
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 20:54
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 22:31

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: MW-101B_23_03
Lab Sample ID: 310-252084-12
Date Collected: 03/22/23 14:55
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19

Client Sample ID: MW-109B_23_03
Lab Sample ID: 310-252084-13
Date Collected: 03/23/23 15:20
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 17:38
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 22:35
Total/NA	Analysis	I-3765-85		1	382445	DGU1	EET CF	03/28/23 10:08

Client Sample ID: FD-1_23_03
Lab Sample ID: 310-252084-14
Date Collected: 03/23/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 18:00
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 23:07
Total/NA	Analysis	I-3765-85		1	382392	DGU1	EET CF	03/28/23 07:19

Client Sample ID: FD-2_23_03
Lab Sample ID: 310-252084-15
Date Collected: 03/23/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 18:20
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 23:10
Total/NA	Analysis	I-3765-85		1	382416	DGU1	EET CF	03/28/23 08:38

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 11:58
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382563	L0FS	EET CF	03/29/23 14:00
Total/NA	Prep	3510C			382259	Y6AF	EET CF	03/27/23 09:25
Total/NA	Analysis	8270E		1	382466	L0FS	EET CF	03/28/23 21:20
Total/NA	Analysis	8015C		1	382240	V7YZ	EET CF	03/27/23 13:33
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8081B		1	382688	BW2O	EET CF	03/30/23 18:24

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Client Sample ID: FB-1_23_03
Lab Sample ID: 310-252084-16
Date Collected: 03/23/23 11:05
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			382246	Y6AF	EET CF	03/27/23 08:07
Total/NA	Analysis	8082A		1	382691	BW2O	EET CF	03/30/23 18:24
Total/NA	Prep	3005A			382513	QTZ5	EET CF	03/29/23 10:20
Total/NA	Analysis	6020B		1	382841	A6US	EET CF	03/30/23 23:14
Total/NA	Prep	7470A			382465	XXW3	EET CF	03/28/23 12:24
Total/NA	Analysis	7470A		1	382628	XXW3	EET CF	03/29/23 12:56
Total/NA	Prep	9012B			382448	ENB7	EET CF	03/28/23 10:17
Total/NA	Analysis	9012B		1	382797	ZJX4	EET CF	03/30/23 22:50
Total/NA	Prep	9030B			704691	CLB	EET CHI	03/28/23 18:23 - 03/28/23 18:26 [1]
Total/NA	Analysis	9034		1	704693	CLB	EET CHI	03/29/23 05:51 - 03/29/23 06:06 [1]
Total/NA	Analysis	I-3765-85		1	382445	DGU1	EET CF	03/28/23 10:08
Total/NA	Prep	EPA 8151A		1	1GC1491_P		SC0005	03/28/23 00:00
Total/NA	Analysis	8151		1	1GC1491	EPP	SC0005	04/06/23 04:27

Client Sample ID: TB-1_23_03
Lab Sample ID: 310-252084-17
Date Collected: 03/22/23 00:00
Matrix: Water
Date Received: 03/24/23 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	382264	WSE8	EET CF	03/27/23 12:19

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

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
SC0005 = Keystone Laboratories, Inc, 600 East 17th Street South, Newton, IA 50208

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

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	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Allyl chloride
8260D		Water	Ethyl methacrylate
8260D		Water	m,p-Xylene
8260D		Water	o-Xylene

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

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-252084-1
Project/Site: CRLCSWA Site 1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
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
8151	SW846 8151 Herbicide	SW846	SC0005
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
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
SC0005 = Keystone Laboratories, Inc, 600 East 17th Street South, Newton, IA 50208

ANALYTICAL REPORT

April 06, 2023

Work Order: 1GC2632

Report To	Work Order Information
Shirley Thompson	Date Received: 3/27/2023 11:45:00AM
Eurofins Test America, Cedar Falls	Collector: Unknown
3019 Venture Way	Phone: (319) 277-2401
Cedar Falls, IA 50613	PO Number: US1702520285

Project: Subcontract - ST

Project Number: 31009776

CASE NARRATIVE

The samples received on 03/27/23 11:45 for Work Order 1GC2632 were contained in client supplied containers.

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC2632-01 MW-13_23_03 (310-252084-2)				Matrix: Water		Collected: 03/23/23 10:10	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 0:39	
Surrogate: 2,5-Dichlorobenzoic Acid	*108 %*			*31-116*	EPP	04/06/23 0:39	
1GC2632-02 MW-16_23_03 (310-252084-4)				Matrix: Water		Collected: 03/24/23 10:10	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 1:11	
Surrogate: 2,5-Dichlorobenzoic Acid	*112 %*			*31-116*	EPP	04/06/23 1:11	
1GC2632-03 MW-17_23_03 (310-252084-5)				Matrix: Water		Collected: 03/24/23 09:15	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 1:44	
Surrogate: 2,5-Dichlorobenzoic Acid	*32.4 %*			*31-116*	EPP	04/06/23 1:44	
1GC2632-04 MW-26_23_03 (310-252084-6)				Matrix: Water		Collected: 03/23/23 13:55	
2,4-D	<2.0 ug/L	2.0	1GC1491	EPA 8151A	EPP	04/06/23 2:17	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 2:17	
2,4,5-T	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 2:17	
Surrogate: 2,5-Dichlorobenzoic Acid	*68.6 %*			*31-116*	EPP	04/06/23 2:17	
1GC2632-05 MW-32_23_03 (310-252084-7)				Matrix: Water		Collected: 03/22/23 16:25	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 2:49	
Surrogate: 2,5-Dichlorobenzoic Acid	*109 %*			*31-116*	EPP	04/06/23 2:49	
1GC2632-06 MW-37_23_03 (310-252084-9)				Matrix: Water		Collected: 03/22/23 11:45	
2,4-D	<2.0 ug/L	2.0	1GC1491	EPA 8151A	EPP	04/06/23 3:22	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 3:22	
2,4,5-T	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 3:22	
Surrogate: 2,5-Dichlorobenzoic Acid	*68.8 %*			*31-116*	EPP	04/06/23 3:22	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Eurofins Test America, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613

April 06, 2023

Work Order: 1GC2632

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC2632-07 MW-101A_23_03 (310-252084-11)				Matrix: Water	Collected: 03/22/23 13:50		
2,4-D	<2.0 ug/L	2.0	1GC1491	EPA 8151A	EPP	04/06/23 3:55	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 3:55	
2,4,5-T	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 3:55	
Surrogate: 2,5-Dichlorobenzoic Acid	*93.5 %*			*31-116*	EPP	04/06/23 3:55	
1GC2632-08 FB-1_23_03 (310-252084-16)				Matrix: Water	Collected: 03/23/23 11:05		
2,4-D	<2.0 ug/L	2.0	1GC1491	EPA 8151A	EPP	04/06/23 4:27	
2,4,5-TP (Silvex)	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 4:27	
2,4,5-T	<0.5 ug/L	0.5	1GC1491	EPA 8151A	EPP	04/06/23 4:27	
Surrogate: 2,5-Dichlorobenzoic Acid	*56.1 %*			*31-116*	EPP	04/06/23 4:27	

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Eurofins Test America, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613

Work Order: 1GC2632

Determination of Chlorinated Phenoxy Herbicides - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC1491 - EPA 8151A										
Blank (1GC1491-BLK1)				Prepared: 03/28/23 Analyzed: 04/05/23						
Surrogate: 2,5-Dichlorobenzoic Acid	*1.33*		*ug/L*	*2.55000*		*52.2*	*31-116*			
Surrogate: 2,5-Dichlorobenzoic Acid	*1.33*		*"*	*2.55000*		*52.2*	*31-116*			
2,4,5-TP (Silvex)	ND	0.5	"							
2,4-D	ND	2.0	"							
2,4,5-TP (Silvex)	ND	0.5	"							
2,4,5-T	ND	0.5	"							
Dinoseb	ND	0.5	"							
LCS (1GC1491-BS1)				Prepared: 03/28/23 Analyzed: 04/06/23						
Surrogate: 2,5-Dichlorobenzoic Acid	*2.00*		*ug/L*	*2.55000*		*78.2*	*31-116*			
Surrogate: 2,5-Dichlorobenzoic Acid	*2.00*		*"*	*2.55000*		*78.2*	*31-116*			
2,4,5-TP (Silvex)	0.50	0.5	"	0.575000		86.1	35-141			
2,4-D	0.82	2.0	"	1.15000		70.9	16-161			
2,4,5-TP (Silvex)	0.50	0.5	"	0.575000		86.1	35-141			
2,4,5-T	0.40	0.5	"	0.575000		70.4	54-149			
Dinoseb	0.70	0.5	"	1.15000		60.9	10-133			
Matrix Spike (1GC1491-MS1)		**Source: 1GC2194-06**		Prepared: 03/28/23 Analyzed: 04/06/23						
Surrogate: 2,5-Dichlorobenzoic Acid	*2.60*		*ug/L*	*2.71277*		*95.9*	*31-116*			
Surrogate: 2,5-Dichlorobenzoic Acid	*2.60*		*"*	*2.71277*		*95.9*	*31-116*			
2,4,5-TP (Silvex)	0.66	0.5	"	0.611702	ND	109	50-129			
2,4-D	1.01	2.0	"	1.22340	ND	82.2	50-131			
2,4,5-TP (Silvex)	0.66	0.5	"	0.611702	ND	109	50-129			
2,4,5-T	0.58	0.5	"	0.611702	ND	94.8	50-123			
Dinoseb	0.71	0.5	"	1.22340	ND	58.3	50-138			
Matrix Spike Dup (1GC1491-MSD1)		**Source: 1GC2194-06**		Prepared: 03/28/23 Analyzed: 04/06/23						
Surrogate: 2,5-Dichlorobenzoic Acid	*2.66*		*ug/L*	*2.83333*		*93.7*	*31-116*			
Surrogate: 2,5-Dichlorobenzoic Acid	*2.66*		*"*	*2.83333*		*93.7*	*31-116*			
2,4,5-TP (Silvex)	0.68	0.5	"	0.638889	ND	106	50-129	1.92	30	
2,4-D	0.98	2.0	"	1.27778	ND	76.5	50-131	2.78	30	
2,4,5-TP (Silvex)	0.68	0.5	"	0.638889	ND	106	50-129	1.92	30	
2,4,5-T	0.56	0.5	"	0.638889	ND	87.8	50-123	3.27	30	
Dinoseb	0.76	0.5	"	1.27778	ND	59.1	50-138	5.83	30	

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

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Eurofins Test America, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613

April 06, 2023

Work Order: 1GC2632

Certified Analyses Included In This Report

Method/Matrix	Analyte	Certifications
EPA 8151A in Water		
	2,4,5-TP (Silvex)	KS-NT,SIA1X
	2,4-D	KS-NT,SIA1X
	2,4,5-TP (Silvex)	KS-NT,SIA1X
	2,4,5-T	KS-NT
	Dinoseb	KS-NT

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2023
KS-NT	Kansas Department of Health and Environment (NELAP)	E-10287	10/31/2023
MO-KC	Missouri Department of Natural Resources	140	04/30/2023
SIA1X	Iowa Dept. of Natural Resources	95	02/01/2024

End of Report

Sue Thompson

Keystone Laboratories

Sue Thompson
Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

1GC2632

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins

4/7/2023 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Thompson, Shirley J	Carrier Tracking No(s):	COC No: 310-59628.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shirley.Thompson@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Keystone Laboratories, Inc		Accreditations Required (See note): State Program - Iowa		Job #: 310-252084-1
Address: 600 East 17th Street South,	Due Date Requested: 4/5/2023	Analysis Requested		Preservation Codes: A - HCL, M - Hexane
City: Newton	TAT Requested (days):			
State, Zip: IA, 50208				
Phone:	PO #:			
Email:	WO #:			
Project Name: CRLCSWA Site 1	Project #: 31009776			
Site:	SSOW#:			Other:

1 G C 2 6 3 2
Eurofins Test America, Cedar Falls
PM: Sue Thompson

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (8151 - 2,4,5-TP)/ 8151 - 2,4,5-TP	SUB (8151 Herbicides (2,4,D/2,4,5-TP/2,4,5-T))/ 2,4,D/2,4,5-TP/2,4,5-T	Total Number of conta	Special Instructions/Note:
			Preservation Code:							
MW-13_23_03 (310-252084-2)	3/23/23	10:10 Central		Water			X		2	See Attached Instructions 01
MW-16_23_03 (310-252084-4)	3/24/23	10:10 Central		Water			X		2	See Attached Instructions 02
MW-17_23_03 (310-252084-5)	3/24/23	09:15 Central		Water			X		2	See Attached Instructions 03
MW-26_23_03 (310-252084-6)	3/23/23	13:55 Central		Water				X	1	See Attached Instructions 04
MW-32_23_03 (310-252084-7)	3/22/23	16:25 Central		Water			X		2	See Attached Instructions 05
MW-37_23_03 (310-252084-9)	3/22/23	11:45 Central		Water				X	1	See Attached Instructions 06
MW-101A_23_03 (310-252084-11)	3/22/23	13:50 Central		Water				X	1	See Attached Instructions 07
FB-1_23_03 (310-252084-16)	3/23/23	11:05 Central		Water				X	1	See Attached Instructions 08

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	TR	3/27/23 0905		Kyle Laffoon	3/27/23 11:45	0.5 C ✓
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: 0.5

Ver: 06/08/2021

ICOC No:
310-59628

1GC2632
Eurofins Test America, Cedar Falls
PM: Sue Thompson

Containers

Count	Container Type	Preservative
12	Amber Glass 1 liter - unpreserved	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
2, 4, 5, 7	SUBCONTRACT	SUB (8151 - 2,4,5-TP)/ 8151 - 2,4,5-TP	2,4,5-TP
6, 9, 11, 16	SUBCONTRACT	SUB (8151 Herbicides (2,4,D/2,4,5-TP/2,4,5-T))/ 2,4,D/2,4,5-TP/2,4,5-T	2,4,D/2,4,5-TP/2,4,5-T

eurofins | Environment Testing America

310-252084 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE: IA | Project:

Receipt Information

Date/Time Received: DATE: 3-24-23 | TIME: 1445 | Received By: MC

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 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? TB-1 ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

MW-16, MW-17

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: W | Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.4 | Corrected Temp (°C): 0.4

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY · STATE IA Project:

Receipt Information

Date/Time Received: DATE 3-24-23 TIME 1445 Received By: MC

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 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: W Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): -0.1 Corrected Temp (°C): -0.1

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY · STATE IA Project:

Receipt Information

Date/Time Received: DATE 3-24-23 TIME 1445 Received By: MC

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? TB2 + TB3 ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

MW-13 FD-2 MW-14 MW-109B MW-12

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: W Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.8 Corrected Temp (°C): 0.8

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 | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 3-24-23 | TIME 1445 | Received By: MC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 4 of 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: W | 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): 1.0 | Corrected Temp (°C): 1.0

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY · STATE LA Project:

Receipt Information

Date/Time Received: DATE 3-24-23 TIME 1445 Received By: MC

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? ☒ 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: W 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

Chain of Custody Record

385380 eurofins | Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Gina Wilming	Site Contact: —	Date 3/24/23	COC No —
Company Name Foth I & E	Tel/Email gwilming@Foth.com	Lab Contact: Shirly	Carrier: Eurofins	1 of 2 COCs
Address 411 6th ave SE	Analysis Turnaround Time			Sampler:
City/State/Zip Cedar Rapids IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone 319-365-9565	TAT if different from Below _____			Walk-in Client:
Fax: 319-365-9681	☐ 2 weeks			Lab Sampling:
Project Name CRLCSWA #1	☐ 1 week			
Site CRLCSWA #1	☐ 2 days			Job / SDG No
P O #	☐ 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)		Sample Specific Notes
MW-12_23_03	3/23	13:00	G	H_2O	7			See attached	
MW-13_23_03	3/23	10:10			7			Parameter Sheet	
MW-14_23_03	3/23	11:35			5				
MW-16_23_03	3/24	10:10			7				
MW-17_23_03	3/24	9:15			9				
MW-26_23_03	3/23	13:55			17				
MW-32_23_03	3/22	16:25			9				
MW-33_23_03	3/22	17:35			7				
MW-37_23_03	3/22	11:45			17				
MW-38_23_03	3/22	11:25			7				
MW-101A_23_03	3/22	13:50			17				
MW-101B_23_03	3/22	14:55	↓	↓	7				

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:
Do not analyze TB-2 & TB-3 analyze TB-1 only

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]	O.A.Tech	3/24/23 1230			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
			Angie Medrano	Eurofins	3/24/23 1445

Chain of Custody Record

385381

eurofins | Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Gina Wilming	Site Contact: —	Date: 3/24/23	COC No —
Company Name Foth I & E	Tel/Email: gwilming@Foth.com	Lab Contact. Shirly	Carrier: EuroFins	2 of 2 COCs
Address 411 6th ave SE	Analysis Turnaround Time			Sampler:
City/State/Zip Cedar Rapids IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only
Phone 319-365-9565	TAT if different from Below _____			Walk-in Client:
Fax. 319-365-9681	☐ 2 weeks			Lab Sampling
Project Name CRLCSWA #1	☐ 1 week			
Site CRLCSWA #1	☐ 2 days			Job / SDG No
P O #	☐ 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)	Sample Specific Notes
MW-109B_23_03	3/23	15.20	G	H_2O	5			See attached Parameter Sheet
FD-1_23_03	3/23	—			5			
FD-2_23_03	3/23	—			5			
FB-1_23_03	3/23	11:05			17			
TB-1-23_03	—	—	▽	▽	2			
4								

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]	O.A.Tech	3/24/23 12:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by: [signature]	Company: EuroFins	Date/Time 3/24/23 1445

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 2

COC Number: 1-3865545471-022823-228647

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 22C061 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth.com	Task #: 22C061_23_03	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	IA Appendix II List	1,3-Dichlorobenzene	bis(2-Ethylhexyl)phthalate	2,4,5-TP	beta-BHC	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
1	MW-12_23_03	MW-12	GW	G											X	X		X			X	X		
2	MW-13_23_03	MW-13	GW	G											X	X		X		X				
3	MW-14_23_03	MW-14	GW	G											X	X								
4	MW-16_23_03	MW-16	GW	G											X	X		X		X				
5	MW-17_23_03	MW-17	GW	G											X	X				X				
6	MW-26_23_03	MW-26	GW	G												X	X							
7	MW-32_23_03	MW-32	GW	G											X	X				X		X		
8	MW-33_23_03	MW-33	GW	G											X	X				X		X		
9	MW-37_23_03	MW-37	GW	G												X	X							
10	MW-38_23_03	MW-38	GW	G											X	X				X		X		
11	MW-101A_23_03	MW-101A	GW	G												X	X							
12	MW-101B_23_03	MW-101B	GW	G											X	X				X		X		

SHIPMENT METHOD	AIRBILL NO	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
								Angie Mellberg	3/24/23	1445

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER | DATE Signed.

4/7/2023 (Rev. 1)

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 2 of 2 **COC Number:** 1-3865545471-022823-228647

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 22C061 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 22C061_23_03	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List (N)	TSS (N)	IA Appendix II List (N)	IA Appendix II VOCs Only (N)	← Filtered (Y/N)	REMARKS / Lab ID
13	MW-109B_23_03	MW-109B	GW	G											X	X				
14	FD-1_23_03		GW	G											X	X				
15	FD-2_23_03		GW	G											X	X				
16	FB-1_23_03	FB-1	GW	G												X	X			
17	TB-1_23_03	Trip Blank	GW	G														X		
18	TB-2_23_03	Trip Blank	GW	G														X		
19	TB-3_23_03	Trip Blank	GW	G														X		
20																				
21																				
22																				
23																				
24																				

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
								Angie Mueheling	3/24/23	1445

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed.

4/7/2023 (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

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Thompson Shirley J	310-252084 COC	COC No: 310-59616 1
Client Contact: Shipping/Receiving	Phone:	E Mail: Shirley Thompson@et eurofinsus com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program Iowa		Job #: 310-252084-1
Address: 2417 Bond Street	Due Date Requested: 4/6/2023			
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_1	Project #: 31009776			
Site:	SSOW#:			

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide Acid soluble and Insoluble (Tit	Total Number of containers	Special Instructions/Note
			Preservation Code						
MW-26_23_03 (310-252084-6)	3/23/23	13 55 Central		Water			X	1	
MW-37_23_03 (310-252084-9)	3/22/23	11 45 Central		Water			X	1	
MW 101A_23_03 (310-252084-11)	3/22/23	13 50 Central		Water			X	1	
FB-1_23_03 (310-252084-16)	3/23/23	11 05 Central		Water			X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing North Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing North Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing North Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central LLC

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time 32423 1705	Company	Received by Stephanie Hernandez	Date/Time 3125123 1030	Company EEIA
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 1.7+2.1

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-252084-1

Login Number: 252084
List Number: 1
Creator: Muehling, Angela C

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.	False	TSS bottle not recd for APP II samples
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: Foth Infrastructure & Environment, LLC

Job Number: 310-252084-1

Login Number: 252084
List Number: 2
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago
List Creation: 03/25/23 11:21 AM

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	2.1
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	

Data Validation Report

Project Name:	CRLCSWA Site 1 – Cedar Rapids, IA (22C061.00)
Task Name:	22C061_23_03
Data Set Description:	Spring 2023 Groundwater Event
Laboratory(s):	Eurofins – Cedar Falls, IA and Chicago, IL Keystone Laboratories – Newton, IA
Laboratory Sample Delivery Group (SDG) ID(s):	310-252084-1
Sample Collection Dates:	3/22/2023 – 3/24/2023
Sample Analysis Dates:	3/27/2023 – 4/6/2023
Sample Matrices:	Groundwater
Sample IDs Reviewed:	See Table 1
Verification and Validation Stage, 100% data:	☐ 1 ☒ 2A ☐ 2B ☐ 3 ☐ 4
Verified and Validated By:	Gina Wilming, Senior Project Manager 4/19/2023

The analytical data were validated to verify that laboratory quality assurance and quality control (QA/QC) procedures were documented and to evaluate the overall quality of the data reported. Analytical reports include 13 investigative groundwater samples collected via low-flow or no-purge sampling techniques at the Cedar Rapids Linn County Solid Waste Agency (CRLCSWA) Site 1 from March 22 to 24, 2023; samples are listed in Table 1. The data were collected in accordance with the *Hydrologic Monitoring System Plan* (HRG, 2006), Iowa Department of Natural Resources (IDNR) Sanitary Disposal Closure Permit Number 57-SDP-03-75C (including Amendments), and 567 Iowa Administrative Code (IAC) 113.10.

Validation Summary

Stage 2A data validation was performed on 100% of the data from this SDG, with review tasks and items of note documented in the summary table below.

Validation Task and Description	Review Notes	Action
Chain of Custody (COC) and Sample Receipt Form Confirm relinquish & receipt signatures. Confirm parameters and analytical methods match COC and Hydrologic Monitoring System Plan (HMSP).	All appropriate relinquish and receipt signatures were present. Parameters and analytical methods analyzed match the COC and current sampling program. Eurofins inadvertently omitted the plastic 1-liter container for TSS sample collection at MW-26_23_03, MW-37_23_03, MW-101A-23_03, and FB-1_23_03. Eurofins was able to conduct TSS analysis for these samples using samples collected in another unpreserved glass container. Trip blanks TB-2_23_03 and TB-3_23_03 were provided by the lab but were not analyzed since only one shipment of volatile samples occurred and TB-1_23_03 was utilized as the trip blank for that shipment. The COC notes indicated not to perform analysis on TB-2_23_03 and TB-3_23_03.	Not applicable

Validation Task and Description	Review Notes	Action
Case Narrative Review for items noted by the laboratory that may impact the validation process.	As detailed in the Sample Condition Upon Receipt (SCUR) Review Notes, the case narrative noted quality control issues with pH preservation for the volatile organic compound (VOC) analysis at FD-1_23_03 and the total metals analysis at MW-13_23_03. The remaining quality control issues noted in the case narrative were reviewed and found acceptable. Issues either were addressed in the comments below, had no impact on investigative samples, or were corrected/qualified by the laboratory. No additional actions are required. Note: continuing calibration verification (CCV) evaluation is not part of Stage 2A validation.	No qualifiers assigned Not applicable
Sample Condition Upon Receipt Confirm samples in acceptable condition and no discrepancies noted. Confirm preservation meets method requirements.	With the exception identified below, samples were received by Eurofins – Cedar Falls, IA in acceptable conditions. In addition, the sulfide sample shipment from Eurofins – Cedar Falls, IA to Eurofins – Chicago, IL, and the herbicides sample shipment from Eurofins – Cedar Falls, IA to Keystone Laboratories – Newton, IA were received in acceptable conditions. The Case Narrative indicated that properly preserved vials were filled for VOC analysis at FD-1_23_03; however, pH was outside the required criteria when verified by the laboratory. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a), the technical holding time for aqueous samples that are properly cooled and pH greater than (>) 2 is 7 days. Since the VOC analysis was conducted within the 7-day holding time for unpreserved vials, no qualifiers are assigned. The total metals container for MW-13_23_03 was received with a pH >2, and Eurofins adjusted the pH to less than (<) 2 upon receipt. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b), Inductively Coupled Plasma Mass Spectrometry (ICP-MS) metals samples adjusted to a pH <2 by the laboratory do not require qualification.	Not applicable No qualifiers assigned No qualifiers assigned
Methods Requested Confirm methods match project requirements and lab provided all methods ordered.	The methods ordered and analyzed were performed in accordance with the project requirements. Methods include United States Environmental Protection Agency (USEPA) 8260D VOCs, USEPA 8270E Semivolatile Organic Compounds (SVOCs), USEPA 8015C Nonhalogenated Organics, USEPA 8151A Herbicides, USEPA 8081B Organochlorine Pesticides, USEPA 8082A Polychlorinated Biphenyls (PCBs), USEPA 6020B Total Metals, USEPA 7470A Total Mercury, USEPA 9012B Cyanide, USEPA 9034 Sulfide, and United States Geological Survey (USGS) I-3765-85 Total Suspended Solids.	Not applicable
Analytes Requested Confirm analytes ordered match project requirements and lab provided all analytes ordered.	The analytes requested were analyzed in accordance with the project requirements. The laboratory provided all analytes ordered.	Not applicable

Validation Task and Description	Review Notes	Action
Holding Times Confirm laboratory performed extractions and analyses within method-required holding times.	Eurofins and Keystone Laboratories performed analysis within the method-required holding times.	Not applicable
Blanks Confirm no detections in laboratory method blanks, field blanks, and trip blanks.	Table 3 presents analytes detected in the method, field, and trip blanks. No detections were found in the trip blank. Qualifiers are assigned in Table 9. Antimony was detected in the method blank (MB 310-382513/1-A) at a concentration of 0.000757 J mg/L. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the blank contamination concentration is J-flagged, associated non-detect sample results are not qualified and associated J-flagged sample results are assigned a U qualifier and reported at the practical quantitation limit (PQL). Toluene was detected in the field blank (FB-1_23_03) at a concentration of 0.597 J ug/L. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for VOCs, when the blank contamination concentration is J-flagged, associated non-detect sample results are not qualified and associated J-flagged sample results are assigned a U qualifier and reported at the PQL.	Yes qualifiers assigned Yes qualifiers assigned
Surrogates or Deuterated Monitoring Compounds For *organic analyses only*, confirm surrogates analyzed and surrogate recovery within QC limits.	Table 4 is intended to present surrogate recoveries that were outside the control limits. Surrogate recoveries were within control limits for this SDG.	Not applicable
Matrix Spike/Matrix Spike Duplicates (MS/MSDs) Confirm MS/MSDs analyzed at frequency specified by project requirements and MS/MSD percent recovery within lab specified limits. Confirm, for Organic analytes, MSD relative percent difference (RPD) within limits. For inorganic analytes, lab replicate RPD within limits.	MS/MSD quality control samples are not required for this project. As a result, no MS/MSD samples were collected or submitted for analysis. Where analyzed and reported by the laboratory, MS/MSD results associated with the samples in 310-252084-1 are reviewed under Stage 2A validation guidelines. Table 5 is intended to present MS/MSD recoveries and RPDs that were outside the control limits, MS/MSD recoveries and RPDs were within control limits for this SDG.	Not applicable

Validation Task and Description	Review Notes	Action
Laboratory Control Sample/Laboratory Control Sample Duplicates (LCS/LCSDs) Confirm LCS analyzed and LCS/LCSD recovery and RPD within lab specified limits.	LCS/LCSD quality control samples are not required for this project. Where analyzed and reported by the laboratory, LCS/LCSD results associated with method batches in 310-252084-1 are reviewed under Stage 2A validation guidelines. Table 6 presents the LCS/LCSD recoveries and RPDs that were outside the control limits. LCS/LCSD recoveries were within control limits for this SDG. No qualifiers were assigned due to the LCS/LCSD RPD exceedance. The 4-chloroaniline LCS/LCSD RPD associated with prep batch 382259 was above the RPD limit (35%). In accordance with the approved data validation Standard Operating Procedure (SOP), when LCS/LCSD RPD is above the RPD limit for SVOCs, non-detect sample results from the same prep batch are not qualified.	No qualifiers assigned
Laboratory Duplicates Confirm lab duplicates analyzed and RPD within lab specified limits.	Laboratory duplicate quality control samples are not required for this project. Where analyzed and reported by the laboratory, laboratory duplicate results associated with the samples in 310-252084-1 are reviewed under Stage 2A validation guidelines. Table 7 is intended to present the lab duplicate sample RPDs that were outside the RPD limits. RPDs were within the lab-specified RPD limits for this SDG.	Not applicable
Field Duplicates Confirm field duplicates collected at required frequency and field duplicate RPD within acceptable limits.	Field duplicate samples were collected at a 1 per 10 frequency in accordance with the project requirements. Table 8 contains the precision evaluation of the parent/field duplicate samples. The RPDs between the investigative and field duplicate samples were within the duplicate sample validation criteria.	Not applicable

Abbreviations:
> = greater than
< = less than
CCV = continuing calibration verification
COC = chain of custody
HMSP = Hydrologic Monitoring System Plan
ICP-MS = inductively coupled plasma mass spectrometry
mg/L = milligram per liter
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MS = matrix spike
MSD = matrix spike duplicate
PQL = Practical Quantification Limit
QA = quality assurance
QC = quality control
PCB = polychlorinated biphenyl
RPD = relative percent difference
SCUR = sample condition upon receipt
SDG = sample delivery group
SOP = standard operating procedures
SVOC = semivolatile organic compound
ug/L = microgram per liter

Abbreviations (Continued):
USEPA = United States Environmental Protection Agency
USGS = United States Geological Survey
VOC = volatile organic compound

Overall Assessment of Data

Item	Acceptable		Comments
	Yes	No	
1. Method Criteria	X		Samples were collected, preserved, shipped/delivered, and analyzed within the method protocols, except for VOCs at FD-1_23_03 and total metals at MW-13_23_03. During sample check-in, the vials for VOC analysis at FD-1_23_03 were outside the required pH preservation criteria. VOC analysis at FD-1_23_03 was conducted within the 7-day holding time for unpreserved vials; no qualifiers were assigned. The total metals container for MW-13_22_03 was received with a pH >2 but adjusted by Eurofins to pH <2 upon receipt. ICP-MS metals samples adjusted to a pH <2 by the laboratory do not require qualification.
2. Precision	X		Field precision was evaluated through investigative and field duplicate RPDs. The RPDs between the investigative and field duplicate samples were within the duplicate sample validation criteria. Laboratory precision was evaluated through MS/MSD, LCS/LCSD, and laboratory duplicate RPDs. Where analyzed and reported by the laboratory, MS/MSD and laboratory duplicate RPDs were within control limits. With the exception identified below, LCS/LCSD RPDs were within control limits. The 4-chloroaniline LCS/LCSD RPD associated with prep batch 382259 was above the RPD limit. Details are provided in the LCS/LCSD section of the Validation Summary above. No qualifiers were assigned since the associated 4-chloroaniline concentrations were non-detect.
3. Accuracy	X		Accuracy was evaluated through surrogate, MS/MSD, and LCS/LCD recovery. The % recoveries for surrogates or spiked samples were within control limits.
4. Representativeness	X		Sampling was conducted in accordance with the sample collection procedures described in the approved HMSP, approved HMSP revisions, and SOPs.
5. Comparability	X		Collection techniques, measurement procedures, methods, and reporting were equivalent to currently approved procedures and are comparable to historical data.
6. Completeness	X		Valid analytical results exceeded 90%.
7. Suitability for Intended Use	X		No evidence of gross contamination or significant issues with the method criteria, precision, accuracy, representativeness, comparability, or completeness were identified.

Overall, the data reported are of good quality and the results for the QA/QC measurements that were used by the laboratories during the analysis of the samples were generally acceptable. Some sample results required qualification during data validation because method-specific QA/QC criteria were not met; results may be qualified for more than one reason. Qualified data are usable (unless qualified as rejected [R]), represent data of good quality and reasonable confidence, and have an acceptable degree of

uncertainty (i.e., may be less precise or less accurate than unqualified data). Table 2 provides a definition of the qualifiers that may be assigned by the validator and/or retained from the laboratory. A summary of the validation qualifiers is provided below.

- No results were qualified as estimated (assigned as J qualifiers), biased low (assigned as J- qualifier), biased high (assigned as J+ qualifiers), non-detect with the reporting limit an estimated value (assigned as UJ, UJ+, or UJ- qualifiers), presumptive evidence of presence of an analyte (assigned as N or NJ qualifiers), or not usable and rejected (assigned as R qualifier).
- Three results (0.2%) were qualified as non-detect at a concentration less than the reporting limit or less than the sample result (assigned as U qualifiers).
- 100% of the data is usable for project data quality objectives.

Attachment 1

Tables

Table 1
Sample IDs Reviewed

Project Sample ID	Analyzed Lab Sample ID	Project Sample ID Matches Lab Client Sample ID	Lab Sample Date/Time Match COC/Logbook	Parameters and Analytical Methods Match COC	Sample Type
MW-12_23_03	310-252084-1	Yes	Yes	Yes	Normal
MW-13_23_03	310-252084-2	Yes	Yes	Yes	Normal
MW-14_23_03	310-252084-3	Yes	Yes	Yes	Normal
MW-16_23_03	310-252084-4	Yes	Yes	Yes	Normal
MW-17_23_03	310-252084-5	Yes	Yes	Yes	Normal
MW-26_23_03	310-252084-6	Yes	Yes	Yes	Normal
MW-32_23_03	310-252084-7	Yes	Yes	Yes	Normal
MW-33_23_03	310-252084-8	Yes	Yes	Yes	Normal
MW-37_23_03	310-252084-9	Yes	Yes	Yes	Normal
MW-38_23_03	310-252084-10	Yes	Yes	Yes	Normal
MW-101A_23_03	310-252084-11	Yes	Yes	Yes	Normal
MW-101B_23_03	310-252084-12	Yes	Yes	Yes	Normal
MW-109B_23_03	310-252084-13	Yes	Yes	Yes	Normal
FD-1_23_03	310-252084-14	Yes	Yes	Yes	FD
FD-2_23_03	310-252084-15	Yes	Yes	Yes	FD
FB-1_23_03	310-252084-16	Yes	Yes	Yes	FB
TB-1_23_03	310-252084-17	Yes	Yes	Yes	TB

Notes:
FB = field blank
FD = field duplicate
TB = trip blank

Table 2
Data Qualifiers That May Be Used to Qualify Analytical Results During Validation

Qualifier	Explanation
U	The analyte was analyzed for and was not detected above the numerical quantitation limit.
J	The analyte was analyzed for and was positively identified, but the analytical result (i.e., quantitation) is an estimated value. In some cases it is recognized that the estimated value is biased high (J+) suggesting the actual value is lower than estimated; or biased low (J-) suggesting the actual value is higher than estimated.
UJ	The analyte was analyzed for and was not detected above the reporting limit, but the reporting limit is an estimated value.
R	The analyte was analyzed for but may or may not be present and/or quantifiable due to quality control issues. The analytical result is not usable and should be rejected.
N	The analysis indicates presumptive evidence of the presence of the analyte.
NJ	The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Notes:
Results qualified as "J" or "UJ" are of acceptable data quality and may be used quantitatively per United States Environmental Protection Agency guidelines.

Table 3
Method, Field, and Trip Blank Exceedances

Lab Report	Blank Type	Lab Sample ID	Analysis Batch	Prep Batch	Parameter	Result	Units	Lab Qualifier	MDL	PQL	Associated Samples
310-252084-1	Method	MB 310-382513/1-A	382841	382513	Antimony	0.000757	mg/L	J	0.00069	0.002	MW-14_23_03, MW-16_23_03, MW-17_23_03, MW-26_23_03, MW-32_23_03, MW-33_23_03, MW-37_23_03, MW-38_23_03, MW-101A_23_03, MW-101B_23_03, MW-109B_23_03, FD-1_23_03, FD-2_23_03, FB-1_23_03
310-252084-1	Field	310-252084-16	382264	N/A	Toluene	0.597	ug/L	J	0.43	1.00	Investigative and FD samples in 310-252084-1

Notes:
FD = field duplicate
mg/L = milligrams per liter
MDL = minimum detection limit
N/A = not applicable
PQL = practical quantitation limit
ug/L = micrograms per liter

Table 4
Surrogate Recovery Exceedances

Lab Sample ID	Parent Sample	Parameter	Surrogate % Recovery	% Recovery Limits
Surrogate recoveries were within control limits for this Sample Delivery Group.				

Notes:
% = percent

Table 5
Matrix Spike - Matrix Spike Duplicate Exceedances

Lab Sample ID	Parent Sample	Parameter	MS % Recovery	MSD % Recovery	% Recovery Limits	RPD	RPD Limit
MS/MSD recoveries and RPDs were within control limits for this Sample Delivery Group.							

Notes:
% = percent
MS = matrix spike
MSD = matrix spike duplicate
RPD = relative percent difference

Table 6
Laboratory Control Sample and Laboratory Control Sample Duplicate Exceedances

Lab Sample ID	Associated SDG Batch	Parameter	LCS % Recovery	LCSD % Recovery	% Recovery Limits		RPD	RPD Limit
LCS 310-382259/2-A	382259	4-Chloroaniline	89	58	10	121	41	35
LCSD 310-382259/3-A								

Notes:
% = percent
LCS = laboratory control sample
LSCD = laboratory control sample duplicate
RPD = relative percent difference
SDG = sample delivery group

Table 7
Laboratory Duplicate Sample Exceedances

Lab Sample ID	Client Sample ID	Parameter	RPD	RPD Limit
Lab duplicate sample RPDs were within the RPD limits for this Sample Delivery Group.				

Notes:
RPD = relative percent difference

Table 8
Relative Percent Difference (RPD) Analysis for Field Duplicate Samples
Appendix I Constituents & TSS

RPD = $\dfrac{\text{absolute value (a - b)}}{\text{(a + b)/2}} \times 100\%$

Acceptance Criteria*: 35%

* Unless otherwise noted in project planning documents, the acceptance criteria for field duplicates RPD is as follows:
- For analytes with concentrations greater than 5x (2x for soil matrices) the reporting limit, the RPD should be within 35% for water matrices (50% for soil matrices).
- For analytes with either or both concentrations less than 5x (2x for soil matrices) the reporting limit (indicated below by "low-level"), the absolute difference between the sample and field duplicate should not exceed 5x the reporting limit.

Duplicate Result Analysis:

Parameter	Unit	Parent	Duplicate Sample	RPD	Acceptable?
		MW-13_23_03	**FD-1_23_03**		
1,1-Dichloroethane	ug/L	2.01	1.97	low-level	Yes
1,2-Dichlorobenzene	ug/L	2.20	2.18	low-level	Yes
1,4-Dichlorobenzene	ug/L	14.6	14.2	2.8%	Yes
Benzene	ug/L	3.74	3.67	1.9%	Yes
Chlorobenzene	ug/L	4.31	4.16	low-level	Yes
Chloroethane	ug/L	J 2.33	J 2.00	low-level	Yes
Xylenes, Total	ug/L	J 0.439	J 0.415	low-level	Yes
Arsenic	mg/L	0.0534	0.0447	17.7%	Yes
Barium	mg/L	1.10	0.906	19.3%	Yes
Cobalt	mg/L	0.00204	0.00173	low-level	Yes
Nickel	mg/L	0.0117	0.0117	low-level	Yes
Vanadium	mg/L	J 0.00237	J 0.00146	low-level	Yes
Total Suspended Solids	mg/L	154	165	6.9%	Yes
		MW-109B_23_03	**FD-2_23_03**		
1,1-Dichloroethane	ug/L	J 0.959	J 0.910	low-level	Yes
1,4-Dichlorobenzene	ug/L	1.72	1.81	low-level	Yes
Chlorobenzene	ug/L	7.41	7.43	0.3%	Yes
cis-1,2-Dichloroethene	ug/L	J 0.423	J 0.428	low-level	Yes
Vinyl Chloride	ug/L	J 0.267	J 0.277	low-level	Yes
Arsenic	mg/L	0.0202	0.0194	4.0%	Yes
Barium	mg/L	0.633	0.615	2.9%	Yes
Cobalt	mg/L	0.0173	0.0167	3.5%	Yes
Nickel	mg/L	0.0366	0.0355	3.1%	Yes
Thallium	mg/L	0.00515	0.00495	low-level	Yes
Total Suspended Solids	mg/L	11.0	8.33	low-level	Yes

Table 9
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
MW-14_23_03	310-252084-3	USEPA 6020B	Antimony	0.000736	J	mg/L	<0.002	U	MB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
MW-16_23_03	310-252084-4	USEPA 6020B	Antimony	0.000859	J	mg/L	<0.002	U	MB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
MW-32_23_03	310-252084-7	USEPA 8260D	Toluene	0.503	J	ug/L	<1.00	U	FB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.

Notes:
This table only lists validator qualified data. Not all laboratory qualified data are listed; only the laboratory qualified data that was validator qualified are included.
> = greater than
< = less than
FB = field blank
MB = method blank
MDL = minimum detection limit
mg/L = milligrams per liter
PQL = practical quantitation limit
ug/L = micrograms per liter
USEPA = United States Environmental Protection Agency

Attachment 2

References

References

Howard R. Green Company (HRG), 2006. *Landfill Permit Application, Cedar Rapids/Linn County Solid Waste Agency, Waste Management Site 1, Appendix 4: Hydrologic Monitoring System Plan (HMSP).* September.

United States Environmental Protection Agency (USEPA, 2020a). *National Functional Guidelines for Organic Superfund Methods Data Review.* EPA-540-R-20-005. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

USEPA, 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. EPA-542-R-20-006. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

August 2023 Sampling Event

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-1	Weather:	Clear, 77°F, SW wind @ 5 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	9	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	736.84
Top of screen (ft. MSL):	711.84	Materials:	PVC	Top of Casing elevation (ft. MSL):	739.51
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	35.91	36.03	36.10
Water elevation (ft. MSL):	703.60	703.48	703.41

3 Well Volumes (gal): 5.75 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	47.67	48.00	0.33

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	696.51	Flow Rate (mL/min):	200	Volume removed (gal):	0.95
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
AW-1_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	11:27	11:29	11:32
Temp (°C)	15.42	15.46	15.43
Sp. Cond (umhos/cm)	1532.8	1527.0	1520.8
pH	6.09	6.08	6.08
DO (mg/l)	0.40	0.51	0.40
ORP (mV)	-122.3	-124.1	-125.5
Turbidity (NTU)	21.80	20.10	20.90

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-1	Weather:	Clear, 77°F, SW wind @ 5 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at AW-1 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-2 | Weather: Clear, 89°F, S wind @ 9 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 788.60
Top of screen (ft. MSL): 710.60 | Materials: PVC | Top of Casing elevation (ft. MSL): 788.18
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	77.58	77.44	77.64
Water elevation (ft. MSL):	710.60	710.74	710.54

3 Well Volumes (gal): 9.78 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	97.58	97.50	0.08

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 696.18 | Flow Rate (mL/min): 200 | Volume removed (gal): 1.1 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
AW-2_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:24	13:28	13:31
Temp (°C)	21.80	21.76	21.59
Sp. Cond (umhos/cm)	753.71	755.51	750.34
pH	6.67	6.63	6.58
DO (mg/l)	0.37	0.35	0.33
ORP (mV)	-169.2	-167.6	-165.7
Turbidity (NTU)	3.32	4.72	4.93

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-2	Weather:	Clear, 89°F, S wind @ 9 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at AW-2 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-3 | Weather: Clear, 93°F, WSW wind @ 14 mph
Date: 8/23/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 799.70
Top of screen (ft. MSL): 711.70 | Materials: PVC | Top of Casing elevation (ft. MSL): 799.31
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	91.07	90.98	91.21
Water elevation (ft. MSL):	708.24	708.33	708.10

3 Well Volumes (gal): 8.09 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	107.61	107.90	0.29

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 694.31 | Flow Rate (mL/min): 150 | Volume removed (gal): 1.0 | Volume sampled (L): 2.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
AW-3_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8081B - delta-BHC	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	11:24	11:29	11:34
Temp (°C)	21.49	21.46	21.34
Sp. Cond (umhos/cm)	516.46	518.25	512.11
pH	6.26	6.24	6.24
DO (mg/l)	0.60	0.55	0.52
ORP (mV)	-136.0	-136.8	-137.2
Turbidity (NTU)	5.39	5.81	5.67

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-3	Weather:	Clear, 93°F, WSW wind @ 14 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at AW-3 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-4 | Weather: Clear, 94°F, S wind @ 5-10 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 723.44
Top of screen (ft. MSL): 712.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 725.76
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	24.54	24.59	25.74
Water elevation (ft. MSL):	701.22	701.17	700.02

3 Well Volumes (gal): 4.29 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	33.32	33.10	0.22

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: Geotech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 697.76 | Flow Rate (mL/min): 175 | Volume removed (gal): 0.9 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): Yes, slight*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
AW-4_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	14:44	14:46	14:48
Temp (°C)	17.65	17.64	17.72
Sp. Cond (umhos/cm)	1678.6	1676.4	1693.3
pH	5.93	5.93	5.96
DO (mg/l)	0.37	0.36	0.45
ORP (mV)	50.6	52.7	53.4
Turbidity (NTU)	0.44	1.23	2.72

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-4	Weather:	Clear, 94°F, S wind @ 5-10 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at AW-4 in Fall 2023.

*Slight yellow color after sampling.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-5 | Weather: Cloudy, 52°F, SE wind at 12 mph
Date: 3/21/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 718.94
Top of screen (ft. MSL): 711.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.33
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.07	20.16	20.63
Water elevation (ft. MSL):	701.26	701.17	700.70

3 Well Volumes (gal): 4.80 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	29.89	30.25	0.36

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: Geotech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 696.33 | Flow Rate (mL/min): 250 | Volume removed (gal): 0.86 | Volume sampled (L): 3.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
AW-5_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	14:22	14:24	14:26
Temp (°C)	16.30	16.30	16.32
Sp. Cond (umhos/cm)	1559.4	1553.1	1543.2
pH	6.11	6.07	6.06
DO (mg/l)	0.34	0.32	0.27
ORP (mV)	-253.9	-251.1	-249.9
Turbidity (NTU)	4.30	4.80	4.50

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-5	Weather:	Cloudy, 52°F, SE wind at 12 mph
Date:	3/21/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at AW-5 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: AW-6 | Weather: Clear, 74°F, WNW wind @ 5-10 mph
Date: 8/29/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 718.94
Top of screen (ft. MSL): 651.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.13
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.43	20.60	20.80
Water elevation (ft. MSL):	700.70	700.53	700.33

3 Well Volumes (gal): 28.98 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	79.69	79.50	0.19

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 646.13 | Flow Rate (mL/min): 200 | Volume removed (gal): 1.0 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
AW-6_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:05	9:07	9:10
Temp (°C)	16.32	16.39	16.35
Sp. Cond (umhos/cm)	2316.0	2326.8	2331.4
pH	6.02	6.01	6.01
DO (mg/l)	0.32	0.28	0.29
ORP (mV)	173.4	168.8	162.0
Turbidity (NTU)	0.00	0.00	0.32

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	AW-6	Weather:	Clear, 74°F, WNW wind @ 5-10 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at AW-6 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: CRL-9 | Weather: Clear, 80°F, SW wind @ 7 mph
Date: 8/29/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 734.10
Top of screen (ft. MSL): 672.89 | Materials: PVC | Top of Casing elevation (ft. MSL): 736.59
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	34.10	34.22	34.25
Water elevation (ft. MSL):	702.49	702.37	702.34

3 Well Volumes (gal): 19.36 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	73.70	73.65	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 668.59 | Flow Rate (mL/min): 150 | Volume removed (gal): 1.1 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): Yes* | Color? (Y/N): Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
CRL-9_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:42	13:46	13:50
Temp (°C)	16.46	16.42	16.50
Sp. Cond (umhos/cm)	5923.8	5937.4	5954.2
pH	6.47	6.48	6.48
DO (mg/l)	0.31	0.28	0.26
ORP (mV)	-149.9	-152.7	-154.7
Turbidity (NTU)	4.12	4.42	4.69

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	CRL-9	Weather:	Clear, 80°F, SW wind @ 7 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at CRL-9 in Fall 2023.

*Slight effervescence, black suspended solids, yellow color and odor in sample.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-11 | Weather: Clear, 82°F, SSW wind @ 9 mph
Date: 8/24/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 742.00
Top of screen (ft. MSL): 678.44 | Materials: PVC | Top of Casing elevation (ft. MSL): 745.62
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	40.74	40.77	41.67
Water elevation (ft. MSL):	704.88	704.85	703.95

3 Well Volumes (gal): 15.37 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	72.18	72.60	0.42

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 680.62 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.85 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-11_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	8:47	8:50	8:53
Temp (°C)	18.15	18.18	18.08
Sp. Cond (umhos/cm)	925.84	932.84	949.10
pH	6.12	6.11	6.11
DO (mg/l)	0.37	0.32	0.26
ORP (mV)	231.2	226.6	224.9
Turbidity (NTU)	3.93	4.36	4.61

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-11	Weather:	Clear, 82°F, SSW wind @ 9 mph
Date:	8/24/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-11 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-12 | Weather: Clear, 84°F, SW wind @ 11 mph
Date: 8/24/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 742.11
Top of screen (ft. MSL): 708.84 | Materials: PVC | Top of Casing elevation (ft. MSL): 745.37
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	40.37	40.40	40.46
Water elevation (ft. MSL):	705.00	704.97	704.91

3 Well Volumes (gal): 3.01 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	46.53	46.80	0.27

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 702.37 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.7 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): Yes | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-12_23_08	USEPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	USEPA 8081B - beta-BHC	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:23	9:26	9:28
Temp (°C)	21.02	20.90	20.65
Sp. Cond (umhos/cm)	2783.2	2781.8	2776.0
pH	5.79	5.78	5.78
DO (mg/l)	0.52	0.67	0.65
ORP (mV)	-98.6	-100.7	-101.7
Turbidity (NTU)	2.26	0.3	0.0

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-12	Weather:	Clear, 84°F, SW wind @ 11 mph
Date:	8/24/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-13 | Weather: Clear, 75°F, SE wind @ 7 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 737.34
Top of screen (ft. MSL): 714.16 | Materials: PVC | Top of Casing elevation (ft. MSL): 740.99
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	36.01	35.98	36.56
Water elevation (ft. MSL):	704.98	705.01	704.43

3 Well Volumes (gal): 2.85 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	41.83	42.15	0.32

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 701.99 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.6 | Volume sampled (L): 3.37
Well dry? (Y/N): No | Odor? (Y/N): Yes* | Color? (Y/N): Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-13_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:06	9:08	9:10
Temp (°C)	18.10	18.12	18.13
Sp. Cond (umhos/cm)	2032.0	2025.6	2012.3
pH	5.90	5.89	5.87
DO (mg/l)	0.27	0.24	0.22
ORP (mV)	151.4	149.5	142.0
Turbidity (NTU)	2.03	1.31	2.78

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-13	Weather:	Clear, 75°F, SE wind @ 7 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: *Slight color, odor, slight effervescence and suspended solids in sample.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-14 | Weather: Clear, 77°F. SE wind @ 7 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 737.42
Top of screen (ft. MSL): 679.13 | Materials: PVC | Top of Casing elevation (ft. MSL): 740.93
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	36.09	36.07	37.95
Water elevation (ft. MSL):	704.84	704.86	702.98

3 Well Volumes (gal): 15.02 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	66.80	67.15	0.35

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 678.93 | Flow Rate (mL/min): 150 | Volume removed (gal): 1.1 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): Yes, slight* | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-14_23_08	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:10	10:13	10:17
Temp (°C)	21.59	21.70	21.80
Sp. Cond (umhos/cm)	2225.4	2259.1	2282.3
pH	6.02	6.03	6.04
DO (mg/l)	0.34	0.31	0.31
ORP (mV)	-156	-156.4	-156.5
Turbidity (NTU)	6.63	6.09	6.21

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-14	Weather:	Clear, 77°F. SE wind @ 7 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-15 | Weather: Clear, 84°F, SSW wind @ 9 mph
Date: 8/23/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 735.19
Top of screen (ft. MSL): 673.59 | Materials: PVC | Top of Casing elevation (ft. MSL): 737.99
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	34.50	34.54	36.10
Water elevation (ft. MSL):	703.49	703.45	701.89

3 Well Volumes (gal): 17.07 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	69.40	69.65	0.25

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 672.99 | Flow Rate (mL/min): 200 | Volume removed (gal): 2.1 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-15_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:44	9:47	9:50
Temp (°C)	19.18	19.06	19.36
Sp. Cond (umhos/cm)	1809.9	1810.9	1818.8
pH	5.81	5.81	5.81
DO (mg/l)	0.17	0.16	0.16
ORP (mV)	143.6	141.6	137.1
Turbidity (NTU)	0.82	0.69	0.70

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-15	Weather:	Clear, 84°F, SSW wind @ 9 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-15 in Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-16	Weather:	Clear, 88°F, SW wind @ 12 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.81
Top of screen (ft. MSL):	711.67	Materials:	PVC	Top of Casing elevation (ft. MSL):	737.92
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	34.82	34.88	35.18
Water elevation (ft. MSL):	703.10	703.04	702.74

3 Well Volumes (gal): 3.14 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	41.25	41.50	0.25

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	699.92	Flow Rate (mL/min):	200	Volume removed (gal):	0.6
Well dry? (Y/N):	No	Odor? (Y/N):	Yes*	Volume sampled (L):	3.37
				Color? (Y/N):	Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-16_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:17	10:19	10:21
Temp (°C)	20.08	19.96	19.92
Sp. Cond (umhos/cm)	1728.6	1705.4	1701.3
pH	5.61	5.61	5.61
DO (mg/l)	0.75	0.66	0.66
ORP (mV)	-121.4	-125.2	-126.9
Turbidity (NTU)	3.61	2.87	1.56

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-16	Weather:	Clear, 88°F, SW wind @ 12 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: *Slight yellow color and odor in sample.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-17	Weather:	Clear, 70°F, W wind @ 7 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.80
Top of screen (ft. MSL):	709.99	Materials:	PVC	Top of Casing elevation (ft. MSL):	736.68
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	30.26	30.45	30.79
Water elevation (ft. MSL):	706.42	706.23	705.89

3 Well Volumes (gal): 3.14 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	36.69	36.90	0.21

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	703.18	Flow Rate (mL/min):	200	Volume removed (gal):	2.4
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	3.87
				Color? (Y/N):	Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-17_23_08	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading:
Time	9:26	9:28	9:31
Temp (°C)	14.87	15.20	15.24
Sp. Cond (umhos/cm)	2129.3	2128.9	2125.8
pH	6.07	6.07	6.07
DO (mg/l)	1.23	1.23	1.24
ORP (mV)	-118.5	-123.4	-125.9
Turbidity (NTU)	3.48	3.25	2.92

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-17	Weather:	Clear, 70°F, W wind @ 7 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: *Very slight color and suspended solids in sample.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-18	Weather:	Clear, 76°F, NW wind @ 8 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	734.40
Top of screen (ft. MSL):	676.53	Materials:	PVC	Top of Casing elevation (ft. MSL):	736.28
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	30.78	30.94	31.76
Water elevation (ft. MSL):	705.50	705.34	704.52

3 Well Volumes (gal): 16.61 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	64.75	65.10	0.35

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	676.28	Flow Rate (mL/min):	200	Volume removed (gal):	0.7
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Volume sampled (L): 1.87

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-18_23_08	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 6020B - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	EPA 7470A - Total Mercury		
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:12	10:15	10:18
Temp (°C)	15.90	15.76	15.91
Sp. Cond (umhos/cm)	1864.3	18.62.2	1858.8
pH	6.02	6.02	6.02
DO (mg/l)	0.40	0.32	0.27
ORP (mV)	-50.7	-50.9	-51.5
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-18	Weather:	Clear, 76°F, NW wind @ 8 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-18 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-19 | Weather: Clear, 81°F, SW wind @ 5-10 mph
Date: 8/28/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 721.10
Top of screen (ft. MSL): 680.23 | Materials: PVC | Top of Casing elevation (ft. MSL): 723.01
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	21.54	21.64	21.86
Water elevation (ft. MSL):	701.47	701.37	701.15

3 Well Volumes (gal): 12.83 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	47.78	47.80	0.02

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 680.01 | Flow Rate (mL/min): 250 | Volume removed (gal): 0.8 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-19_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:09	13:11	13:13
Temp (°C)	15.79	15.60	15.86
Sp. Cond (umhos/cm)	2567.0	2565.6	2566.8
pH	5.86	5.82	5.80
DO (mg/l)	0.63	0.52	0.46
ORP (mV)	-89.4	-92.2	-96.0
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-19	Weather:	Clear, 81°F, SW wind @ 5-10 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-19 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-20 | Weather: Clear, 69°F, S wind @ 0-5 mph
Date: 8/28/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 721.14
Top of screen (ft. MSL):* 706.73 | Materials: PVC | Top of Casing elevation (ft. MSL)*: 723.48
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	22.11	22.20	22.38
Water elevation (ft. MSL):	701.37	701.28	701.10

3 Well Volumes (gal): 2.27 | Screen submerged? (Y/N): No

	Constructed*	Measured	Difference
Well Depth (ft. TOC):	26.75	26.50	0.25

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 699.98 | Flow Rate (mL/min): 225 | Volume removed (gal): 1.9 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-20_23_08	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:30	0.40	9:34
Temp (°C)	14.7	14.62	14.63
Sp. Cond (umhos/cm)	1373.9	1377.8	1385.8
pH	6.04	6.04	6.03
DO (mg/l)	0.46	0.42	0.40
ORP (mV)	-96.4	-101.3	-105.1
Turbidity (NTU)	2.82	2.78	2.50

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-20	Weather:	Clear, 69°F, S wind @ 0-5 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: *Well replaced in 2005 - could not find well construction form on DocDNA. TOC and Constructed Well Depth from 2005 AWQR. TOS estimated.

In accordance with Permit Amendment #16, annual monitoring was conducted at MW-20 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-21 | Weather: Clear, 82°F, SW wind @ 7 mph
Date: 8/28/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 730.62
Top of screen (ft. MSL):* 706.93 | Materials: PVC | Top of Casing elevation (ft. MSL): 732.88
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	30.96	31.05	31.13
Water elevation (ft. MSL):	701.92	701.83	701.75

3 Well Volumes (gal): 2.71 | Screen submerged? (Y/N): No

	Constructed*	Measured	Difference
Well Depth (ft. TOC):	36.50	35.90	0.60

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 699.88 | Flow Rate (mL/min): 200 | Volume removed (gal): 1.2 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-21_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8081B - 4,4'-DDT & Dieldrin	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	14:52	14:54	14:56
Temp (°C)	16.55	16.40	16.14
Sp. Cond (umhos/cm)	2251.3	2244.4	2238.5
pH	6.19	6.18	6.17
DO (mg/l)	0.24	0.22	0.21
ORP (mV)	-107.6	-108.2	-108.9
Turbidity (NTU)	5.04	5.16	5.21

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-21	Weather:	Clear, 82°F, SW wind @ 7 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: *Well replaced in 2005 - could not find well construction form on DocDNA. Constructed Well Depth from 2005 AWQR plus the Spring 2021 casing extension. TOS estimated.

In accordance with Permit Amendment #16, annual monitoring was conducted at MW-21 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-22 | Weather: Clear, 79°F, NNE wind @ 9 mph
Date: 8/30/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 731.05
Top of screen (ft. MSL): 681.27 | Materials: PVC | Top of Casing elevation (ft. MSL): 733.34
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	31.40	31.50	31.59
Water elevation (ft. MSL):	701.94	701.84	701.75

3 Well Volumes (gal): 12.74 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	57.45	57.50	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 681.34 | Flow Rate (mL/min): 250 | Volume removed (gal): 1.4 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): Yes, slight

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-22_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - 2,2'-oxybis(1-Chloropropane) & Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	15:01	15:03	15:05
Temp (°C)	15.64	15.44	15.47
Sp. Cond (umhos/cm)	3418.8	3471.8	3521.2
pH	6.17	6.17	6.17
DO (mg/l)	0.21	0.19	0.18
ORP (mV)	-109.8	-111.7	-113.7
Turbidity (NTU)	0.41	0.36	0.29

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-22	Weather:	Clear, 79°F, NNE wind @ 9 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-22 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-23 | Weather: Clear, 79°F, WSW wind @ 4 mph
Date: 8/28/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 734.30
Top of screen (ft. MSL): 712.29 | Materials: PVC | Top of Casing elevation (ft. MSL): 736.74
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	34.27	34.37	35.72
Water elevation (ft. MSL):	702.47	702.37	701.02

3 Well Volumes (gal): 2.53 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	39.45	39.50	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 698.74 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.5 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-23_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:01	13:03	13:05
Temp (°C)	15.69	15.42	15.24
Sp. Cond (umhos/cm)	1260.7	1254.5	1262.4
pH	6.10	6.09	6.07
DO (mg/l)	0.62	0.50	0.43
ORP (mV)	1.7	2.4	2.8
Turbidity (NTU)	0.00	0.81	1.07

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-23	Weather:	Clear, 79°F, WSW wind @ 4 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-23 in Fall 2023.

*Slight black suspended solids in sample.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-24 | Weather: Clear, 77°F, NNE wind @ 7 mph
Date: 8/30/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 783.32
Top of screen (ft. MSL):* 707.00 | Materials: PVC | Top of Casing elevation (ft. MSL)*: 785.70
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	80.23	80.38	81.69
Water elevation (ft. MSL):	705.47	705.32	704.01

3 Well Volumes (gal): 4.14 | Screen submerged? (Y/N): No

	Constructed*	Measured	Difference
Well Depth (ft. TOC):	88.70	89.00	0.30

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 700.70 | Flow Rate (mL/min): 150 | Volume removed (gal): 1.1 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-24_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4-D	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	12:49	12:54	12:58
Temp (°C)	19.29	19.20	19.04
Sp. Cond (umhos/cm)	947.43	947.61	944.64
pH	5.65	5.64	5.64
DO (mg/l)	0.47	0.41	0.39
ORP (mV)	-34.1	-36.6	-38.7
Turbidity (NTU)	6.63	6.13	6.32

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-24	Weather:	Clear, 77°F, NNE wind @ 7 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: *Well replaced in 2005 - could not find well construction form on DocDNA. TOC and Constructed Well Depth from 2005 AWQR. TOS estimated.

In accordance with Permit Amendment #16, annual monitoring was conducted at MW-24 in Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-25	Weather:	Clear, 79°F, NE wind @ 9 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	781.70
Top of screen (ft. MSL):	679.02	Materials:	PVC	Top of Casing elevation (ft. MSL):	784.20
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	78.89	79.01	79.21
Water elevation (ft. MSL):	705.31	705.19	704.99

3 Well Volumes (gal): 15.30 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	110.18	110.20	0.02

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	679.20	Flow Rate (mL/min):	200	Volume removed (gal):	0.8
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	1.87
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-25_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:50	13:54	13:58
Temp (°C)	19.98	19.87	20.00
Sp. Cond (umhos/cm)	696.72	701.37	703.03
pH	6.28	6.28	6.27
DO (mg/l)	0.60	0.51	0.46
ORP (mV)	-63.6	-66.0	-67.1
Turbidity (NTU)	0.09	0.06	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-25	Weather:	Clear, 79°F, NE wind @ 9 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-25 in Fall 2023.

Field duplicate (FD-5_23_08) collected at MW-25.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-26 | Weather: Clear, 69°F, ENE wind @ 6 mph
Date: 8/30/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 807.70
Top of screen (ft. MSL): 716.70 | Materials: PVC | Top of Casing elevation (ft. MSL): 811.58
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	103.42	103.33	105.37
Water elevation (ft. MSL):	708.16	708.25	706.21

3 Well Volumes (gal): 3.16 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	109.88	111.35	1.47

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 703.58 | Flow Rate (mL/min): 150 | Volume removed (gal): 0.9 | Volume sampled (L): 2.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-26_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8081B - alpha-BHC & Heptachlor	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:38	10:43	10:48
Temp (°C)	21.00	21.16	21.47
Sp. Cond (umhos/cm)	942.05	942.48	944.26
pH	5.80	5.79	5.79
DO (mg/l)	0.55	0.51	0.45
ORP (mV)	-60.2	-64.6	-68.4
Turbidity (NTU)	1.92	0.76	0.33

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-26	Weather:	Clear, 69°F, ENE wind @ 6 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-26 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-27 | Weather: Clear, 72°F, Calm
Date: 8/18/2023 | Personnel: O.A. Technical Services: Randy Gavin & Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 807.30
Top of screen (ft. MSL): 671.66 | Materials: PVC | Top of Casing elevation (ft. MSL): 809.66
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	102.36	N/A*	N/A*
Water elevation (ft. MSL):	707.30	N/A*	N/A*

3 Well Volumes (gal): 19.87 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	143.00	143.35	0.35

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-27 is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-28 | Weather: Clear, 65°F, ENE wind @ 9 mph
Date: 8/30/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 814.40
Top of screen (ft. MSL): 715.46 | Materials: PVC | Top of Casing elevation (ft. MSL): 816.62
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	109.10	108.99	111.02
Water elevation (ft. MSL):	707.52	707.63	705.60

3 Well Volumes (gal): 3.45 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	116.16	117.15	0.99

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 702.62 | Flow Rate (mL/min): 150 | Volume removed (gal): 2.4 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-28_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - m/p-Cresol	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:42	0.41	9:52
Temp (°C)	19.96	20.01	20.12
Sp. Cond (umhos/cm)	818.72	814.31	815.8
pH	5.66	5.68	5.69
DO (mg/l)	0.43	0.48	0.45
ORP (mV)	-43.8	-48.4	-51.8
Turbidity (NTU)	1.09	0.89	0.8

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-28	Weather:	Clear, 65°F, ENE wind @ 9 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-28 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-29 | Weather: Clear, 72°F, Calm
Date: 8/18/2023 | Personnel: O.A. Technical Services: Randy Gavin & Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 813.80
Top of screen (ft. MSL): 679.70 | Materials: PVC | Top of Casing elevation (ft. MSL): 816.20
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	108.70	N/A*	N/A*
Water elevation (ft. MSL):	707.50	N/A*	N/A*

3 Well Volumes (gal): 16.04 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	141.50	141.75	0.25

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-29 is a water level only location.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-30	Weather:	Clear, 84°F, N wind @ 11 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	788.60
Top of screen (ft. MSL):	712.40	Materials:	PVC	Top of Casing elevation (ft. MSL):	790.98
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	82.26	82.19	82.50
Water elevation (ft. MSL):	708.72	708.79	708.48

3 Well Volumes (gal): 3.09 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	88.58	89.60	1.02

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	705.98	Flow Rate (mL/min):	200	Volume removed (gal):	1.6
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	1.87
				Color? (Y/N):	Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-30_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	12:38	12:41	12:44
Temp (°C)	17.31	17.22	17.17
Sp. Cond (umhos/cm)	1173.2	1175.0	1177.3
pH	5.87	5.86	5.86
DO (mg/l)	0.23	0.22	0.21
ORP (mV)	-102.9	-102.6	-103.3
Turbidity (NTU)	2.99	2.25	1.89

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-30	Weather:	Clear, 84°F, N wind @ 11 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-30 in Fall 2023.

*Black suspended solids in sample

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-31 | Weather: Clear, 79°F, NNW wind @ 10 mph
Date: 8/29/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 787.90
Top of screen (ft. MSL): 671.00 | Materials: PVC | Top of Casing elevation (ft. MSL): 790.06
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	83.01	82.98	83.36
Water elevation (ft. MSL):	707.05	707.08	706.70

3 Well Volumes (gal): 20.07 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	124.06	124.20	0.14

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 671.06 | Flow Rate (mL/min): 200 | Volume removed (gal): 2.6 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-31_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	11:33	11:37	11:41
Temp (°C)	15.89	16.12	16.36
Sp. Cond (umhos/cm)	616.92	625.28	630.38
pH	6.48	6.47	10:48
DO (mg/l)	0.24	0.22	0.21
ORP (mV)	-109.0	-110.2	-110.8
Turbidity (NTU)	0.00	0.00	0:00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-31	Weather:	Clear, 79°F, NNW wind @ 10 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-31 in Fall 2023.

Field duplicate (FD-4_23_08) collected at MW-31.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-32 | Weather: Partly Cloudy, 87°F, NNW wind @ 13 mph
Date: 8/29/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 746.80
Top of screen (ft. MSL): 713.62 | Materials: PVC | Top of Casing elevation (ft. MSL): 749.01
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	46.68	46.84	46.86
Water elevation (ft. MSL):	702.33	702.17	702.15

3 Well Volumes (gal): 4.37 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	55.62	55.80	0.18

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 699.01 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.8 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-32_23_08	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	USEPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	14:48	14:51	14:53
Temp (°C)	17.76	17.61	17.46
Sp. Cond (umhos/cm)	3106.9	3115.9	3103.4
pH	6.20	6.19	6.19
DO (mg/l)	0.25	0.21	0.19
ORP (mV)	-142.9	-144.1	-144.9
Turbidity (NTU)	5.48	5.47	4.99

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-32	Weather:	Partly Cloudy, 87°F, NNW wind @ 13 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-33 | Weather: Partly Cloudy, 85°F, NNW wind @ 13 mph
Date: 8/29/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.86 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 746.36
Top of screen (ft. MSL): 670.39 | Materials: PVC | Top of Casing elevation (ft. MSL): 749.92
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	47.38	47.50	47.54
Water elevation (ft. MSL):	702.54	702.42	702.38

3 Well Volumes (gal): 18.17 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	84.53	84.70	0.17

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 670.92 | Flow Rate (mL/min): 200 | Volume removed (gal): 1.0 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-33_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	14:11	14:14	14:17
Temp (°C)	18.16	17.86	17.42
Sp. Cond (umhos/cm)	1895.9	1931.7	1908.1
pH	6.42	6.40	6.38
DO (mg/l)	0.36	0.31	0.26
ORP (mV)	-104.3	-106.6	-108.4
Turbidity (NTU)*	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-33	Weather:	Partly Cloudy, 85°F, NNW wind @ 13 mph
Date:	8/29/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-34 | Weather: Clear, 86°F, WSW @ 11 mph
Date: 8/24/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 745.33
Top of screen (ft. MSL): 708.91 | Materials: PVC | Top of Casing elevation (ft. MSL): 748.72
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	45.00	45.05	46.06
Water elevation (ft. MSL):	703.72	703.67	702.66

3 Well Volumes (gal): 2.35 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	49.81	49.50	0.31

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 700.72 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.8 | Volume sampled (L): 1.87
Well dry? (Y/N): No | Odor? (Y/N): Yes, slight | Color? (Y/N): Yes, slight*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-34_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:11	10:14	10:16
Temp (°C)	19.78	19.74	19.67
Sp. Cond (umhos/cm)	3333.2	3377.8	3406.9
pH	6.05	6.04	6.02
DO (mg/l)	0.27	0.22	0.23
ORP (mV)	-126.7	-125.6	-124.2
Turbidity (NTU)	7.05	6.5	6.81

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-34	Weather:	Clear, 86°F, WSW @ 11 mph
Date:	8/24/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-34 in Fall 2023.

*Slight black suspended solids

Field blank (FB-2_23_08) collected at 10:40.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-35	Weather:	Clear, 74°F, SSW wind @ 3 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8.68	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	741.63
Top of screen (ft. MSL):	711.04	Materials:	PVC	Top of Casing elevation (ft. MSL):	744.89
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	42.09	42.09	42.70
Water elevation (ft. MSL):	702.80	702.80	702.19

3 Well Volumes (gal): 0.86 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	43.85	45.40	1.55

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	700.69	Flow Rate (mL/min):	200	Volume removed (gal):	0.9
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-35_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals & Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:32	10:34	10:36
Temp (°C)	15.08	14.87	14.94
Sp. Cond (umhos/cm)	1234.6	1228.8	1234.4
pH	5.88	5.88	5.89
DO (mg/l)	0.51	0.37	0.32
ORP (mV)	-31.3	-32.0	-34.4
Turbidity (NTU)	3.85	2.44	20:24

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-35	Weather:	Clear, 74°F, SSW wind @ 3 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at in Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-36	Weather:	Clear, 69°F, S wind @ 3 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 741.58
Top of screen (ft. MSL): 674.03 Materials: PVC Top of Casing elevation (ft. MSL): 745.22
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	42.47	42.46	42.61
Water elevation (ft. MSL):	702.75	702.76	702.61

3 Well Volumes (gal): 16.49 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	76.19	76.20	0.01

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 674.22 Flow Rate (mL/min): 225 Volume removed (gal): 2.1 Volume sampled (L): 1.87
Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-36_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:52	9:55	9:58
Temp (°C)	14.53	14.64	14.77
Sp. Cond (umhos/cm)	1625.4	1626.5	1622.1
pH	5.94	5.94	5.94
DO (mg/l)	0.12	0.11	0.12
ORP (mV)	-95.7	-100.3	-103.5
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-36	Weather:	Clear, 69°F, S wind @ 3 mph
Date:	8/28/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-36 in Fall 2023.

*Black suspended solids in sample.

Field duplicate (FD-3_23_08) collected at MW-36.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-37 | Weather: Clear, 92°F, SE wind @ 8 mph
Date: 8/21/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 782.70
Top of screen (ft. MSL): 724.97 | Materials: PVC | Top of Casing elevation (ft. MSL): 784.81
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	64.84	N/A	N/A
Water elevation (ft. MSL):	719.97	N/A	N/A

3 Well Volumes (gal): 2.45 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	69.84	69.95	0.11

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | X No-purge (specify sample interval): Bottom of Screen
Bailer | Other (specify):

Equipment type: Submersible pump | Peristaltic pump | X Bladder pump
Inertial lift pump | Bailer | No-purge (specify):
Other (specify):

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 715.81 | Flow Rate (mL/min): 200 | Volume removed (gal): N/A | Volume sampled (L): 4.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-37_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate, Di-n-butylphthalate, m/p-Cresol, & Phenol	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8081B - 4,4'-DDT, beta-BHC, delta-BHC, Dieldrin, Heptachlor	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex), 2,4-D	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-37	Weather:	Clear, 92°F, SE wind @ 8 mph
Date:	8/21/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Field Analysis

	Final Reading
Time	15:43
Temp (°C)	20.71
Sp. Cond (umhos/cm)	723.26
pH	7.04
DO (mg/l)	4.64
ORP (mV)	114.9
Turbidity (NTU)	0.98

Comments: No purge sampling conducted since well recharge rate is less than 100 mL/min. Field measurements collected prior to sample collection using flow-through cell.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-38 | Weather: Clear, 90°F, SE wind @ 7 mph
Date: 8/21/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.68 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 782.60
Top of screen (ft. MSL): 699.26 | Materials: PVC | Top of Casing elevation (ft. MSL): 784.81
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	65.03	65.16	66.98
Water elevation (ft. MSL):	719.78	719.65	717.83

3 Well Volumes (gal): 12.48 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	90.55	90.10	0.45

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 699.81 | Flow Rate (mL/min): 200 | Volume removed (gal): 4.1 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-38_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - 2,2'-oxybis(1-Chloropropane, Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	EPA 7470A - Mercury		No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-38	Weather:	Clear, 90°F, SE wind @ 7 mph
Date:	8/21/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Field Analysis

			Final Reading
Time	15:00	15:03	15:07
Temp (°C)	17.61	17.40	17.31
Sp. Cond (umhos/cm)	342.81	337.00	339.51
pH	7.27	7.28	7.29
DO (mg/l)*	0.48	0.48	0.50
ORP (mV)	-16.3	-23.2	-25.9
Turbidity (NTU)	2.49	1.19	1.16

Comments:

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	VP-3	Weather:	Clear, 84°F, S wind @ 8 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	9	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	774.99
Top of screen (ft. MSL):	710.42	Materials:	PVC	Top of Casing elevation (ft. MSL):	774.52
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	63.18	63.03	63.11
Water elevation (ft. MSL):	711.34	711.49	711.41

3 Well Volumes (gal): 5.34 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	74.10	74.30	0.20

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	706.02	Flow Rate (mL/min):	150	Volume removed (gal):	1.0
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	1.87
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
VP-3_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate & Di-n-butylphthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	11:21	11:25	11:29
Temp (°C)	21.85	21.32	21.35
Sp. Cond (umhos/cm)	790.66	788.08	788.59
pH	6.40	6.37	6.34
DO (mg/l)	0.41	0.33	0.31
ORP (mV)	-167.2	-166.7	-166.2
Turbidity (NTU)	0.51	0.37	0.42

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	VP-3	Weather:	Clear, 84°F, S wind @ 8 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at VP-3 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: VP-4 | Weather: Clear, 91°F, S wind @ 10 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 9 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 791.29
Top of screen (ft. MSL): 718.01 | Materials: PVC | Top of Casing elevation (ft. MSL): 790.91
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	79.49	79.48	80.18
Water elevation (ft. MSL):	711.42	711.43	710.73

3 Well Volumes (gal): 1.71 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	82.99	83.25	0.26

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | ___ Peristaltic pump | X Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 708.91 | Flow Rate (mL/min): 200 | Volume removed (gal): 1.1 | Volume sampled (L): 2.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
VP-4_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8081B - Heptachlor	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	14:29	14:32	14:35
Temp (°C)	17.77	17.44	17.25
Sp. Cond (umhos/cm)	563.69	559.81	558.52
pH	6.61	6.59	6.56
DO (mg/l)	0.44	0.38	0.35
ORP (mV)	-106.4	-104.3	-102.5
Turbidity (NTU) In accor	3.15	3.54	1.78

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	VP-4	Weather:	Clear, 91°F, S wind @ 10 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at VP-4 in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-101A | Weather: Clear, 92°F, ESE wind @ 5-10 mph
Date: 8/21/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.95
Top of screen (ft. MSL): 706.36 | Materials: PVC | Top of Casing elevation (ft. MSL): 720.47
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	18.52	18.52	18.54
Water elevation (ft. MSL):	701.95	701.95	701.93

3 Well Volumes (gal): 5.39 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	29.55	29.45	0.10

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 695.97 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.7 | Volume sampled (L): 4.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-101A_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - Bis(2-ethylhexyl)phthalate, Di-n-butylphthalate, m/p-Cresol, & Phenol	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8081B - 4,4'-DDT, beta-BHC, delta-BHC, Dieldrin, Heptachlor	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex), 2,4-D	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-101A	Weather:	Clear, 92°F, ESE wind @ 5-10 mph
Date:	8/21/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Field Analysis

			Final Reading
Time	15:37	15:39	15:41
Temp (°C)	19.44	19.49	19.66
Sp. Cond (umhos/cm)	864.48	869.22	873.74
pH	6.82	6.85	6.87
DO (mg/l)	0.97	1.04	1.06
ORP (mV)	87.0	94.0	89.9
Turbidity (NTU)	0.69	0.33	0.00

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-101B | Weather: Clear, 92°F, ESE wind @ 5-10 mph
Date: 8/21/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.86
Top of screen (ft. MSL): 640.36 | Materials: PVC | Top of Casing elevation (ft. MSL): 720.33
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	18.32	18.31	18.94
Water elevation (ft. MSL):	702.01	702.02	701.39

3 Well Volumes (gal): 32.56 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	84.90	84.85	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 640.33 | Flow Rate (mL/min): 125 | Volume removed (gal): 1.0 | Volume sampled (L): 3.87
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-101B_23_08	EPA 8260D - Appendix I VOCs & 1,3-Dichlorobenzene	(3) VOA Vial 40 mL - HCl	No
	EPA 8270E - 2,2'-oxybis(1-Chloropropane, Bis(2-ethylhexyl)phthalate	(2) Amber Glass 250 mL - Unpreserved	No
	EPA 8151A - 2,4,5-TP (Silvex)	(2) Amber Glass 1 Liter - Unpreserved	No
	EPA 6020A - Appendix I Total Metals & Total Tin	(1) Plastic 250 mL - HNO_3	No
	EPA 7470A - Mercury		No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-101B	Weather:	Clear, 92°F, ESE wind @ 5-10 mph
Date:	8/21/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Field Analysis

			Final Reading
Time	14:39	14:41	14:43
Temp (°C)	22.42	21.48	21.46
Sp. Cond (umhos/cm)	1018.7	1020.3	1016.6
pH	7.14	7.15	7.14
DO (mg/l)	3.14	3.25	3.23
ORP (mV)	49.4	48.4	49.8
Turbidity (NTU)	0.30	0.26	0.38

Comments:

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-102A | Weather: Clear, 72°F, Calm
Date: 8/18/2023 | Personnel: O.A. Technical Services: Randy Gavin & Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 723.29
Top of screen (ft. MSL): 705.11 | Materials: PVC | Top of Casing elevation (ft. MSL): 725.57
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	23.57	N/A*	N/A*
Water elevation (ft. MSL):	702.00	N/A*	N/A*

3 Well Volumes (gal): 4.98 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	33.75	33.75	0.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-102A is a water level only location.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-102B	Weather:	Clear, 75°F, NNE wind @ 5-10 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	723.68
Top of screen (ft. MSL):	651.28	Materials:	PVC	Top of Casing elevation (ft. MSL):	726.21
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	24.29	24.41	24.65
Water elevation (ft. MSL):	701.92	701.80	701.56

3 Well Volumes (gal): 31.15 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	88.00	88.00	0.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump X Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:)	643.21	Flow Rate (mL/min):	200	Volume removed (gal):	1.6
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	1.37
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-102B_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:06	13:08	13:11
Temp (°C)	17.64	17.64	17.51
Sp. Cond (umhos/cm)	792.38	792.26	789.33
pH	6.52	6.51	6.52
DO (mg/l)	0.34	0.33	0.32
ORP (mV)	81.5	87.3	91.0
Turbidity (NTU)	6.15	6.44	6.40

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-102B	Weather:	Clear, 75°F, NNE wind @ 5-10 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-102B in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-103A | Weather: Clear, 72°F, Calm
Date: 8/18/2023 | Personnel: O.A. Technical Services: Randy Gavin & Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.62
Top of screen (ft. MSL): 707.62 | Materials: PVC | Top of Casing elevation (ft. MSL): 720.34
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.51	N/A*	N/A*
Water elevation (ft. MSL):	702.83	N/A*	N/A*

3 Well Volumes (gal): 2.64 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	22.90	22.50	0.40

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-103A is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-103C | Weather: Clear, 72°F, Calm
Date: 8/18/2023 | Personnel: O.A. Technical Services: Randy Gavin & Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 717.32
Top of screen (ft. MSL): 649.32 | Materials: PVC | Top of Casing elevation (ft. MSL): 719.90
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.09	N/A*	N/A*
Water elevation (ft. MSL):	702.81	N/A*	N/A*

3 Well Volumes (gal): 28.73 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	75.85	75.50	0.35

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump | ___ Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-103C is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-104B | Weather: Clear, 82°F, NE wind @ 10-15 mph
Date: 8/30/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 771.09
Top of screen (ft. MSL): 686.09 | Materials: PVC | Top of Casing elevation (ft. MSL): 773.35
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	64.84	64.84	65.16
Water elevation (ft. MSL):	708.51	708.51	708.19

3 Well Volumes (gal): 16.26 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	98.10	98.20	0.10

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 680.35 | Flow Rate (mL/min): 200 | Volume removed (gal): 1.0 | Volume sampled (L): 1.25
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-104B_23_08	EPA 6020A - Total Arsenic	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	15:58	16.02	16:05
Temp (°C)	16.21	15.94	15.67
Sp. Cond (umhos/cm)	1244.8	1250.5	1254.6
pH	6.39	6.37	6.36
DO (mg/l)	0.40	0.35	0.31
ORP (mV)	-67.60	-64.40	-61.80
Turbidity (NTU)	3.36	1.88	2.14

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-104B	Weather:	Clear, 82°F, NE wind @ 10-15 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-104B in Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-105A	Weather:	Clear, 85°F, SW wind @ 10-15 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	721.80
Top of screen (ft. MSL):	708.80	Materials:	PVC	Top of Casing elevation (ft. MSL):	723.97
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	23.05	23.07	23.17
Water elevation (ft. MSL):	700.92	700.90	700.80

3 Well Volumes (gal): 3.59 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	30.40	30.35	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump X Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:)	698.97	Flow Rate (mL/min):	200	Volume removed (gal):	0.6
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-105A_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:12	9:14	9:16
Temp (°C)	17.69	17.42	18.25
Sp. Cond (umhos/cm)	1084.8	1083.5	1083.9
pH	5.65	5.64	5.65
DO (mg/l)	0.68	0.58	0.52
ORP (mV)	217.2	218.1	216.1
Turbidity (NTU)	0.27	1.05	0.52

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-105A	Weather:	Clear, 85°F, SW wind @ 10-15 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-105A in Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-105B	Weather:	Clear, 86°F, SW wind @ 10-15 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	721.80
Top of screen (ft. MSL):	648.80	Materials:	PVC	Top of Casing elevation (ft. MSL):	724.00
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	23.10	23.14	23.14
Water elevation (ft. MSL):	700.90	700.86	700.86

3 Well Volumes (gal): 30.51 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	85.50	85.40	0.10

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:)	644.00	Flow Rate (mL/min):	250	Volume removed (gal):	0.7
Well dry? (Y/N):	No	Odor? (Y/N):	Yes	Color? (Y/N):	Yes

Volume sampled (L): 1.37

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-105B_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:01	10:03	10:05
Temp (°C)	16.72	16.51	16.67
Sp. Cond (umhos/cm)	1826.9	1789.8	1774.9
pH	6.10	6.07	6.07
DO (mg/l)	0.48	0.42	0.39
ORP (mV)	163.4	164.3	165.9
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-105B	Weather:	Clear, 86°F, SW wind @ 10-15 mph
Date:	8/23/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-105B in Fall 2023.

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-106A	Weather:	Clear, 89°F, S wind @ 5-10 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	714.04
Top of screen (ft. MSL):	707.34	Materials:	PVC	Top of Casing elevation (ft. MSL):	716.19
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	15.11	15.16	15.70
Water elevation (ft. MSL):	701.08	701.03	700.49

3 Well Volumes (gal): 4.13 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	23.55	23.50	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump X Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic Dedicated? (Y/N): No Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:)	698.19	Flow Rate (mL/min):	200	Volume removed (gal):	3.3
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-106A_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	13:55	0.58	13:59
Temp (°C)	16.53	16.36	16.51
Sp. Cond (umhos/cm)	895.43	869.77	870.18
pH	6.59	6.6	6.61
DO (mg/l)	0.18	0.18	0.18
ORP (mV)	-200.7	-200.4	-201.7
Turbidity (NTU)	3.8	3.5	3.2

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-106A	Weather:	Clear, 89°F, S wind @ 5-10 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-106A in Fall 2023

*Black suspended solids

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-107A | Weather: Clear, 74°F, SE wind @ 5-10 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.13
Top of screen (ft. MSL): 706.90 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.65
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.43	20.43	20.47
Water elevation (ft. MSL):	701.22	701.22	701.18

3 Well Volumes (gal): 4.66 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	29.95	29.65	0.30

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 696.65 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.6 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-107A_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	9:25	0.39	9:29
Temp (°C)	18.25	18.20	18.39
Sp. Cond (umhos/cm)	1054.5	1054.5	1055.4
pH	6.10	6.11	6.12
DO (mg/l)	0.53	0.45	0.42
ORP (mV)	239.4	241.3	234.5
Turbidity (NTU)	0.00	0.00	0.06

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-107A	Weather:	Clear, 74°F, SE wind @ 5-10 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-107A in Fall 2023.

Field duplicate (FD-1_23_08) collected at MW-107A.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-107B | Weather: Clear, 82°F, SSE wind @ 5-10 mph
Date: 8/22/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.12
Top of screen (ft. MSL): 660.37 | Materials: PVC | Top of Casing elevation (ft. MSL): 721.91
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.31	20.30	20.38
Water elevation (ft. MSL):	701.60	701.61	701.53

3 Well Volumes (gal): 23.08 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	67.51	67.60	0.09

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 659.41 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.8 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-107B_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:52	10:54	10:56
Temp (°C)	18.24	18.40	18.48
Sp. Cond (umhos/cm)	1062.2	1066.7	1066.1
pH	6.19	6.21	6.23
DO (mg/l)	0.47	0.44	0.40
ORP (mV)	208.5	211.8	212.4
Turbidity (NTU)	2.80	3.20	2.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-107B	Weather:	Clear, 82°F, SSE wind @ 5-10 mph
Date:	8/22/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-107B in Fall 2023.

Field blank (FB-1_23_08) collected at 11:15.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-108A | Weather: Clear, 72°F, Calm
Date: 8/18/2023 | Personnel: O.A. Technical Services: Randy Gavin & Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.45
Top of screen (ft. MSL): 710.15 | Materials: PVC | Top of Casing elevation (ft. MSL): 719.11
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	15.28	N/A*	N/A*
Water elevation (ft. MSL):	703.83	N/A*	N/A*

3 Well Volumes (gal): 1.97 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	19.30	19.30	0.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Water Level Only - No Sample*

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: ___ Dedicated? (Y/N): ___ Disposable? (Y/N): ___
Decontamination method: ___

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
	Sample not collected*	N/A	N/A

Field Analysis

Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *In accordance with Permit Amendment #16, MW-108A is a water level only location.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-108B | Weather: Clear, 67°F, E wind @ 5-10 mph
Date: 8/30/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.25 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 719.45
Top of screen (ft. MSL): 646.77 | Materials: PVC | Top of Casing elevation (ft. MSL): 719.00
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	14.54	15.06	15.84
Water elevation (ft. MSL):	704.46	703.94	703.16

3 Well Volumes (gal): 30.40 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	76.70	76.80	0.10

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 645.00 | Flow Rate (mL/min): 125 | Volume removed (gal): 1.7 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-108B_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:42	10:46	10:50
Temp (°C)	17.16	17.56	17.52
Sp. Cond (umhos/cm)	859.29	864.16	871.1
pH	6.64	6.65	6.63
DO (mg/l)	0.59	0.52	0.49
ORP (mV)	-100.9	-106.5	-105.0
Turbidity (NTU)	1.42	1.55	1.50

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-108B	Weather:	Clear, 67°F, E wind @ 5-10 mph
Date:	8/30/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-108B in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-109A | Weather: Clear, 82°F, SW wind @ 10-15 mph
Date: 8/24/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.25 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 721.23
Top of screen (ft. MSL): 707.23 | Materials: PVC | Top of Casing elevation (ft. MSL): 724.17
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	23.22	23.28	23.69
Water elevation (ft. MSL):	700.95	700.89	700.48

3 Well Volumes (gal): 2.07 | Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC):	27.45	27.15	0.30

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 701.17 | Flow Rate (mL/min): 200 | Volume removed (gal): 0.7 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): N/A | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-109A_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	8:59	9:01	9:03
Temp (°C)	16.21	16.59	16.59
Sp. Cond (umhos/cm)	1346.4	1354.7	1354.8
pH	5.94	5.95	5.97
DO (mg/l)	3.70	3.72	3.71
ORP (mV)	200.3	201.0	199.6
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-109A	Weather:	Clear, 82°F, SW wind @ 10-15 mph
Date:	8/24/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments: In accordance with Permit Amendment #16, annual monitoring was conducted at MW-109A in Fall 2023.

Site Name: Cedar Rapids Linn County Solid Waste Agency Site 1 | Permit No.: 57-SDP-03-75C
Well/Piezometer: MW-109B | Weather: Clear, 88°F, WSW wind @ 10-15 mph
Date: 8/24/2023 | Personnel: O.A. Technical Services: Randy Gavin and Tyler Merritt

Monitoring Well Details

Borehole diameter (in): 8.25 | Casing Diameter (in): 2 | Ground surface elevation (ft. MSL): 721.27
Top of screen (ft. MSL): 650.27 | Materials: PVC | Top of Casing elevation (ft. MSL): 724.37
Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	22.42	22.45	22.59
Water elevation (ft. MSL):	701.95	701.92	701.78

3 Well Volumes (gal): 30.14 | Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC):	84.05	83.65	0.40

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) | ___ No-purge (specify sample interval): ___
___ Bailer | ___ Other (specify): ___

Equipment type: ___ Submersible pump | X Peristaltic pump | ___ Bladder pump
___ Inertial lift pump | ___ Bailer | ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic | Dedicated? (Y/N): No | Disposable? (Y/N): No
Decontamination method: disposable tubing

Equipment depth (ft. MSL:) 645.37 | Flow Rate (mL/min): 125 | Volume removed (gal): 0.9 | Volume sampled (L): 1.37
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-109B_23_08	EPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
	EPA 6020A - Appendix I Total Metals	(1) Plastic 250 mL - HNO_3	No
	USGS I-3765-85 - TSS	(1) Plastic 1 Liter - Unpreserved	No

Field Analysis

			Final Reading
Time	10:19	10:24	10:29
Temp (°C)	20.41	20.05	20.21
Sp. Cond (umhos/cm)	2055.8	2046.6	2049.0
pH	6.07	6.05	6.03
DO (mg/l)	0.55	0.49	0.47
ORP (mV)	-163.9	-160.5	-159.9
Turbidity (NTU)	0.00	0.00	0.00

Site Name:	Cedar Rapids Linn County Solid Waste Agency Site 1	Permit No.:	57-SDP-03-75C
Well/Piezometer:	MW-109B	Weather:	Clear, 88°F, WSW wind @ 10-15 mph
Date:	8/24/2023	Personnel:	O.A. Technical Services: Randy Gavin and Tyler Merritt

Comments:

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

Generated 9/11/2023 8:13:26 AM

JOB DESCRIPTION

CRLCSWA_1

JOB NUMBER

310-263235-1

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.

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Job ID: 310-263235-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-263235-1

Receipt
The samples were received on 8/23/2023 4:15 PM. 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 2.1°C, 3.1°C, 3.5°C, 3.7°C and 4.8°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-397921 recovered outside control limits for 2-Hexanone (-21.9%D). The LCS associated with this CCV passes CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-397921/3).

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: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-397584.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: Surrogate recovery for the following sample was outside control limits: MW-37_23_08 (310-263235-5). Evidence of matrix interference is present; 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.

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

Pesticides
Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-397585.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

Metals
Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of >2: AW-4_23_08 (310-263235-2) and MW-13_23_08 (310-263235-3). The sample(s) was preserved to the appropriate pH in the laboratory.

Method 6020B: The low level check standard recovery associated with batch 310-398418 recovered above the upper control limit for Antimony. The samples associated with this standard were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-101A_23_08 (310-263235-9), MW-101B_23_08 (310-263235-10), MW-106A_23_08 (310-263235-11), MW-107A_23_08 (310-263235-12), MW-107B_23_08 (310-263235-13), FD-1_23_08 (310-263235-14) and FB-1_23_08 (310-263235-15).

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: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-263235-1	AW-2_23_08	Water	08/22/23 13:35	08/23/23 16:15
310-263235-2	AW-4_23_08	Water	08/22/23 14:50	08/23/23 16:15
310-263235-3	MW-13_23_08	Water	08/22/23 09:15	08/23/23 16:15
310-263235-4	MW-14_23_08	Water	08/22/23 10:20	08/23/23 16:15
310-263235-5	MW-37_23_08	Water	08/21/23 15:45	08/23/23 16:15
310-263235-6	MW-38_23_08	Water	08/21/23 15:10	08/23/23 16:15
310-263235-7	VP-3_23_08	Water	08/22/23 11:30	08/23/23 16:15
310-263235-8	VP-4_23_08	Water	08/22/23 14:40	08/23/23 16:15
310-263235-9	MW-101A_23_08	Water	08/21/23 13:45	08/23/23 16:15
310-263235-10	MW-101B_23_08	Water	08/21/23 14:40	08/23/23 16:15
310-263235-11	MW-106A_23_08	Water	08/22/23 14:05	08/23/23 16:15
310-263235-12	MW-107A_23_08	Water	08/22/23 09:30	08/23/23 16:15
310-263235-13	MW-107B_23_08	Water	08/22/23 11:00	08/23/23 16:15
310-263235-14	FD-1_23_08	Water	08/22/23 00:00	08/23/23 16:15
310-263235-15	FB-1_23_08	Water	08/22/23 11:15	08/23/23 16:15
310-263235-16	TB-1_23_08	Water	08/22/23 00:00	08/23/23 16:15

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: AW-2_23_08 — Lab Sample ID: 310-263235-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.842	J	1.00	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	1.57		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.87		1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.655	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0173		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.438		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000111	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00177		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.00201		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0145		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00277		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0312		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	13.0		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: AW-4_23_08 — Lab Sample ID: 310-263235-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00104	J	0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.00163	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.103		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000148	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00282		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.0378		0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0223		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00111	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.00		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-13_23_08 — Lab Sample ID: 310-263235-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.644	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	1.24		1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	12.9		1.00	0.230	ug/L	1		8260D	Total/NA
Acetone	6.28	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	3.51		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	3.49		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	3.19	J	4.00	0.790	ug/L	1		8260D	Total/NA
Arsenic	0.0549		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.794		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00155		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0132		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00123	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	113		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-14_23_08 — Lab Sample ID: 310-263235-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.70		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.495	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	7.04		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.943		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	2.06		1.00	0.400	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-14_23_08 (Continued) — Lab Sample ID: 310-263235-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	1.35	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.837	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.0142		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.373		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000874		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0171		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	53.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-37_23_08 — Lab Sample ID: 310-263235-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0349		0.00200	0.000640	mg/L	1		6020B	Total/NA

Client Sample ID: MW-38_23_08 — Lab Sample ID: 310-263235-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00112	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0476		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000186	J	0.000500	0.000170	mg/L	1		6020B	Total/NA

Client Sample ID: VP-3_23_08 — Lab Sample ID: 310-263235-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00890		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.682		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000232	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Zinc	0.00734	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	19.0		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: VP-4_23_08 — Lab Sample ID: 310-263235-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00296		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0677		0.00200	0.000640	mg/L	1		6020B	Total/NA
Lead	0.000288	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Total Suspended Solids	6.75		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-101A_23_08 — Lab Sample ID: 310-263235-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0846		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000387	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00207	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00289	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Suspended Solids	0.875	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-101B_23_08 — Lab Sample ID: 310-263235-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000547	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.117		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000378	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00268	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00220	J	0.00500	0.00140	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-106A_23_08 — Lab Sample ID: 310-263235-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0124		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.110		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00913		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0168		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.5		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-107A_23_08 — Lab Sample ID: 310-263235-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.131		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000178	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000630		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0109		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00216	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.00	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-107B_23_08 — Lab Sample ID: 310-263235-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.302		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00275		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0126		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00200		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0102	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	0.875	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-1_23_08 — Lab Sample ID: 310-263235-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.134		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000166	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000626		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0110		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00246	J	0.00500	0.00140	mg/L	1		6020B	Total/NA

Client Sample ID: FB-1_23_08 — Lab Sample ID: 310-263235-15

No Detections.

Client Sample ID: TB-1_23_08 — Lab Sample ID: 310-263235-16

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: AW-2_23_08
Date Collected: 08/22/23 13:35
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 06:05	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 06:05	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 06:05	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 06:05	1
1,1-Dichloroethane	**0.842**	**J**	1.00	0.220	ug/L			08/26/23 06:05	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 06:05	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 06:05	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 06:05	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 06:05	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 06:05	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 06:05	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 06:05	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 06:05	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 06:05	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 12:40	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 12:40	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 06:05	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 06:05	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 06:05	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 06:05	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 06:05	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 06:05	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 06:05	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 06:05	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 06:05	1
Chlorobenzene	**1.57**		1.00	0.400	ug/L			08/26/23 06:05	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 06:05	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 06:05	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 06:05	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 06:05	1
cis-1,2-Dichloroethene	**2.87**		1.00	0.210	ug/L			08/26/23 06:05	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 06:05	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 06:05	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 06:05	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 06:05	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 06:05	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 06:05	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 06:05	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 06:05	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 06:05	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 06:05	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 06:05	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 06:05	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 06:05	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 06:05	1
Vinyl chloride	**0.655**	**J**	1.00	0.180	ug/L			08/26/23 06:05	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 128*		*08/26/23 06:05*	*1*

Client Sample ID: AW-2_23_08
Lab Sample ID: 310-263235-1
Date Collected: 08/22/23 13:35
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/28/23 12:40*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 06:05*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/28/23 12:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*08/26/23 06:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/23 12:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<6.40		11.6	6.40	ug/L		08/24/23 06:09	09/01/23 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*117*		*45 - 129*	*08/24/23 06:09*	*09/01/23 16:03*	*1*
Terphenyl-d14 (Surr)	*48*		*12 - 144*	*08/24/23 06:09*	*09/01/23 16:03*	*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		08/25/23 09:30	08/28/23 16:35	1
Arsenic	**0.0173**		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 16:35	1
Barium	**0.438**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 16:35	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 16:35	1
Cadmium	**0.000111**	**J**	0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 16:35	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:35	1
Cobalt	**0.00177**		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 16:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 16:35	1
Lead	**0.00201**		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 16:35	1
Nickel	**0.0145**		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 16:35	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 16:35	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 16:35	1
Thallium	**0.00277**		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 16:35	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:35	1
Zinc	**0.0312**		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 16:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**13.0**		3.75	1.28	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: AW-4_23_08
Date Collected: 08/22/23 14:50
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 06:28	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 06:28	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 06:28	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 06:28	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 06:28	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 06:28	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 06:28	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 06:28	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 06:28	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 06:28	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 06:28	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 06:28	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 06:28	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 06:28	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 13:02	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 13:02	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 06:28	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 06:28	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 06:28	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 06:28	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 06:28	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 06:28	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 06:28	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 06:28	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 06:28	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 06:28	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 06:28	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 06:28	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 06:28	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 06:28	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 06:28	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 06:28	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 06:28	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 06:28	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 06:28	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 06:28	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 06:28	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 06:28	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 06:28	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 06:28	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 06:28	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 06:28	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 06:28	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 06:28	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 06:28	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 06:28	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 06:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 128*		*08/26/23 06:28*	*1*

Client Sample ID: AW-4_23_08

Lab Sample ID: 310-263235-2

Date Collected: 08/22/23 14:50

Matrix: Water

Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*08/28/23 13:02*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/26/23 06:28*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/28/23 13:02*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/26/23 06:28*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/23 13:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.73		10.4	5.73	ug/L		08/24/23 06:09	09/01/23 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*95*		*45 - 129*	*08/24/23 06:09*	*09/01/23 16:30*	*1*
Terphenyl-d14 (Surr)	*61*		*12 - 144*	*08/24/23 06:09*	*09/01/23 16:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00104**	**J**	0.00200	0.00100	mg/L		08/25/23 09:30	08/28/23 16:40	1
Arsenic	**0.00163**	**J**	0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 16:40	1
Barium	**0.103**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 16:40	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 16:40	1
Cadmium	**0.000148**	**J**	0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 16:40	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:40	1
Cobalt	**0.00282**		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 16:40	1
Copper	**0.0378**		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 16:40	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 16:40	1
Nickel	**0.0223**		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 16:40	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 16:40	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 16:40	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 16:40	1
Vanadium	**0.00111**	**J**	0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:40	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.00**		1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-13_23_08
Lab Sample ID: 310-263235-3
Date Collected: 08/22/23 09:15
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 06:50	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 06:50	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 06:50	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 06:50	1
1,1-Dichloroethane	**0.644**	**J**	1.00	0.220	ug/L			08/26/23 06:50	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 06:50	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 06:50	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 06:50	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 06:50	1
1,2-Dichlorobenzene	**1.24**		1.00	0.370	ug/L			08/26/23 06:50	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 06:50	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 06:50	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 06:50	1
1,4-Dichlorobenzene	**12.9**		1.00	0.230	ug/L			08/26/23 06:50	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 06:50	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 13:25	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 13:25	1
Acetone	**6.28**	**J**	10.0	3.10	ug/L			08/26/23 06:50	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 06:50	1
Benzene	**3.51**		0.500	0.220	ug/L			08/26/23 06:50	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 06:50	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 06:50	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 06:50	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 06:50	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 06:50	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 06:50	1
Chlorobenzene	**3.49**		1.00	0.400	ug/L			08/26/23 06:50	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 06:50	1
Chloroethane	**3.19**	**J**	4.00	0.790	ug/L			08/26/23 06:50	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 06:50	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 06:50	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 06:50	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 06:50	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 06:50	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 06:50	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 06:50	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 06:50	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 06:50	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 06:50	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 06:50	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 06:50	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 06:50	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 06:50	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 06:50	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 06:50	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 06:50	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 06:50	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 06:50	1

Client Sample ID: MW-13_23_08
Lab Sample ID: 310-263235-3
Date Collected: 08/22/23 09:15
Matrix: Water
Date Received: 08/23/23 16:15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*08/26/23 06:50*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/28/23 13:25*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 06:50*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/28/23 13:25*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 06:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/28/23 13:25*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0910		1.09	0.0910	ug/L		08/28/23 08:53	08/29/23 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*71*		*25 - 130*	*08/28/23 08:53*	*08/29/23 11:26*	*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		08/25/23 09:30	08/28/23 16:42	1
Arsenic	**0.0549**		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 16:42	1
Barium	**0.794**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 16:42	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 16:42	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 16:42	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:42	1
Cobalt	**0.00155**		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 16:42	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 16:42	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 16:42	1
Nickel	**0.0132**		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 16:42	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 16:42	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 16:42	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 16:42	1
Vanadium	**0.00123**	**J**	0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:42	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**113**		15.0	5.10	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-14_23_08
Date Collected: 08/22/23 10:20
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 07:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 07:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 07:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 07:13	1
1,1-Dichloroethane	**1.70**		1.00	0.220	ug/L			08/26/23 07:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 07:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 07:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 07:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 07:13	1
1,2-Dichlorobenzene	**0.495**	**J**	1.00	0.370	ug/L			08/26/23 07:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 07:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 07:13	1
1,4-Dichlorobenzene	**7.04**		1.00	0.230	ug/L			08/26/23 07:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 07:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 13:47	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 13:47	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 07:13	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 07:13	1
Benzene	**0.943**		0.500	0.220	ug/L			08/26/23 07:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 07:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 07:13	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 07:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 07:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 07:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 07:13	1
Chlorobenzene	**2.06**		1.00	0.400	ug/L			08/26/23 07:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 07:13	1
Chloroethane	**1.35**	**J**	4.00	0.790	ug/L			08/26/23 07:13	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 07:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 07:13	1
cis-1,2-Dichloroethene	**0.837**	**J**	1.00	0.210	ug/L			08/26/23 07:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 07:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 07:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 07:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 07:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 07:13	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 07:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 07:13	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 07:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 07:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 07:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 07:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 07:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 07:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 07:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 07:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 07:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*08/26/23 07:13*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-14_23_08
Lab Sample ID: 310-263235-4
Date Collected: 08/22/23 10:20
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/28/23 13:47*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 07:13*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/28/23 13:47*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 07:13*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*08/28/23 13:47*	*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		08/25/23 09:30	08/28/23 16:53	1
Arsenic	**0.0142**		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 16:53	1
Barium	**0.373**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 16:53	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 16:53	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 16:53	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:53	1
Cobalt	**0.000874**		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 16:53	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 16:53	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 16:53	1
Nickel	**0.0171**		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 16:53	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 16:53	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 16:53	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 16:53	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:53	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**53.0**		15.0	5.10	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-37_23_08
Lab Sample ID: 310-263235-5
Date Collected: 08/21/23 15:45
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 13:36	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 13:36	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 13:36	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 13:36	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 13:36	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 13:36	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 13:36	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 13:36	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 13:36	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 13:36	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 13:36	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 13:36	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 13:36	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 13:36	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 13:36	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 13:36	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 13:36	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 13:36	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 13:36	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 13:36	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 13:36	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 13:36	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 13:36	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 13:36	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 13:36	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 13:36	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 13:36	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 13:36	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 13:36	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 13:36	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 13:36	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 13:36	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 13:36	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 13:36	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 13:36	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 13:36	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 13:36	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 13:36	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 13:36	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 13:36	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 13:36	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 13:36	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 13:36	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 13:36	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 13:36	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 13:36	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 13:36	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 13:36	1

Client Sample ID: MW-37_23_08
Lab Sample ID: 310-263235-5
Date Collected: 08/21/23 15:45
Matrix: Water
Date Received: 08/23/23 16:15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*80 - 128*		*08/26/23 13:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/26/23 13:36*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*08/26/23 13:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.29		9.62	5.29	ug/L		08/24/23 06:09	09/01/23 14:16	1
Di-n-butyl phthalate	<5.38		9.62	5.38	ug/L		08/24/23 06:09	09/01/23 14:16	1
m & p-Cresol	<0.673		9.62	0.673	ug/L		08/24/23 06:09	09/01/23 14:16	1
Phenol	<1.06		9.62	1.06	ug/L		08/24/23 06:09	09/01/23 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*88*		*25 - 110*	*08/24/23 06:09*	*09/01/23 14:16*	*1*
Phenol-d5 (Surr)	*70*		*21 - 110*	*08/24/23 06:09*	*09/01/23 14:16*	*1*
Nitrobenzene-d5 (Surr)	*135*	*S1+*	*45 - 129*	*08/24/23 06:09*	*09/01/23 14:16*	*1*
2-Fluorobiphenyl (Surr)	*102*		*39 - 118*	*08/24/23 06:09*	*09/01/23 14:16*	*1*
2,4,6-Tribromophenol (Surr)	*115*		*27 - 136*	*08/24/23 06:09*	*09/01/23 14:16*	*1*
Terphenyl-d14 (Surr)	*108*		*12 - 144*	*08/24/23 06:09*	*09/01/23 14:16*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0396		0.0604	0.0396	ug/L		08/24/23 06:14	09/02/23 21:36	1
alpha-BHC	<0.0274		0.0604	0.0274	ug/L		08/24/23 06:14	09/02/23 21:36	1
beta-BHC	<0.0349		0.0604	0.0349	ug/L		08/24/23 06:14	09/02/23 21:36	1
delta-BHC	<0.0255		0.0604	0.0255	ug/L		08/24/23 06:14	09/02/23 21:36	1
Dieldrin	<0.0245		0.0604	0.0245	ug/L		08/24/23 06:14	09/02/23 21:36	1
Heptachlor	<0.0311		0.0604	0.0311	ug/L		08/24/23 06:14	09/02/23 21:36	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.341		1.11	0.341	ug/L		08/28/23 08:53	08/29/23 11:43	1
2,4,5-TP	<0.0925		1.11	0.0925	ug/L		08/28/23 08:53	08/29/23 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*80*		*25 - 130*	*08/28/23 08:53*	*08/29/23 11:43*	*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		08/25/23 09:30	08/28/23 16:55	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 16:55	1
Barium	**0.0349**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 16:55	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 16:55	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 16:55	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:55	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 16:55	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 16:55	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 16:55	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 16:55	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 16:55	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 16:55	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 16:55	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-37_23_08
Lab Sample ID: 310-263235-5
Date Collected: 08/21/23 15:45
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:55	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 16:55	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/25/23 09:30	08/28/23 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-38_23_08
Date Collected: 08/21/23 15:10
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 13:58	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 13:58	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 13:58	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 13:58	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 13:58	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 13:58	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 13:58	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 13:58	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 13:58	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 13:58	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 13:58	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 13:58	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 13:58	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 13:58	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 13:58	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 13:58	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 13:58	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 13:58	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 13:58	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 13:58	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 13:58	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 13:58	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 13:58	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 13:58	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 13:58	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 13:58	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 13:58	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 13:58	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 13:58	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 13:58	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 13:58	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 13:58	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 13:58	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 13:58	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 13:58	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 13:58	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 13:58	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 13:58	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 13:58	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 13:58	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 13:58	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 13:58	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 13:58	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 13:58	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 13:58	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 13:58	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 13:58	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 13:58	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-38_23_08

Date Collected: 08/21/23 15:10
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/26/23 13:58*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/26/23 13:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/26/23 13:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.529		9.80	0.529	ug/L		08/24/23 06:09	09/01/23 16:57	1
Bis(2-ethylhexyl) phthalate	<5.39		9.80	5.39	ug/L		08/24/23 06:09	09/01/23 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*97*		*45 - 129*	*08/24/23 06:09*	*09/01/23 16:57*	*1*
Terphenyl-d14 (Surr)	*33*		*12 - 144*	*08/24/23 06:09*	*09/01/23 16:57*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0870		1.04	0.0870	ug/L		08/28/23 08:53	08/29/23 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*80*		*25 - 130*	*08/28/23 08:53*	*08/29/23 12:18*	*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		08/25/23 09:30	08/28/23 16:57	1
Arsenic	**0.00112**	**J**	0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 16:57	1
Barium	**0.0476**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 16:57	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 16:57	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 16:57	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:57	1
Cobalt	**0.000186**	**J**	0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 16:57	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 16:57	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 16:57	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 16:57	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 16:57	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 16:57	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 16:57	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 16:57	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 16:57	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/25/23 09:30	08/28/23 16:57	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		08/28/23 11:25	08/29/23 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: VP-3_23_08
Date Collected: 08/22/23 11:30
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 14:21	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 14:21	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 14:21	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 14:21	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 14:21	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 14:21	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 14:21	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 14:21	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 14:21	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 14:21	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 14:21	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 14:21	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 14:21	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 14:21	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 14:21	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 14:21	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 14:21	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 14:21	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 14:21	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 14:21	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 14:21	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 14:21	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 14:21	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 14:21	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 14:21	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 14:21	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 14:21	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 14:21	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 14:21	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 14:21	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 14:21	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 14:21	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 14:21	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 14:21	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 14:21	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 14:21	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 14:21	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 14:21	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 14:21	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 14:21	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 14:21	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 14:21	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 14:21	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 14:21	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 14:21	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 14:21	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/26/23 14:21*	*1*

Client Sample ID: VP-3_23_08
Lab Sample ID: 310-263235-7
Date Collected: 08/22/23 11:30
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 14:21*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 14:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.85		10.6	5.85	ug/L		08/24/23 06:09	09/01/23 17:23	1
Di-n-butyl phthalate	<5.96		10.6	5.96	ug/L		08/24/23 06:09	09/01/23 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*119*		*45 - 129*	*08/24/23 06:09*	*09/01/23 17:23*	*1*
Terphenyl-d14 (Surr)	*55*		*12 - 144*	*08/24/23 06:09*	*09/01/23 17:23*	*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		08/25/23 09:30	08/28/23 17:00	1
Arsenic	**0.00890**		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 17:00	1
Barium	**0.682**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 17:00	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 17:00	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 17:00	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 17:00	1
Cobalt	**0.000232**	**J**	0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 17:00	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 17:00	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 17:00	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 17:00	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 17:00	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 17:00	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 17:00	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 17:00	1
Zinc	**0.00734**	**J**	0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**19.0**		3.75	1.28	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: VP-4_23_08
Date Collected: 08/22/23 14:40
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 14:44	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 14:44	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 14:44	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 14:44	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 14:44	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 14:44	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 14:44	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 14:44	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 14:44	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 14:44	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 14:44	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 14:44	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 14:44	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 14:44	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 14:44	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 14:44	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 14:44	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 14:44	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 14:44	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 14:44	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 14:44	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 14:44	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 14:44	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 14:44	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 14:44	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 14:44	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 14:44	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 14:44	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 14:44	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 14:44	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 14:44	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 14:44	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 14:44	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 14:44	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 14:44	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 14:44	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 14:44	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 14:44	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 14:44	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 14:44	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 14:44	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 14:44	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 14:44	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 14:44	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 14:44	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 14:44	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/26/23 14:44*	*1*

Client Sample ID: VP-4_23_08
Lab Sample ID: 310-263235-8
Date Collected: 08/22/23 14:40
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/26/23 14:44*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 14:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		08/24/23 06:09	09/01/23 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*115*		*45 - 129*	*08/24/23 06:09*	*09/01/23 17:50*	*1*
Terphenyl-d14 (Surr)	*41*		*12 - 144*	*08/24/23 06:09*	*09/01/23 17:50*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.0367		0.0711	0.0367	ug/L		08/24/23 06:14	09/02/23 21:52	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		08/25/23 09:30	08/28/23 17:02	1
Arsenic	**0.00296**		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 17:02	1
Barium	**0.0677**		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 17:02	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 17:02	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 17:02	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 17:02	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 17:02	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 17:02	1
Lead	**0.000288**	**J**	0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 17:02	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 17:02	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 17:02	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 17:02	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 17:02	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 17:02	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**6.75**		1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-101A_23_08
Date Collected: 08/21/23 13:45
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 15:06	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 15:06	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 15:06	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 15:06	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 15:06	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 15:06	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 15:06	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 15:06	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 15:06	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 15:06	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 15:06	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 15:06	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 15:06	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 15:06	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 15:06	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 15:06	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 15:06	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 15:06	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 15:06	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 15:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 15:06	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 15:06	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 15:06	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 15:06	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 15:06	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 15:06	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 15:06	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 15:06	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 15:06	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 15:06	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 15:06	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 15:06	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 15:06	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 15:06	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 15:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 15:06	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 15:06	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 15:06	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 15:06	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 15:06	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 15:06	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 15:06	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 15:06	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 15:06	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 15:06	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 15:06	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 15:06	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 15:06	1

Client Sample ID: MW-101A_23_08
Lab Sample ID: 310-263235-9
Date Collected: 08/21/23 13:45
Matrix: Water
Date Received: 08/23/23 16:15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/26/23 15:06*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/26/23 15:06*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 15:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<6.25		11.4	6.25	ug/L		08/24/23 06:09	09/01/23 14:43	1
Di-n-butyl phthalate	<6.36		11.4	6.36	ug/L		08/24/23 06:09	09/01/23 14:43	1
m & p-Cresol	<0.795		11.4	0.795	ug/L		08/24/23 06:09	09/01/23 14:43	1
Phenol	<1.25		11.4	1.25	ug/L		08/24/23 06:09	09/01/23 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*57*		*25 - 110*	*08/24/23 06:09*	*09/01/23 14:43*	*1*
Phenol-d5 (Surr)	*48*		*21 - 110*	*08/24/23 06:09*	*09/01/23 14:43*	*1*
Nitrobenzene-d5 (Surr)	*91*		*45 - 129*	*08/24/23 06:09*	*09/01/23 14:43*	*1*
2-Fluorobiphenyl (Surr)	*71*		*39 - 118*	*08/24/23 06:09*	*09/01/23 14:43*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*27 - 136*	*08/24/23 06:09*	*09/01/23 14:43*	*1*
Terphenyl-d14 (Surr)	*79*		*12 - 144*	*08/24/23 06:09*	*09/01/23 14:43*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0467		0.0711	0.0467	ug/L		08/24/23 06:14	09/02/23 22:09	1
alpha-BHC	<0.0322		0.0711	0.0322	ug/L		08/24/23 06:14	09/02/23 22:09	1
beta-BHC	<0.0411		0.0711	0.0411	ug/L		08/24/23 06:14	09/02/23 22:09	1
delta-BHC	<0.0300		0.0711	0.0300	ug/L		08/24/23 06:14	09/02/23 22:09	1
Dieldrin	<0.0289		0.0711	0.0289	ug/L		08/24/23 06:14	09/02/23 22:09	1
Heptachlor	<0.0367		0.0711	0.0367	ug/L		08/24/23 06:14	09/02/23 22:09	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.311		1.01	0.311	ug/L		08/28/23 08:53	08/29/23 12:36	1
2,4,5-TP	<0.0845		1.01	0.0845	ug/L		08/28/23 08:53	08/29/23 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*69*		*25 - 130*	*08/28/23 08:53*	*08/29/23 12:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:11	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:11	1
Barium	**0.0846**		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:11	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:11	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:11	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:11	1
Cobalt	**0.000387**	**J**	0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:11	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:11	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:11	1
Nickel	**0.00207**	**J**	0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:11	1
Selenium	**0.00289**	**J**	0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:11	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:11	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:11	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-101A_23_08
Lab Sample ID: 310-263235-9
Date Collected: 08/21/23 13:45
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:11	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:11	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/28/23 09:35	08/31/23 19:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	0.875	J	1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-101B_23_08
Lab Sample ID: 310-263235-10
Date Collected: 08/21/23 14:40
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 15:29	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 15:29	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 15:29	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 15:29	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 15:29	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 15:29	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 15:29	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 15:29	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 15:29	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 15:29	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 15:29	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 15:29	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 15:29	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 15:29	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 15:29	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 15:29	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 15:29	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 15:29	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 15:29	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 15:29	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 15:29	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 15:29	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 15:29	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 15:29	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 15:29	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 15:29	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 15:29	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 15:29	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 15:29	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 15:29	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 15:29	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 15:29	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 15:29	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 15:29	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 15:29	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 15:29	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 15:29	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 15:29	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 15:29	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 15:29	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 15:29	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 15:29	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 15:29	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 15:29	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 15:29	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 15:29	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 15:29	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 15:29	1

Client Sample ID: MW-101B_23_08

Date Collected: 08/21/23 14:40
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/26/23 15:29*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/26/23 15:29*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/26/23 15:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.628		11.6	0.628	ug/L		08/24/23 06:09	09/01/23 18:16	1
Bis(2-ethylhexyl) phthalate	<6.40		11.6	6.40	ug/L		08/24/23 06:09	09/01/23 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*121*		*45 - 129*	*08/24/23 06:09*	*09/01/23 18:16*	*1*
Terphenyl-d14 (Surr)	*43*		*12 - 144*	*08/24/23 06:09*	*09/01/23 18:16*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0895		1.07	0.0895	ug/L		08/28/23 08:53	08/29/23 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*82*		*25 - 130*	*08/28/23 08:53*	*08/29/23 12:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:15	1
Arsenic	**0.000547**	**J**	0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:15	1
Barium	**0.117**		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:15	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:15	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:15	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:15	1
Cobalt	**0.000378**	**J**	0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:15	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:15	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:15	1
Nickel	**0.00268**	**J**	0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:15	1
Selenium	**0.00220**	**J**	0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:15	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:15	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:15	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:15	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:15	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/28/23 09:35	08/31/23 19:15	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		08/28/23 11:25	08/29/23 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-106A_23_08
Date Collected: 08/22/23 14:05
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 15:51	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 15:51	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 15:51	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 15:51	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 15:51	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 15:51	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 15:51	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 15:51	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 15:51	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 15:51	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 15:51	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 15:51	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 15:51	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 15:51	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 15:51	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 15:51	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 15:51	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 15:51	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 15:51	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 15:51	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 15:51	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 15:51	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 15:51	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 15:51	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 15:51	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 15:51	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 15:51	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 15:51	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 15:51	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 15:51	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 15:51	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 15:51	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 15:51	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 15:51	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 15:51	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 15:51	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 15:51	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 15:51	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 15:51	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 15:51	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 15:51	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 15:51	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 15:51	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 15:51	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 15:51	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 15:51	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/26/23 15:51*	*1*

Client Sample ID: MW-106A_23_08
Lab Sample ID: 310-263235-11
Date Collected: 08/22/23 14:05
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 15:51*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*08/26/23 15:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:17	1
Arsenic	**0.0124**		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:17	1
Barium	**0.110**		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:17	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:17	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:17	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:17	1
Cobalt	**0.00913**		0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:17	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:17	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:17	1
Nickel	**0.0168**		0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:17	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:17	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:17	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:17	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:17	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**12.5**		3.75	1.28	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-107A_23_08
Date Collected: 08/22/23 09:30
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 16:14	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 16:14	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 16:14	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 16:14	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 16:14	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 16:14	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 16:14	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 16:14	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 16:14	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 16:14	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 16:14	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 16:14	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 16:14	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 16:14	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 16:14	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 16:14	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 16:14	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 16:14	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 16:14	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 16:14	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 16:14	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 16:14	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 16:14	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 16:14	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 16:14	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 16:14	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 16:14	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 16:14	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 16:14	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 16:14	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 16:14	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 16:14	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 16:14	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 16:14	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 16:14	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 16:14	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 16:14	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 16:14	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 16:14	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 16:14	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 16:14	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 16:14	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 16:14	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 16:14	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 16:14	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 16:14	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*80 - 128*		*08/26/23 16:14*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-107A_23_08
Lab Sample ID: 310-263235-12

Date Collected: 08/22/23 09:30
Matrix: Water

Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/26/23 16:14*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/26/23 16:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:19	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:19	1
Barium	**0.131**		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:19	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:19	1
Cadmium	**0.000178**	**J**	0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:19	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:19	1
Cobalt	**0.000630**		0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:19	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:19	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:19	1
Nickel	**0.0109**		0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:19	1
Selenium	**0.00216**	**J**	0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:19	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:19	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:19	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:19	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.00**	**J**	1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

Client Sample ID: MW-107B_23_08
Date Collected: 08/22/23 11:00
Date Received: 08/23/23 16:15

Lab Sample ID: 310-263235-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 16:37	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 16:37	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 16:37	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 16:37	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 16:37	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 16:37	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 16:37	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 16:37	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 16:37	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 16:37	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 16:37	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 16:37	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 16:37	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 16:37	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 16:37	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 16:37	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 16:37	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 16:37	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 16:37	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 16:37	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 16:37	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 16:37	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 16:37	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 16:37	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 16:37	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 16:37	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 16:37	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 16:37	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 16:37	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 16:37	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 16:37	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 16:37	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 16:37	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 16:37	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 16:37	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 16:37	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 16:37	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 16:37	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 16:37	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 16:37	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 16:37	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 16:37	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 16:37	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 16:37	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 16:37	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 16:37	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 128*		*08/26/23 16:37*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-107B_23_08
Lab Sample ID: 310-263235-13
Date Collected: 08/22/23 11:00
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 16:37*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 16:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:22	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:22	1
Barium	**0.302**		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:22	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:22	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:22	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:22	1
Cobalt	**0.00275**		0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:22	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:22	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:22	1
Nickel	**0.0126**		0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:22	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:22	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:22	1
Thallium	**0.00200**		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:22	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:22	1
Zinc	**0.0102**	**J**	0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**0.875**	**J**	1.88	0.638	mg/L			08/24/23 12:30	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-1_23_08
Lab Sample ID: 310-263235-14
Date Collected: 08/22/23 00:00
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 16:59	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 16:59	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 16:59	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 16:59	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 16:59	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 16:59	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 16:59	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 16:59	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 16:59	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 16:59	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 16:59	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 16:59	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 16:59	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 16:59	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 16:59	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 16:59	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 16:59	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 16:59	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 16:59	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 16:59	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 16:59	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 16:59	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 16:59	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 16:59	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 16:59	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 16:59	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 16:59	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 16:59	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 16:59	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 16:59	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 16:59	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 16:59	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 16:59	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 16:59	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 16:59	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 16:59	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 16:59	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 16:59	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 16:59	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 16:59	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 16:59	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 16:59	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 16:59	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 16:59	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 16:59	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 16:59	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/26/23 16:59*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-1_23_08
Lab Sample ID: 310-263235-14
Date Collected: 08/22/23 00:00
Matrix: Water
Date Received: 08/23/23 16:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/26/23 16:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/26/23 16:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:33	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:33	1
Barium	**0.134**		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:33	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:33	1
Cadmium	**0.000166**	**J**	0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:33	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:33	1
Cobalt	**0.000626**		0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:33	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:33	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:33	1
Nickel	**0.0110**		0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:33	1
Selenium	**0.00246**	**J**	0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:33	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:33	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:33	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:33	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/25/23 09:15	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-1_23_08
Lab Sample ID: 310-263235-15
Date Collected: 08/22/23 11:15
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 12:51	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 12:51	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 12:51	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 12:51	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 12:51	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 12:51	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 12:51	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 12:51	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 12:51	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 12:51	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 12:51	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 12:51	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 12:51	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 12:51	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 12:51	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 12:51	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 12:51	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 12:51	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 12:51	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 12:51	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 12:51	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 12:51	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 12:51	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 12:51	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 12:51	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 12:51	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 12:51	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 12:51	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 12:51	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 12:51	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 12:51	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 12:51	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 12:51	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 12:51	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 12:51	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 12:51	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 12:51	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 12:51	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 12:51	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 12:51	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 12:51	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 12:51	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 12:51	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 12:51	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 12:51	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 12:51	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 12:51	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 12:51	1

Client Sample ID: FB-1_23_08
Lab Sample ID: 310-263235-15
Date Collected: 08/22/23 11:15
Matrix: Water
Date Received: 08/23/23 16:15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/26/23 12:51*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/26/23 12:51*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/26/23 12:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.574		10.6	0.574	ug/L		08/24/23 06:09	09/01/23 15:10	1
Bis(2-ethylhexyl) phthalate	<5.85		10.6	5.85	ug/L		08/24/23 06:09	09/01/23 15:10	1
Di-n-butyl phthalate	<5.96		10.6	5.96	ug/L		08/24/23 06:09	09/01/23 15:10	1
m & p-Cresol	<0.745		10.6	0.745	ug/L		08/24/23 06:09	09/01/23 15:10	1
Phenol	<1.17		10.6	1.17	ug/L		08/24/23 06:09	09/01/23 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*71*		*25 - 110*	*08/24/23 06:09*	*09/01/23 15:10*	*1*
Phenol-d5 (Surr)	*58*		*21 - 110*	*08/24/23 06:09*	*09/01/23 15:10*	*1*
Nitrobenzene-d5 (Surr)	*104*		*45 - 129*	*08/24/23 06:09*	*09/01/23 15:10*	*1*
2-Fluorobiphenyl (Surr)	*78*		*39 - 118*	*08/24/23 06:09*	*09/01/23 15:10*	*1*
2,4,6-Tribromophenol (Surr)	*102*		*27 - 136*	*08/24/23 06:09*	*09/01/23 15:10*	*1*
Terphenyl-d14 (Surr)	*95*		*12 - 144*	*08/24/23 06:09*	*09/01/23 15:10*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0500		0.0762	0.0500	ug/L		08/24/23 06:14	09/02/23 22:25	1
alpha-BHC	<0.0345		0.0762	0.0345	ug/L		08/24/23 06:14	09/02/23 22:25	1
beta-BHC	<0.0440		0.0762	0.0440	ug/L		08/24/23 06:14	09/02/23 22:25	1
delta-BHC	<0.0321		0.0762	0.0321	ug/L		08/24/23 06:14	09/02/23 22:25	1
Dieldrin	<0.0310		0.0762	0.0310	ug/L		08/24/23 06:14	09/02/23 22:25	1
Heptachlor	<0.0393		0.0762	0.0393	ug/L		08/24/23 06:14	09/02/23 22:25	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.316		1.03	0.316	ug/L		08/28/23 08:53	08/29/23 13:11	1
2,4,5-TP	<0.0858		1.03	0.0858	ug/L		08/28/23 08:53	08/29/23 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*78*		*25 - 130*	*08/28/23 08:53*	*08/29/23 13:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	^3+	0.00200	0.00100	mg/L		08/28/23 09:35	08/31/23 19:35	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 19:35	1
Barium	<0.000640		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 19:35	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 19:35	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 19:35	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:35	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 19:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 19:35	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 19:35	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 19:35	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 19:35	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 19:35	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-1_23_08
Lab Sample ID: 310-263235-15
Date Collected: 08/22/23 11:15
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 19:35	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 19:35	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 19:35	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/28/23 09:35	08/31/23 19:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		08/28/23 11:25	08/29/23 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/25/23 09:15	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-1_23_08
Lab Sample ID: 310-263235-16
Date Collected: 08/22/23 00:00
Matrix: Water
Date Received: 08/23/23 16:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 13:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 13:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 13:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 13:13	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 13:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 13:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 13:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 13:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 13:13	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 13:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 13:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 13:13	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 13:13	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 13:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 13:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 13:13	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 13:13	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 13:13	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 13:13	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 13:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 13:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 13:13	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 13:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 13:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 13:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 13:13	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 13:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 13:13	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 13:13	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 13:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 13:13	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 13:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 13:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 13:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 13:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 13:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 13:13	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 13:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 13:13	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 13:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 13:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 13:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 13:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 13:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 13:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 13:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 13:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 13:13	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-1_23_08
Lab Sample ID: 310-263235-16
Date Collected: 08/22/23 00:00
Matrix: Water
Date Received: 08/23/23 16:15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	94		80 - 128		08/26/23 13:13	1
Toluene-d8 (Surr)	100		80 - 120		08/26/23 13:13	1
4-Bromofluorobenzene (Surr)	104		80 - 120		08/26/23 13:13	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
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

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263235-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)
310-263164-A-40 MS	Matrix Spike	98	100	99
310-263164-A-40 MSD	Matrix Spike Duplicate	96	104	99
310-263235-1	AW-2_23_08	93	98	105
310-263235-1	AW-2_23_08	94	99	104
310-263235-2	AW-4_23_08	93	100	104
310-263235-2	AW-4_23_08	97	99	104
310-263235-3	MW-13_23_08	96	98	103
310-263235-3	MW-13_23_08	95	98	103
310-263235-4	MW-14_23_08	96	98	103
310-263235-4	MW-14_23_08	95	100	105
310-263235-5	MW-37_23_08	92	100	105
310-263235-6	MW-38_23_08	94	99	104
310-263235-7	VP-3_23_08	95	98	103
310-263235-8	VP-4_23_08	94	99	103
310-263235-9	MW-101A_23_08	94	99	103
310-263235-9 MS	MW-101A_23_08	86	101	98
310-263235-9 MSD	MW-101A_23_08	97	100	98
310-263235-10	MW-101B_23_08	95	100	104
310-263235-11	MW-106A_23_08	95	98	105
310-263235-12	MW-107A_23_08	92	100	104
310-263235-13	MW-107B_23_08	93	98	103
310-263235-14	FD-1_23_08	94	100	104
310-263235-15	FB-1_23_08	95	99	104
310-263235-16	TB-1_23_08	94	100	104
310-263293-C-4 MS	Matrix Spike	98	99	99
310-263293-C-4 MSD	Matrix Spike Duplicate	98	102	97
LCS 310-397811/6	Lab Control Sample	95	103	96
LCS 310-397811/7	Lab Control Sample	94	97	101
LCS 310-397813/6	Lab Control Sample	97	103	97
LCS 310-397813/7	Lab Control Sample	95	100	103
LCS 310-397921/6	Lab Control Sample	97	101	97
LCS 310-397921/7	Lab Control Sample	94	99	103
MB 310-397811/5	Method Blank	95	98	100
MB 310-397813/5	Method Blank	94	98	103
MB 310-397921/5	Method Blank	95	99	104

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	PHL	TPHL	FBP	TBP
Lab Sample ID	Client Sample ID	(45-129)	(25-110)	(21-110)	(12-144)	(39-118)	(27-136)
310-263235-1	AW-2_23_08	117			48		
310-263235-2	AW-4_23_08	95			61		
310-263235-5	MW-37_23_08	135 S1+	88	70	108	102	115

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	2FP	PHL	TPHL	FBP	TBP
Lab Sample ID	Client Sample ID	(45-129)	(25-110)	(21-110)	(12-144)	(39-118)	(27-136)
310-263235-6	MW-38_23_08	97			33		
310-263235-7	VP-3_23_08	119			55		
310-263235-8	VP-4_23_08	115			41		
310-263235-9	MW-101A_23_08	91	57	48	79	71	85
310-263235-10	MW-101B_23_08	121			43		
310-263235-15	FB-1_23_08	104	71	58	95	78	102
LCS 310-397584/2-A	Lab Control Sample	105	73	61	89	78	98
LCSD 310-397584/3-A	Lab Control Sample Dup	95	67	56	82	73	93
MB 310-397584/1-A	Method Blank	118	82	66	99	84	108

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCB1
Lab Sample ID	Client Sample ID	(10-136)
LCS 310-397585/2-A	Lab Control Sample	60
LCSD 310-397585/3-A	Lab Control Sample Dup	62
MB 310-397585/1-A	Method Blank	62

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1
Lab Sample ID	Client Sample ID	(25-130)
310-263235-3	MW-13_23_08	71
310-263235-5	MW-37_23_08	80
310-263235-6	MW-38_23_08	80
310-263235-9	MW-101A_23_08	69
310-263235-10	MW-101B_23_08	82
310-263235-15	FB-1_23_08	78
LB 500-729638/1-B	Method Blank	67
LCS 500-729670/2-A	Lab Control Sample	80
LCSD 500-729670/3-A	Lab Control Sample Dup	85
MB 500-729670/1-A	Method Blank	78

Surrogate Legend

DCPAA = DCAA

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Method: 8151A - Herbicides (GC)

Matrix: Water
Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)								
		DCPAA1								
Lab Sample ID	Client Sample ID	(25-130)								
310-262901-C-3-H MS	Matrix Spike	84								

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-397811/5
Matrix: Water
Analysis Batch: 397811

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 00:50	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 00:50	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 00:50	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 00:50	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 00:50	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 00:50	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 00:50	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 00:50	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 00:50	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 00:50	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 00:50	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 00:50	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 00:50	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 00:50	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 00:50	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 00:50	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 00:50	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 00:50	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 00:50	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 00:50	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 00:50	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 00:50	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 00:50	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 00:50	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 00:50	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 00:50	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 00:50	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 00:50	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 00:50	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 00:50	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 00:50	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 00:50	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 00:50	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 00:50	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 00:50	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 00:50	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 00:50	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 00:50	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 00:50	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 00:50	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 00:50	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 00:50	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 00:50	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 00:50	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 00:50	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 00:50	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 00:50	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 00:50	1

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

Lab Sample ID: MB 310-397811/5
Matrix: Water
Analysis Batch: 397811

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/26/23 00:50*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 00:50*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/26/23 00:50*	*1*

Lab Sample ID: LCS 310-397811/6
Matrix: Water
Analysis Batch: 397811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	16.46		ug/L		82	68 - 123
1,1,1-Trichloroethane	20.0	19.45		ug/L		97	71 - 128
1,1,2,2-Tetrachloroethane	20.0	16.53		ug/L		83	64 - 124
1,1,2-Trichloroethane	20.0	17.43		ug/L		87	70 - 124
1,1-Dichloroethane	20.0	19.03		ug/L		95	71 - 123
1,1-Dichloroethene	20.0	20.32		ug/L		102	61 - 129
1,2,3-Trichloropropane	20.0	17.83		ug/L		89	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	17.95		ug/L		90	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.36		ug/L		87	73 - 125
1,2-Dichlorobenzene	20.0	18.75		ug/L		94	68 - 120
1,2-Dichloroethane	20.0	17.35		ug/L		87	70 - 124
1,2-Dichloropropane	20.0	18.08		ug/L		90	73 - 121
1,3-Dichlorobenzene	20.0	18.76		ug/L		94	67 - 123
1,4-Dichlorobenzene	20.0	18.78		ug/L		94	67 - 120
2-Butanone (MEK)	40.0	29.45		ug/L		74	50 - 150
2-Hexanone	40.0	32.53		ug/L		81	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	31.22		ug/L		78	62 - 130
Acetone	40.0	34.18		ug/L		85	50 - 150
Acrylonitrile	200	166.9		ug/L		83	50 - 150
Benzene	20.0	18.78		ug/L		94	73 - 122
Bromochloromethane	20.0	19.66		ug/L		98	68 - 132
Bromodichloromethane	20.0	18.09		ug/L		90	72 - 121
Bromoform	20.0	15.08		ug/L		75	55 - 129
Carbon disulfide	20.0	20.52		ug/L		103	58 - 131
Carbon tetrachloride	20.0	17.81		ug/L		89	67 - 132
Chlorobenzene	20.0	18.46		ug/L		92	69 - 121
Chlorodibromomethane	20.0	17.19		ug/L		86	69 - 122
Chloroform	20.0	18.05		ug/L		90	72 - 120
cis-1,2-Dichloroethene	20.0	18.73		ug/L		94	74 - 120
cis-1,3-Dichloropropene	20.0	17.58		ug/L		88	71 - 126
Dibromomethane	20.0	18.12		ug/L		91	72 - 123
Ethylbenzene	20.0	18.48		ug/L		92	69 - 122
Iodomethane	20.0	18.72		ug/L		94	10 - 150
Methylene Chloride	20.0	20.12		ug/L		101	50 - 150
Styrene	20.0	18.30		ug/L		92	67 - 125
Tetrachloroethene	20.0	19.97		ug/L		100	69 - 131
Toluene	20.0	19.23		ug/L		96	72 - 121
trans-1,2-Dichloroethene	20.0	19.48		ug/L		97	68 - 125
trans-1,3-Dichloropropene	20.0	17.55		ug/L		88	68 - 124

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

Lab Sample ID: LCS 310-397811/6
Matrix: Water
Analysis Batch: 397811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,4-Dichloro-2-butene	20.0	15.11		ug/L		76	48 - 150
Trichloroethene	20.0	18.36		ug/L		92	73 - 126
Vinyl acetate	40.0	36.68		ug/L		92	50 - 150
Xylenes, Total	40.0	37.46		ug/L		94	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*80 - 128*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*

Lab Sample ID: LCS 310-397811/7
Matrix: Water
Analysis Batch: 397811

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	19.46		ug/L		97	24 - 150
Chloroethane	20.0	20.59		ug/L		103	51 - 137
Chloromethane	20.0	18.79		ug/L		94	37 - 150
Trichlorofluoromethane	20.0	23.24		ug/L		116	56 - 144
Vinyl chloride	20.0	20.67		ug/L		103	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*80 - 128*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: 310-263164-A-40 MS
Matrix: Water
Analysis Batch: 397811

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	15.93		ug/L		80	52 - 130
1,1,1-Trichloroethane	<0.190		20.0	16.69		ug/L		83	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	16.95		ug/L		85	51 - 130
1,1,2-Trichloroethane	<0.450		20.0	17.21		ug/L		86	56 - 130
1,1-Dichloroethane	<0.220		20.0	17.96		ug/L		90	53 - 130
1,1-Dichloroethene	<0.560		20.0	18.00		ug/L		90	39 - 130
1,2,3-Trichloropropane	<0.590		20.0	18.79		ug/L		94	50 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	19.07		ug/L		95	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	16.93		ug/L		85	59 - 130
1,2-Dichlorobenzene	<0.370		20.0	17.77		ug/L		89	53 - 130
1,2-Dichloroethane	<0.390		20.0	17.07		ug/L		85	57 - 130
1,2-Dichloropropane	<0.270		20.0	17.07		ug/L		85	60 - 130
1,3-Dichlorobenzene	<0.300		20.0	17.83		ug/L		89	54 - 130
1,4-Dichlorobenzene	<0.230		20.0	17.94		ug/L		90	53 - 130
2-Butanone (MEK)	<2.10		40.0	31.22		ug/L		78	47 - 150
2-Hexanone	<2.00		40.0	34.74		ug/L		87	45 - 132
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	33.20		ug/L		83	46 - 132

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

Lab Sample ID: 310-263164-A-40 MS
Matrix: Water
Analysis Batch: 397811

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
Acetone	<3.10		40.0	38.61		ug/L		97	35 - 150
Acrylonitrile	<2.20		200	167.6		ug/L		84	50 - 150
Benzene	<0.220		20.0	17.18		ug/L		86	47 - 130
Bromochloromethane	<0.540		20.0	18.18		ug/L		91	54 - 132
Bromodichloromethane	<0.390		20.0	16.88		ug/L		84	58 - 130
Bromoform	<0.780		20.0	15.01		ug/L		75	42 - 130
Carbon disulfide	<0.450		20.0	18.34		ug/L		92	39 - 131
Carbon tetrachloride	<0.650		20.0	14.17		ug/L		71	45 - 132
Chlorobenzene	<0.400		20.0	17.03		ug/L		85	54 - 130
Chlorodibromomethane	<0.750		20.0	16.66		ug/L		83	53 - 130
Chloroform	<1.30		20.0	16.84		ug/L		84	55 - 130
cis-1,2-Dichloroethene	<0.210		20.0	17.51		ug/L		88	52 - 130
cis-1,3-Dichloropropene	<0.250		20.0	16.60		ug/L		83	55 - 130
Dibromomethane	<0.330		20.0	17.16		ug/L		86	61 - 130
Ethylbenzene	<0.310		20.0	16.52		ug/L		83	48 - 130
Iodomethane	<7.00		20.0	15.13		ug/L		76	10 - 150
Methylene Chloride	<1.70		20.0	18.66		ug/L		93	50 - 150
Styrene	<0.370		20.0	16.46		ug/L		82	46 - 130
Tetrachloroethene	<0.480		20.0	17.30		ug/L		86	42 - 131
Toluene	<0.430		20.0	17.82		ug/L		89	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	17.66		ug/L		88	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	15.90		ug/L		79	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	14.70		ug/L		73	33 - 150
Trichloroethene	<0.430		20.0	17.61		ug/L		88	55 - 130
Vinyl acetate	<2.50		40.0	30.31		ug/L		76	34 - 150
Xylenes, Total	<0.400		40.0	34.16		ug/L		85	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-263164-A-40 MSD
Matrix: Water
Analysis Batch: 397811

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	15.64		ug/L		78	52 - 130	2	20
1,1,1-Trichloroethane	<0.190		20.0	16.54		ug/L		83	49 - 130	1	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	16.96		ug/L		85	51 - 130	0	20
1,1,2-Trichloroethane	<0.450		20.0	17.11		ug/L		86	56 - 130	1	20
1,1-Dichloroethane	<0.220		20.0	17.80		ug/L		89	53 - 130	1	20
1,1-Dichloroethene	<0.560		20.0	17.43		ug/L		87	39 - 130	3	28
1,2,3-Trichloropropane	<0.590		20.0	15.96		ug/L		80	50 - 130	16	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	18.57		ug/L		93	45 - 150	3	20
1,2-Dibromoethane (EDB)	<0.340		20.0	16.88		ug/L		84	59 - 130	0	20
1,2-Dichlorobenzene	<0.370		20.0	18.70		ug/L		93	53 - 130	5	20
1,2-Dichloroethane	<0.390		20.0	16.31		ug/L		82	57 - 130	5	21

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

Lab Sample ID: 310-263164-A-40 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloropropane	<0.270		20.0	16.78		ug/L		84	60 - 130	2	31
1,3-Dichlorobenzene	<0.300		20.0	18.39		ug/L		92	54 - 130	3	20
1,4-Dichlorobenzene	<0.230		20.0	18.42		ug/L		92	53 - 130	3	20
2-Butanone (MEK)	<2.10		40.0	29.04		ug/L		73	47 - 150	7	20
2-Hexanone	<2.00		40.0	33.95		ug/L		85	45 - 132	2	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	32.64		ug/L		82	46 - 132	2	20
Acetone	<3.10		40.0	36.93		ug/L		92	35 - 150	4	26
Acrylonitrile	<2.20		200	160.9		ug/L		80	50 - 150	4	21
Benzene	<0.220		20.0	17.26		ug/L		86	47 - 130	0	20
Bromochloromethane	<0.540		20.0	17.88		ug/L		89	54 - 132	2	20
Bromodichloromethane	<0.390		20.0	17.22		ug/L		86	58 - 130	2	20
Bromoform	<0.780		20.0	14.98		ug/L		75	42 - 130	0	20
Carbon disulfide	<0.450		20.0	17.38		ug/L		87	39 - 131	5	32
Carbon tetrachloride	<0.650		20.0	14.34		ug/L		72	45 - 132	1	20
Chlorobenzene	<0.400		20.0	16.95		ug/L		85	54 - 130	0	20
Chlorodibromomethane	<0.750		20.0	16.62		ug/L		83	53 - 130	0	20
Chloroform	<1.30		20.0	16.27		ug/L		81	55 - 130	3	20
cis-1,2-Dichloroethene	<0.210		20.0	16.76		ug/L		84	52 - 130	4	20
cis-1,3-Dichloropropene	<0.250		20.0	17.66		ug/L		88	55 - 130	6	20
Dibromomethane	<0.330		20.0	17.25		ug/L		86	61 - 130	0	20
Ethylbenzene	<0.310		20.0	16.91		ug/L		85	48 - 130	2	20
Iodomethane	<7.00		20.0	16.24		ug/L		81	10 - 150	7	35
Methylene Chloride	<1.70		20.0	18.29		ug/L		91	50 - 150	2	24
Styrene	<0.370		20.0	16.96		ug/L		85	46 - 130	3	20
Tetrachloroethene	<0.480		20.0	17.45		ug/L		87	42 - 131	1	20
Toluene	<0.430		20.0	18.58		ug/L		93	48 - 130	4	20
trans-1,2-Dichloroethene	<0.270		20.0	16.88		ug/L		84	54 - 130	5	24
trans-1,3-Dichloropropene	<0.560		20.0	16.12		ug/L		81	51 - 130	1	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	14.98		ug/L		75	33 - 150	2	20
Trichloroethene	<0.430		20.0	17.07		ug/L		85	55 - 130	3	20
Vinyl acetate	<2.50		40.0	29.48		ug/L		74	34 - 150	3	27
Xylenes, Total	<0.400		40.0	34.42		ug/L		86	44 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 310-397813/5
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397813

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/26/23 11:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/26/23 11:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/26/23 11:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/26/23 11:43	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/26/23 11:43	1

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

Lab Sample ID: MB 310-397813/5
Matrix: Water
Analysis Batch: 397813

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/26/23 11:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/26/23 11:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/26/23 11:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/26/23 11:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/26/23 11:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/26/23 11:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/26/23 11:43	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/26/23 11:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/26/23 11:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/26/23 11:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/26/23 11:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/26/23 11:43	1
Acetone	<3.10		10.0	3.10	ug/L			08/26/23 11:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/26/23 11:43	1
Benzene	<0.220		0.500	0.220	ug/L			08/26/23 11:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/26/23 11:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/26/23 11:43	1
Bromoform	<0.780		5.00	0.780	ug/L			08/26/23 11:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/26/23 11:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/26/23 11:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/26/23 11:43	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/26/23 11:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/26/23 11:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/26/23 11:43	1
Chloroform	<1.30		3.00	1.30	ug/L			08/26/23 11:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/26/23 11:43	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/26/23 11:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/26/23 11:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/26/23 11:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/26/23 11:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/26/23 11:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/26/23 11:43	1
Styrene	<0.370		1.00	0.370	ug/L			08/26/23 11:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/26/23 11:43	1
Toluene	<0.430		1.00	0.430	ug/L			08/26/23 11:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/26/23 11:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/26/23 11:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/26/23 11:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/26/23 11:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/26/23 11:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/26/23 11:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/26/23 11:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/26/23 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/26/23 11:43*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/26/23 11:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/26/23 11:43*	*1*

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

Lab Sample ID: LCS 310-397813/6
Matrix: Water
Analysis Batch: 397813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	16.98		ug/L		85	68 - 123
1,1,1-Trichloroethane	20.0	18.62		ug/L		93	71 - 128
1,1,2,2-Tetrachloroethane	20.0	17.44		ug/L		87	64 - 124
1,1,2-Trichloroethane	20.0	18.15		ug/L		91	70 - 124
1,1-Dichloroethane	20.0	19.10		ug/L		96	71 - 123
1,1-Dichloroethene	20.0	19.56		ug/L		98	61 - 129
1,2,3-Trichloropropane	20.0	18.72		ug/L		94	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	15.98		ug/L		80	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.81		ug/L		89	73 - 125
1,2-Dichlorobenzene	20.0	19.10		ug/L		95	68 - 120
1,2-Dichloroethane	20.0	17.07		ug/L		85	70 - 124
1,2-Dichloropropane	20.0	17.68		ug/L		88	73 - 121
1,3-Dichlorobenzene	20.0	19.27		ug/L		96	67 - 123
1,4-Dichlorobenzene	20.0	19.18		ug/L		96	67 - 120
2-Butanone (MEK)	40.0	30.61		ug/L		77	50 - 150
2-Hexanone	40.0	35.08		ug/L		88	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	33.00		ug/L		83	62 - 130
Acetone	40.0	36.29		ug/L		91	50 - 150
Acrylonitrile	200	172.0		ug/L		86	50 - 150
Benzene	20.0	18.89		ug/L		94	73 - 122
Bromochloromethane	20.0	19.47		ug/L		97	68 - 132
Bromodichloromethane	20.0	17.97		ug/L		90	72 - 121
Bromoform	20.0	15.87		ug/L		79	55 - 129
Carbon disulfide	20.0	19.67		ug/L		98	58 - 131
Carbon tetrachloride	20.0	16.06		ug/L		80	67 - 132
Chlorobenzene	20.0	18.16		ug/L		91	69 - 121
Chlorodibromomethane	20.0	17.31		ug/L		87	69 - 122
Chloroform	20.0	18.00		ug/L		90	72 - 120
cis-1,2-Dichloroethene	20.0	18.88		ug/L		94	74 - 120
cis-1,3-Dichloropropene	20.0	17.08		ug/L		85	71 - 126
Dibromomethane	20.0	16.69		ug/L		83	72 - 123
Ethylbenzene	20.0	18.39		ug/L		92	69 - 122
Iodomethane	20.0	16.05		ug/L		80	10 - 150
Methylene Chloride	20.0	19.76		ug/L		99	50 - 150
Styrene	20.0	18.11		ug/L		91	67 - 125
Tetrachloroethene	20.0	19.68		ug/L		98	69 - 131
Toluene	20.0	19.08		ug/L		95	72 - 121
trans-1,2-Dichloroethene	20.0	19.11		ug/L		96	68 - 125
trans-1,3-Dichloropropene	20.0	17.21		ug/L		86	68 - 124
trans-1,4-Dichloro-2-butene	20.0	15.43		ug/L		77	48 - 150
Trichloroethene	20.0	19.37		ug/L		97	73 - 126
Vinyl acetate	40.0	34.09		ug/L		85	50 - 150
Xylenes, Total	40.0	37.38		ug/L		93	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

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

Lab Sample ID: LCS 310-397813/7
Matrix: Water
Analysis Batch: 397813

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	18.15		ug/L		91	24 - 150		
Chloroethane			20.0	19.71		ug/L		99	51 - 137		
Chloromethane			20.0	18.40		ug/L		92	37 - 150		
Trichlorofluoromethane			20.0	23.51		ug/L		118	56 - 144		
Vinyl chloride			20.0	21.05		ug/L		105	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-263235-9 MS
Matrix: Water
Analysis Batch: 397813

Client Sample ID: MW-101A_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.59		ug/L		73	52 - 130		
1,1,1-Trichloroethane	<0.190		20.0	15.01		ug/L		75	49 - 130		
1,1,2,2-Tetrachloroethane	<0.470		20.0	15.25		ug/L		76	51 - 130		
1,1,2-Trichloroethane	<0.450		20.0	16.10		ug/L		81	56 - 130		
1,1-Dichloroethane	<0.220		20.0	15.58		ug/L		78	53 - 130		
1,1-Dichloroethene	<0.560		20.0	15.36		ug/L		77	39 - 130		
1,2,3-Trichloropropane	<0.590		20.0	15.59		ug/L		78	50 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.26		ug/L		81	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		20.0	15.85		ug/L		79	59 - 130		
1,2-Dichlorobenzene	<0.370		20.0	17.15		ug/L		86	53 - 130		
1,2-Dichloroethane	<0.390		20.0	16.06		ug/L		80	57 - 130		
1,2-Dichloropropane	<0.270		20.0	15.38		ug/L		77	60 - 130		
1,3-Dichlorobenzene	<0.300		20.0	17.19		ug/L		86	54 - 130		
1,4-Dichlorobenzene	<0.230		20.0	17.17		ug/L		86	53 - 130		
2-Butanone (MEK)	<2.10		40.0	23.46		ug/L		59	47 - 150		
2-Hexanone	<2.00		40.0	30.85		ug/L		77	45 - 132		
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	28.74		ug/L		72	46 - 132		
Acetone	<3.10		40.0	29.43		ug/L		74	35 - 150		
Acrylonitrile	<2.20		200	136.7		ug/L		68	50 - 150		
Benzene	<0.220		20.0	16.97		ug/L		85	47 - 130		
Bromochloromethane	<0.540		20.0	16.14		ug/L		81	54 - 132		
Bromodichloromethane	<0.390		20.0	16.52		ug/L		83	58 - 130		
Bromoform	<0.780		20.0	13.95		ug/L		70	42 - 130		
Carbon disulfide	<0.450		20.0	15.78		ug/L		79	39 - 131		
Carbon tetrachloride	<0.650		20.0	15.23		ug/L		76	45 - 132		
Chlorobenzene	<0.400		20.0	16.44		ug/L		82	54 - 130		
Chlorodibromomethane	<0.750		20.0	15.99		ug/L		80	53 - 130		
Chloroform	<1.30		20.0	14.51		ug/L		73	55 - 130		
cis-1,2-Dichloroethene	<0.210		20.0	14.96		ug/L		75	52 - 130		
cis-1,3-Dichloropropene	<0.250		20.0	15.97		ug/L		80	55 - 130		
Dibromomethane	<0.330		20.0	16.33		ug/L		82	61 - 130		
Ethylbenzene	<0.310		20.0	16.59		ug/L		83	48 - 130		

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

Lab Sample ID: 310-263235-9 MS
Matrix: Water
Analysis Batch: 397813

Client Sample ID: MW-101A_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iodomethane	<7.00		20.0	14.84		ug/L		74	10 - 150
Methylene Chloride	<1.70		20.0	16.21		ug/L		81	50 - 150
Styrene	<0.370		20.0	16.60		ug/L		83	46 - 130
Tetrachloroethene	<0.480		20.0	16.70		ug/L		84	42 - 131
Toluene	<0.430		20.0	17.73		ug/L		89	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	15.07		ug/L		75	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	15.81		ug/L		79	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	13.08		ug/L		65	33 - 150
Trichloroethene	<0.430		20.0	16.89		ug/L		84	55 - 130
Vinyl acetate	<2.50		40.0	23.87		ug/L		60	34 - 150
Xylenes, Total	<0.400		40.0	34.83		ug/L		87	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*86*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Lab Sample ID: 310-263235-9 MSD
Matrix: Water
Analysis Batch: 397813

Client Sample ID: MW-101A_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.380		20.0	15.64		ug/L		78	52 - 130	7	20
1,1,1-Trichloroethane	<0.190		20.0	16.35		ug/L		82	49 - 130	9	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	15.58		ug/L		78	51 - 130	2	20
1,1,2-Trichloroethane	<0.450		20.0	16.40		ug/L		82	56 - 130	2	20
1,1-Dichloroethane	<0.220		20.0	17.26		ug/L		86	53 - 130	10	20
1,1-Dichloroethene	<0.560		20.0	16.96		ug/L		85	39 - 130	10	28
1,2,3-Trichloropropane	<0.590		20.0	17.65		ug/L		88	50 - 130	12	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	17.20		ug/L		86	45 - 150	6	20
1,2-Dibromoethane (EDB)	<0.340		20.0	16.18		ug/L		81	59 - 130	2	20
1,2-Dichlorobenzene	<0.370		20.0	18.00		ug/L		90	53 - 130	5	20
1,2-Dichloroethane	<0.390		20.0	16.44		ug/L		82	57 - 130	2	21
1,2-Dichloropropane	<0.270		20.0	15.99		ug/L		80	60 - 130	4	31
1,3-Dichlorobenzene	<0.300		20.0	17.63		ug/L		88	54 - 130	3	20
1,4-Dichlorobenzene	<0.230		20.0	18.20		ug/L		91	53 - 130	6	20
2-Butanone (MEK)	<2.10		40.0	27.14		ug/L		68	47 - 150	15	20
2-Hexanone	<2.00		40.0	30.74		ug/L		77	45 - 132	0	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	29.55		ug/L		74	46 - 132	3	20
Acetone	<3.10		40.0	33.10		ug/L		83	35 - 150	12	26
Acrylonitrile	<2.20		200	156.6		ug/L		78	50 - 150	14	21
Benzene	<0.220		20.0	16.51		ug/L		83	47 - 130	3	20
Bromochloromethane	<0.540		20.0	18.42		ug/L		92	54 - 132	13	20
Bromodichloromethane	<0.390		20.0	16.34		ug/L		82	58 - 130	1	20
Bromoform	<0.780		20.0	14.09		ug/L		70	42 - 130	1	20
Carbon disulfide	<0.450		20.0	16.83		ug/L		84	39 - 131	6	32
Carbon tetrachloride	<0.650		20.0	14.57		ug/L		73	45 - 132	4	20
Chlorobenzene	<0.400		20.0	16.36		ug/L		82	54 - 130	0	20

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

Lab Sample ID: 310-263235-9 MSD
Client Sample ID: MW-101A_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397813

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorodibromomethane	<0.750		20.0	15.66		ug/L		78	53 - 130	2	20
Chloroform	<1.30		20.0	16.23		ug/L		81	55 - 130	11	20
cis-1,2-Dichloroethene	<0.210		20.0	16.99		ug/L		85	52 - 130	13	20
cis-1,3-Dichloropropene	<0.250		20.0	14.98		ug/L		75	55 - 130	6	20
Dibromomethane	<0.330		20.0	14.53		ug/L		73	61 - 130	12	20
Ethylbenzene	<0.310		20.0	16.35		ug/L		82	48 - 130	2	20
Iodomethane	<7.00		20.0	17.23		ug/L		86	10 - 150	15	35
Methylene Chloride	<1.70		20.0	18.52		ug/L		93	50 - 150	13	24
Styrene	<0.370		20.0	16.22		ug/L		81	46 - 130	2	20
Tetrachloroethene	<0.480		20.0	16.51		ug/L		83	42 - 131	1	20
Toluene	<0.430		20.0	17.22		ug/L		86	48 - 130	3	20
trans-1,2-Dichloroethene	<0.270		20.0	16.80		ug/L		84	54 - 130	11	24
trans-1,3-Dichloropropene	<0.560		20.0	15.19		ug/L		76	51 - 130	4	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	13.57		ug/L		68	33 - 150	4	20
Trichloroethene	<0.430		20.0	15.75		ug/L		79	55 - 130	7	20
Vinyl acetate	<2.50		40.0	28.18		ug/L		70	34 - 150	17	27
Xylenes, Total	<0.400		40.0	33.80		ug/L		85	44 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 310-397921/5
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/28/23 11:32	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/28/23 11:32	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/28/23 11:32	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/28/23 11:32	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/28/23 11:32	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/28/23 11:32	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/28/23 11:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/28/23 11:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/28/23 11:32	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/28/23 11:32	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/28/23 11:32	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/28/23 11:32	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/28/23 11:32	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/28/23 11:32	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/28/23 11:32	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 11:32	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 11:32	1
Acetone	<3.10		10.0	3.10	ug/L			08/28/23 11:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/28/23 11:32	1
Benzene	<0.220		0.500	0.220	ug/L			08/28/23 11:32	1

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

Lab Sample ID: MB 310-397921/5
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/28/23 11:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/28/23 11:32	1
Bromoform	<0.780		5.00	0.780	ug/L			08/28/23 11:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/28/23 11:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/28/23 11:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/28/23 11:32	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/28/23 11:32	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/28/23 11:32	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/28/23 11:32	1
Chloroform	<1.30		3.00	1.30	ug/L			08/28/23 11:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/28/23 11:32	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/28/23 11:32	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/28/23 11:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/28/23 11:32	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/28/23 11:32	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/28/23 11:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/28/23 11:32	1
Styrene	<0.370		1.00	0.370	ug/L			08/28/23 11:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/28/23 11:32	1
Toluene	<0.430		1.00	0.430	ug/L			08/28/23 11:32	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/28/23 11:32	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/28/23 11:32	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/28/23 11:32	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/28/23 11:32	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/28/23 11:32	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/28/23 11:32	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/28/23 11:32	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/28/23 11:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/28/23 11:32*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/28/23 11:32*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/23 11:32*	*1*

Lab Sample ID: LCS 310-397921/6
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	17.19		ug/L		86	68 - 123
1,1,1-Trichloroethane	20.0	19.28		ug/L		96	71 - 128
1,1,2,2-Tetrachloroethane	20.0	16.92		ug/L		85	64 - 124
1,1,2-Trichloroethane	20.0	17.96		ug/L		90	70 - 124
1,1-Dichloroethane	20.0	19.58		ug/L		98	71 - 123
1,1-Dichloroethene	20.0	19.92		ug/L		100	61 - 129
1,2,3-Trichloropropane	20.0	18.27		ug/L		91	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.64		ug/L		93	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.70		ug/L		89	73 - 125

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

Lab Sample ID: LCS 310-397921/6
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	20.0	19.31		ug/L		97	68 - 120
1,2-Dichloroethane	20.0	17.59		ug/L		88	70 - 124
1,2-Dichloropropane	20.0	19.18		ug/L		96	73 - 121
1,3-Dichlorobenzene	20.0	19.56		ug/L		98	67 - 123
1,4-Dichlorobenzene	20.0	19.37		ug/L		97	67 - 120
2-Butanone (MEK)	40.0	29.48		ug/L		74	50 - 150
2-Hexanone	40.0	33.04		ug/L		83	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	31.09		ug/L		78	62 - 130
Acetone	40.0	33.26		ug/L		83	50 - 150
Acrylonitrile	200	171.0		ug/L		85	50 - 150
Benzene	20.0	19.10		ug/L		95	73 - 122
Bromochloromethane	20.0	19.44		ug/L		97	68 - 132
Bromodichloromethane	20.0	18.23		ug/L		91	72 - 121
Bromoform	20.0	15.79		ug/L		79	55 - 129
Carbon disulfide	20.0	19.87		ug/L		99	58 - 131
Carbon tetrachloride	20.0	16.69		ug/L		83	67 - 132
Chlorobenzene	20.0	18.20		ug/L		91	69 - 121
Chlorodibromomethane	20.0	18.01		ug/L		90	69 - 122
Chloroform	20.0	18.62		ug/L		93	72 - 120
cis-1,2-Dichloroethene	20.0	19.18		ug/L		96	74 - 120
cis-1,3-Dichloropropene	20.0	17.99		ug/L		90	71 - 126
Dibromomethane	20.0	16.91		ug/L		85	72 - 123
Ethylbenzene	20.0	18.19		ug/L		91	69 - 122
Iodomethane	20.0	17.10		ug/L		85	10 - 150
Methylene Chloride	20.0	19.83		ug/L		99	50 - 150
Styrene	20.0	18.24		ug/L		91	67 - 125
Tetrachloroethene	20.0	19.60		ug/L		98	69 - 131
Toluene	20.0	19.69		ug/L		98	72 - 121
trans-1,2-Dichloroethene	20.0	19.46		ug/L		97	68 - 125
trans-1,3-Dichloropropene	20.0	17.83		ug/L		89	68 - 124
trans-1,4-Dichloro-2-butene	20.0	16.03		ug/L		80	48 - 150
Trichloroethene	20.0	19.49		ug/L		97	73 - 126
Vinyl acetate	40.0	38.15		ug/L		95	50 - 150
Xylenes, Total	40.0	37.73		ug/L		94	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: LCS 310-397921/7
Matrix: Water
Analysis Batch: 397921

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	18.10		ug/L		91	24 - 150
Chloroethane	20.0	16.55		ug/L		83	51 - 137
Chloromethane	20.0	18.18		ug/L		91	37 - 150

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

Lab Sample ID: LCS 310-397921/7
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichlorofluoromethane			20.0	18.08		ug/L		90	56 - 144		
Vinyl chloride			20.0	19.46		ug/L		97	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-263293-C-4 MS
Matrix: Water
Analysis Batch: 397921

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		
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.97		ug/L		75	52 - 130		
1,1,1-Trichloroethane	<0.190		20.0	15.76		ug/L		79	49 - 130		
1,1,2,2-Tetrachloroethane	<0.470		20.0	17.41		ug/L		87	51 - 130		
1,1,2-Trichloroethane	<0.450		20.0	15.90		ug/L		79	56 - 130		
1,1-Dichloroethane	<0.220		20.0	16.66		ug/L		83	53 - 130		
1,1-Dichloroethene	<0.560		20.0	15.22		ug/L		76	39 - 130		
1,2,3-Trichloropropane	<0.590		20.0	16.88		ug/L		84	50 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.97		ug/L		85	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		20.0	16.02		ug/L		80	59 - 130		
1,2-Dichlorobenzene	<0.370		20.0	17.10		ug/L		85	53 - 130		
1,2-Dichloroethane	<0.390		20.0	16.60		ug/L		83	57 - 130		
1,2-Dichloropropane	<0.270		20.0	15.93		ug/L		80	60 - 130		
1,3-Dichlorobenzene	<0.300		20.0	17.25		ug/L		86	54 - 130		
1,4-Dichlorobenzene	<0.230		20.0	17.22		ug/L		86	53 - 130		
2-Butanone (MEK)	<2.10		40.0	27.94		ug/L		70	47 - 150		
2-Hexanone	<2.00		40.0	30.42		ug/L		76	45 - 132		
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	28.95		ug/L		72	46 - 132		
Acetone	<3.10		40.0	34.31		ug/L		86	35 - 150		
Acrylonitrile	<2.20		200	153.9		ug/L		77	50 - 150		
Benzene	0.745		20.0	16.40		ug/L		78	47 - 130		
Bromochloromethane	<0.540		20.0	17.63		ug/L		88	54 - 132		
Bromodichloromethane	<0.390		20.0	16.15		ug/L		81	58 - 130		
Bromoform	<0.780		20.0	14.69		ug/L		73	42 - 130		
Carbon disulfide	<0.450		20.0	18.05		ug/L		90	39 - 131		
Carbon tetrachloride	<0.650		20.0	13.95		ug/L		70	45 - 132		
Chlorobenzene	<0.400		20.0	16.16		ug/L		81	54 - 130		
Chlorodibromomethane	<0.750		20.0	16.01		ug/L		80	53 - 130		
Chloroform	<1.30		20.0	16.13		ug/L		81	55 - 130		
cis-1,2-Dichloroethene	<0.210		20.0	16.78		ug/L		84	52 - 130		
cis-1,3-Dichloropropene	<0.250		20.0	15.64		ug/L		78	55 - 130		
Dibromomethane	<0.330		20.0	15.74		ug/L		79	61 - 130		
Ethylbenzene	1.56		20.0	15.72		ug/L		71	48 - 130		
Iodomethane	<7.00		20.0	16.72		ug/L		84	10 - 150		
Methylene Chloride	<1.70		20.0	17.77		ug/L		89	50 - 150		
Styrene	<0.370		20.0	15.80		ug/L		79	46 - 130		

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

Lab Sample ID: 310-263293-C-4 MS
Matrix: Water
Analysis Batch: 397921

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
Tetrachloroethene	<0.480		20.0	15.95		ug/L		80	42 - 131
Toluene	<0.430		20.0	16.90		ug/L		84	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	16.45		ug/L		82	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	16.06		ug/L		80	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.63		ug/L		78	33 - 150
Trichloroethene	<0.430		20.0	16.19		ug/L		81	55 - 130
Vinyl acetate	<2.50		40.0	29.72		ug/L		74	34 - 150
Xylenes, Total	2.21	J	40.0	32.53		ug/L		76	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-263293-C-4 MSD
Matrix: Water
Analysis Batch: 397921

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.65		ug/L		73	52 - 130	2	20
1,1,1-Trichloroethane	<0.190		20.0	15.64		ug/L		78	49 - 130	1	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	15.52		ug/L		78	51 - 130	11	20
1,1,2-Trichloroethane	<0.450		20.0	16.05		ug/L		80	56 - 130	1	20
1,1-Dichloroethane	<0.220		20.0	16.90		ug/L		84	53 - 130	1	20
1,1-Dichloroethene	<0.560		20.0	16.10		ug/L		81	39 - 130	6	28
1,2,3-Trichloropropane	<0.590		20.0	17.32		ug/L		87	50 - 130	3	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.66		ug/L		83	45 - 150	2	20
1,2-Dibromoethane (EDB)	<0.340		20.0	16.40		ug/L		82	59 - 130	2	20
1,2-Dichlorobenzene	<0.370		20.0	17.32		ug/L		87	53 - 130	1	20
1,2-Dichloroethane	<0.390		20.0	17.64		ug/L		88	57 - 130	6	21
1,2-Dichloropropane	<0.270		20.0	15.89		ug/L		79	60 - 130	0	31
1,3-Dichlorobenzene	<0.300		20.0	17.34		ug/L		87	54 - 130	1	20
1,4-Dichlorobenzene	<0.230		20.0	17.18		ug/L		86	53 - 130	0	20
2-Butanone (MEK)	<2.10		40.0	29.01		ug/L		73	47 - 150	4	20
2-Hexanone	<2.00		40.0	31.59		ug/L		79	45 - 132	4	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	29.98		ug/L		75	46 - 132	3	20
Acetone	<3.10		40.0	35.28		ug/L		88	35 - 150	3	26
Acrylonitrile	<2.20		200	157.8		ug/L		79	50 - 150	3	21
Benzene	0.745		20.0	16.51		ug/L		79	47 - 130	1	20
Bromochloromethane	<0.540		20.0	17.34		ug/L		87	54 - 132	2	20
Bromodichloromethane	<0.390		20.0	16.40		ug/L		82	58 - 130	2	20
Bromoform	<0.780		20.0	14.61		ug/L		73	42 - 130	1	20
Carbon disulfide	<0.450		20.0	16.41		ug/L		82	39 - 131	10	32
Carbon tetrachloride	<0.650		20.0	13.77		ug/L		69	45 - 132	1	20
Chlorobenzene	<0.400		20.0	15.89		ug/L		79	54 - 130	2	20
Chlorodibromomethane	<0.750		20.0	15.83		ug/L		79	53 - 130	1	20
Chloroform	<1.30		20.0	16.16		ug/L		81	55 - 130	0	20
cis-1,2-Dichloroethene	<0.210		20.0	16.86		ug/L		84	52 - 130	0	20

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

Lab Sample ID: 310-263293-C-4 MSD
Matrix: Water
Analysis Batch: 397921

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
cis-1,3-Dichloropropene	<0.250		20.0	16.45		ug/L		82	55 - 130	5	20
Dibromomethane	<0.330		20.0	16.00		ug/L		80	61 - 130	2	20
Ethylbenzene	1.56		20.0	15.53		ug/L		70	48 - 130	1	20
Iodomethane	<7.00		20.0	16.79		ug/L		84	10 - 150	0	35
Methylene Chloride	<1.70		20.0	17.89		ug/L		89	50 - 150	1	24
Styrene	<0.370		20.0	15.67		ug/L		78	46 - 130	1	20
Tetrachloroethene	<0.480		20.0	15.95		ug/L		80	42 - 131	0	20
Toluene	<0.430		20.0	16.91		ug/L		85	48 - 130	0	20
trans-1,2-Dichloroethene	<0.270		20.0	16.31		ug/L		82	54 - 130	1	24
trans-1,3-Dichloropropene	<0.560		20.0	16.40		ug/L		82	51 - 130	2	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	13.22		ug/L		66	33 - 150	17	20
Trichloroethene	<0.430		20.0	15.99		ug/L		80	55 - 130	1	20
Vinyl acetate	<2.50		40.0	31.30		ug/L		78	34 - 150	5	27
Xylenes, Total	2.21	J	40.0	32.63		ug/L		76	44 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 310-397584/1-A
Matrix: Water
Analysis Batch: 398455

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.540		10.0	0.540	ug/L		08/24/23 06:09	09/01/23 12:56	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/24/23 06:09	09/01/23 12:56	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		08/24/23 06:09	09/01/23 12:56	1
m & p-Cresol	<0.700		10.0	0.700	ug/L		08/24/23 06:09	09/01/23 12:56	1
Phenol	<1.10		10.0	1.10	ug/L		08/24/23 06:09	09/01/23 12:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*82*		*25 - 110*	*08/24/23 06:09*	*09/01/23 12:56*	*1*
Phenol-d5 (Surr)	*66*		*21 - 110*	*08/24/23 06:09*	*09/01/23 12:56*	*1*
Nitrobenzene-d5 (Surr)	*118*		*45 - 129*	*08/24/23 06:09*	*09/01/23 12:56*	*1*
2-Fluorobiphenyl (Surr)	*84*		*39 - 118*	*08/24/23 06:09*	*09/01/23 12:56*	*1*
2,4,6-Tribromophenol (Surr)	*108*		*27 - 136*	*08/24/23 06:09*	*09/01/23 12:56*	*1*
Terphenyl-d14 (Surr)	*99*		*12 - 144*	*08/24/23 06:09*	*09/01/23 12:56*	*1*

Lab Sample ID: LCS 310-397584/2-A
Matrix: Water
Analysis Batch: 398455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2'-oxybis(1-chloropropane)	100	82.68		ug/L		83	34 - 123
Bis(2-ethylhexyl) phthalate	100	72.95		ug/L		73	43 - 143

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

Lab Sample ID: LCS 310-397584/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398455
Prep Batch: 397584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Di-n-butyl phthalate			100	79.22		ug/L		79	50 - 133		
m & p-Cresol			100	78.37		ug/L		78	46 - 117		
Phenol			100	52.11		ug/L		52	29 - 110		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*73*		*25 - 110*
Phenol-d5 (Surr)	*61*		*21 - 110*
Nitrobenzene-d5 (Surr)	*105*		*45 - 129*
2-Fluorobiphenyl (Surr)	*78*		*39 - 118*
2,4,6-Tribromophenol (Surr)	*98*		*27 - 136*
Terphenyl-d14 (Surr)	*89*		*12 - 144*

Lab Sample ID: LCSD 310-397584/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398455
Prep Batch: 397584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,2'-oxybis(1-chloropropane)			100	77.32		ug/L		77	34 - 123	7	35
Bis(2-ethylhexyl) phthalate			100	72.20		ug/L		72	43 - 143	1	35
Di-n-butyl phthalate			100	77.58		ug/L		78	50 - 133	2	35
m & p-Cresol			100	76.06		ug/L		76	46 - 117	3	35
Phenol			100	50.64		ug/L		51	29 - 110	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*67*		*25 - 110*
Phenol-d5 (Surr)	*56*		*21 - 110*
Nitrobenzene-d5 (Surr)	*95*		*45 - 129*
2-Fluorobiphenyl (Surr)	*73*		*39 - 118*
2,4,6-Tribromophenol (Surr)	*93*		*27 - 136*
Terphenyl-d14 (Surr)	*82*		*12 - 144*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-397585/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398519
Prep Batch: 397585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		08/24/23 06:14	09/02/23 20:47	1
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		08/24/23 06:14	09/02/23 20:47	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		08/24/23 06:14	09/02/23 20:47	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		08/24/23 06:14	09/02/23 20:47	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		08/24/23 06:14	09/02/23 20:47	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		08/24/23 06:14	09/02/23 20:47	1

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

Lab Sample ID: LCS 310-397585/2-A
Matrix: Water
Analysis Batch: 398519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397585

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	60		10 - 136

Lab Sample ID: LCSD 310-397585/3-A
Matrix: Water
Analysis Batch: 398519

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 397585

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	62		10 - 136

Method: 8151A - Herbicides (GC)

Lab Sample ID: LB 500-729638/1-B
Matrix: Water
Analysis Batch: 729832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 729670

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<30.7		100	30.7	ug/L		08/28/23 08:53	08/29/23 09:59	1
2,4,5-TP	<8.34		100	8.34	ug/L		08/28/23 08:53	08/29/23 09:59	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	67		25 - 130	08/28/23 08:53	08/29/23 09:59	1

Lab Sample ID: MB 500-729670/1-A
Matrix: Water
Analysis Batch: 729832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 729670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.307		1.00	0.307	ug/L		08/28/23 08:53	08/29/23 09:06	1
2,4,5-TP	<0.0834		1.00	0.0834	ug/L		08/28/23 08:53	08/29/23 09:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	78		25 - 130	08/28/23 08:53	08/29/23 09:06	1

Lab Sample ID: LCS 500-729670/2-A
Matrix: Water
Analysis Batch: 729832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 729670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	10.1	7.011		ug/L		70	30 - 115
2,4,5-TP	2.50	1.840		ug/L		74	32 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCAA	80		25 - 130

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 500-729670/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 729832
Prep Batch: 729670

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			10.1	7.687		ug/L		76	30 - 115	9	20
2,4,5-TP			2.50	2.051		ug/L		82	32 - 115	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*85*		*25 - 130*

Lab Sample ID: 310-262901-C-3-H MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: TCLP
Analysis Batch: 729832
Prep Batch: 729670

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	<30.7		1010	744.3		ug/L		74	30 - 115
2,4,5-TP	<8.34		250	195.4		ug/L		78	32 - 115

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCAA	*84*		*25 - 130*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-397693/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		08/25/23 09:30	08/28/23 15:42	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/25/23 09:30	08/28/23 15:42	1
Barium	<0.000640		0.00200	0.000640	mg/L		08/25/23 09:30	08/28/23 15:42	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/25/23 09:30	08/28/23 15:42	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/25/23 09:30	08/28/23 15:42	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 15:42	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/25/23 09:30	08/28/23 15:42	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/25/23 09:30	08/28/23 15:42	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/25/23 09:30	08/28/23 15:42	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/25/23 09:30	08/28/23 15:42	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/25/23 09:30	08/28/23 15:42	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/25/23 09:30	08/28/23 15:42	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/25/23 09:30	08/28/23 15:42	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/25/23 09:30	08/28/23 15:42	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/25/23 09:30	08/28/23 15:42	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/25/23 09:30	08/28/23 15:42	1

Lab Sample ID: LCS 310-397693/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			0.200	0.2034		mg/L		102	80 - 120
Arsenic			0.200	0.2017		mg/L		101	80 - 120

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

Lab Sample ID: LCS 310-397693/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.100	0.1043		mg/L		104	80 - 120
Beryllium	0.100	0.09813		mg/L		98	80 - 120
Cadmium	0.100	0.09971		mg/L		100	80 - 120
Chromium	0.100	0.1019		mg/L		102	80 - 120
Cobalt	0.100	0.09780		mg/L		98	80 - 120
Copper	0.200	0.2109		mg/L		105	80 - 120
Lead	0.200	0.2040		mg/L		102	80 - 120
Nickel	0.200	0.2121		mg/L		106	80 - 120
Selenium	0.400	0.3982		mg/L		100	80 - 120
Silver	0.100	0.1002		mg/L		100	80 - 120
Thallium	0.200	0.1676		mg/L		84	80 - 120
Vanadium	0.100	0.1023		mg/L		102	80 - 120
Zinc	0.200	0.2025		mg/L		101	80 - 120
Tin	0.200	0.1939		mg/L		97	80 - 120

Lab Sample ID: 310-262418-A-1-C MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00100		0.200	0.2072		mg/L		104	75 - 125
Arsenic	<0.000530		0.200	0.2023		mg/L		101	75 - 125
Barium	0.0440		0.100	0.1467		mg/L		103	75 - 125
Beryllium	<0.000330		0.100	0.09988		mg/L		100	75 - 125
Cadmium	0.000638		0.100	0.09940		mg/L		99	75 - 125
Chromium	<0.00110		0.100	0.09989		mg/L		100	75 - 125
Cobalt	<0.000170		0.100	0.09465		mg/L		95	75 - 125
Copper	<0.00180		0.200	0.2060		mg/L		103	75 - 125
Lead	<0.000240		0.200	0.2004		mg/L		100	75 - 125
Nickel	<0.00190		0.200	0.2028		mg/L		101	75 - 125
Selenium	0.00337	J	0.400	0.4044		mg/L		100	75 - 125
Silver	<0.000500		0.100	0.09733		mg/L		97	75 - 125
Thallium	<0.000260		0.200	0.1579		mg/L		79	75 - 125
Vanadium	<0.00110		0.100	0.1013		mg/L		101	75 - 125
Zinc	<0.00640		0.200	0.1988		mg/L		99	75 - 125
Tin	<0.00230		0.200	0.1892		mg/L		95	75 - 125

Lab Sample ID: 310-262418-A-1-D MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2127		mg/L		106	75 - 125	3	20
Arsenic	<0.000530		0.200	0.2047		mg/L		102	75 - 125	1	20
Barium	0.0440		0.100	0.1445		mg/L		100	75 - 125	2	20
Beryllium	<0.000330		0.100	0.1007		mg/L		101	75 - 125	1	20
Cadmium	0.000638		0.100	0.1016		mg/L		101	75 - 125	2	20
Chromium	<0.00110		0.100	0.1017		mg/L		102	75 - 125	2	20
Cobalt	<0.000170		0.100	0.09550		mg/L		95	75 - 125	1	20

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

Lab Sample ID: 310-262418-A-1-D MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	<0.00180		0.200	0.2084		mg/L		104	75 - 125	1	20
Lead	<0.000240		0.200	0.2049		mg/L		102	75 - 125	2	20
Nickel	<0.00190		0.200	0.2063		mg/L		103	75 - 125	2	20
Selenium	0.00337	J	0.400	0.4111		mg/L		102	75 - 125	2	20
Silver	<0.000500		0.100	0.09754		mg/L		98	75 - 125	0	20
Thallium	<0.000260		0.200	0.1615		mg/L		81	75 - 125	2	20
Vanadium	<0.00110		0.100	0.1016		mg/L		102	75 - 125	0	20
Zinc	<0.00640		0.200	0.2022		mg/L		101	75 - 125	2	20
Tin	<0.00230		0.200	0.1896		mg/L		95	75 - 125	0	20

Lab Sample ID: 310-263159-A-15-C DU
Client Sample ID: Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397969
Prep Batch: 397693

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00100		<0.00100		mg/L		NC	20
Arsenic	0.00510		0.004793		mg/L		6	20
Barium	1.64		1.561		mg/L		5	20
Beryllium	0.00113		0.001089		mg/L		4	20
Cadmium	0.00229		0.002398		mg/L		5	20
Chromium	0.0309		0.03043		mg/L		2	20
Cobalt	0.0289		0.02862		mg/L		1	20
Copper	0.135		0.1281		mg/L		5	20
Lead	0.00595		0.005535		mg/L		7	20
Nickel	0.0676		0.06710		mg/L		0.7	20
Selenium	0.00311	J	0.003327	J	mg/L		7	20
Silver	<0.000500		<0.000500		mg/L		NC	20
Thallium	<0.000260		<0.000260		mg/L		NC	20
Vanadium	0.0155		0.01478		mg/L		5	20
Zinc	0.0315		0.03240		mg/L		3	20
Tin	<0.00230		<0.00230		mg/L		NC	20

Lab Sample ID: MB 310-397850/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398418
Prep Batch: 397850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/28/23 09:35	08/31/23 18:25	1
Barium	<0.000640		0.00200	0.000640	mg/L		08/28/23 09:35	08/31/23 18:25	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/28/23 09:35	08/31/23 18:25	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/28/23 09:35	08/31/23 18:25	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 18:25	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/28/23 09:35	08/31/23 18:25	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/28/23 09:35	08/31/23 18:25	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/28/23 09:35	08/31/23 18:25	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/28/23 09:35	08/31/23 18:25	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/28/23 09:35	08/31/23 18:25	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/28/23 09:35	08/31/23 18:25	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/28/23 09:35	08/31/23 18:25	1

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

Lab Sample ID: MB 310-397850/1-A
Matrix: Water
Analysis Batch: 398418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/28/23 09:35	08/31/23 18:25	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/28/23 09:35	08/31/23 18:25	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/28/23 09:35	08/31/23 18:25	1

Lab Sample ID: MB 310-397850/1-A
Matrix: Water
Analysis Batch: 398627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		08/28/23 09:35	09/05/23 15:07	1

Lab Sample ID: LCS 310-397850/2-A
Matrix: Water
Analysis Batch: 398418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.1930		mg/L		97	80 - 120
Barium	0.100	0.09903		mg/L		99	80 - 120
Beryllium	0.100	0.09940		mg/L		99	80 - 120
Cadmium	0.100	0.1039		mg/L		104	80 - 120
Chromium	0.100	0.1106		mg/L		111	80 - 120
Cobalt	0.100	0.1098		mg/L		110	80 - 120
Copper	0.200	0.2146		mg/L		107	80 - 120
Lead	0.200	0.2131		mg/L		107	80 - 120
Nickel	0.200	0.2063		mg/L		103	80 - 120
Selenium	0.400	0.3807		mg/L		95	80 - 120
Silver	0.100	0.1093		mg/L		109	80 - 120
Thallium	0.200	0.1659		mg/L		83	80 - 120
Vanadium	0.100	0.09639		mg/L		96	80 - 120
Zinc	0.200	0.1963		mg/L		98	80 - 120
Tin	0.200	0.2121		mg/L		106	80 - 120

Lab Sample ID: LCS 310-397850/2-A
Matrix: Water
Analysis Batch: 398627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2212		mg/L		111	80 - 120

Lab Sample ID: 310-263421-A-1-B MS
Matrix: Water
Analysis Batch: 398418

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 397850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.000692	J	0.200	0.1961		mg/L		98	75 - 125
Barium	0.208	F1	0.100	0.7076	F1	mg/L		500	75 - 125
Beryllium	<0.000330		0.100	0.09962		mg/L		100	75 - 125
Cadmium	<0.000100		0.100	0.1014		mg/L		101	75 - 125
Chromium	<0.00110		0.100	0.1047		mg/L		105	75 - 125
Cobalt	0.00177		0.100	0.1092		mg/L		107	75 - 125

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

Lab Sample ID: 310-263421-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398418 — **Prep Batch: 397850**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	<0.00180		0.200	0.2103		mg/L		105	75 - 125
Lead	0.000609		0.200	0.2059		mg/L		103	75 - 125
Nickel	0.00241	J	0.200	0.2041		mg/L		101	75 - 125
Selenium	<0.00140		0.400	0.3902		mg/L		98	75 - 125
Silver	<0.000500		0.100	0.1041		mg/L		104	75 - 125
Thallium	<0.000260		0.200	0.1563		mg/L		78	75 - 125
Vanadium	<0.00110		0.100	0.1045		mg/L		105	75 - 125
Zinc	<0.00640		0.200	0.2007		mg/L		100	75 - 125
Tin	<0.00230		0.200	0.2091		mg/L		105	75 - 125

Lab Sample ID: 310-263421-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398627 — **Prep Batch: 397850**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00100		0.200	0.2184		mg/L		109	75 - 125

Lab Sample ID: 310-263421-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398418 — **Prep Batch: 397850**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.000692	J	0.200	0.1950		mg/L		97	75 - 125	1	20
Barium	0.208	F1	0.100	0.7168	F1	mg/L		509	75 - 125	1	20
Beryllium	<0.000330		0.100	0.1004		mg/L		100	75 - 125	1	20
Cadmium	<0.000100		0.100	0.1011		mg/L		101	75 - 125	0	20
Chromium	<0.00110		0.100	0.1055		mg/L		106	75 - 125	1	20
Cobalt	0.00177		0.100	0.1107		mg/L		109	75 - 125	1	20
Copper	<0.00180		0.200	0.2100		mg/L		105	75 - 125	0	20
Lead	0.000609		0.200	0.2089		mg/L		104	75 - 125	1	20
Nickel	0.00241	J	0.200	0.2038		mg/L		101	75 - 125	0	20
Selenium	<0.00140		0.400	0.3858		mg/L		96	75 - 125	1	20
Silver	<0.000500		0.100	0.1031		mg/L		103	75 - 125	1	20
Thallium	<0.000260		0.200	0.1579		mg/L		79	75 - 125	1	20
Vanadium	<0.00110		0.100	0.1063		mg/L		106	75 - 125	2	20
Zinc	<0.00640		0.200	0.2013		mg/L		101	75 - 125	0	20
Tin	<0.00230		0.200	0.2093		mg/L		105	75 - 125	0	20

Lab Sample ID: 310-263421-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398627 — **Prep Batch: 397850**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2100		mg/L		105	75 - 125	4	20

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

Lab Sample ID: 310-263235-9 DU
Matrix: Water
Analysis Batch: 398418

Client Sample ID: MW-101A_23_08
Prep Type: Total/NA
Prep Batch: 397850

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00100	^3+	<0.00100	^3+	mg/L		NC	20
Arsenic	<0.000530		<0.000530		mg/L		NC	20
Barium	0.0846		0.08297		mg/L		2	20
Beryllium	<0.000330		<0.000330		mg/L		NC	20
Cadmium	<0.000100		<0.000100		mg/L		NC	20
Chromium	<0.00110		<0.00110		mg/L		NC	20
Cobalt	0.000387	J	0.0003520	J	mg/L		9	20
Copper	<0.00180		<0.00180		mg/L		NC	20
Lead	<0.000240		<0.000240		mg/L		NC	20
Nickel	0.00207	J	0.002051	J	mg/L		0.9	20
Selenium	0.00289	J	0.002729	J	mg/L		6	20
Silver	<0.000500		<0.000500		mg/L		NC	20
Vanadium	<0.00110		<0.00110		mg/L		NC	20
Zinc	<0.00640		<0.00640		mg/L		NC	20
Tin	<0.00230		<0.00230		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-397936/1-A
Matrix: Water
Analysis Batch: 398073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		08/28/23 11:25	08/29/23 11:27	1

Lab Sample ID: LCS 310-397936/2-A
Matrix: Water
Analysis Batch: 398073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001632		mg/L		98	80 - 120

Lab Sample ID: 310-263280-A-5-C MS
Matrix: Water
Analysis Batch: 398073

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 397936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000140		0.00167	0.001642		mg/L		99	80 - 120

Lab Sample ID: 310-263280-A-5-D MSD
Matrix: Water
Analysis Batch: 398073

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 397936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000140		0.00167	0.001617		mg/L		97	80 - 120	2	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-397671/1
Matrix: Water
Analysis Batch: 397671

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	<1.70		5.00	1.70	mg/L			08/24/23 12:30	1

Lab Sample ID: LCS 310-397671/2
Matrix: Water
Analysis Batch: 397671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	97.00		mg/L		97	75 - 116

Lab Sample ID: 310-263235-3 DU
Matrix: Water
Analysis Batch: 397671

Client Sample ID: MW-13_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	113		109.0		mg/L		4	35

Lab Sample ID: 310-263235-4 DU
Matrix: Water
Analysis Batch: 397671

Client Sample ID: MW-14_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	53.0		57.00		mg/L		7	35

Lab Sample ID: MB 310-397756/1
Matrix: Water
Analysis Batch: 397756

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	<1.70		5.00	1.70	mg/L			08/25/23 09:15	1

Lab Sample ID: LCS 310-397756/2
Matrix: Water
Analysis Batch: 397756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	98.00		mg/L		98	75 - 116

Lab Sample ID: 310-263252-C-1 DU
Matrix: Water
Analysis Batch: 397756

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	64.0		52.00		mg/L		21	35

GC/MS VOA

Analysis Batch: 397811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	8260D	
310-263235-2	AW-4_23_08	Total/NA	Water	8260D	
310-263235-3	MW-13_23_08	Total/NA	Water	8260D	
310-263235-4	MW-14_23_08	Total/NA	Water	8260D	
MB 310-397811/5	Method Blank	Total/NA	Water	8260D	
LCS 310-397811/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-397811/7	Lab Control Sample	Total/NA	Water	8260D	
310-263164-A-40 MS	Matrix Spike	Total/NA	Water	8260D	
310-263164-A-40 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 397813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-5	MW-37_23_08	Total/NA	Water	8260D	
310-263235-6	MW-38_23_08	Total/NA	Water	8260D	
310-263235-7	VP-3_23_08	Total/NA	Water	8260D	
310-263235-8	VP-4_23_08	Total/NA	Water	8260D	
310-263235-9	MW-101A_23_08	Total/NA	Water	8260D	
310-263235-10	MW-101B_23_08	Total/NA	Water	8260D	
310-263235-11	MW-106A_23_08	Total/NA	Water	8260D	
310-263235-12	MW-107A_23_08	Total/NA	Water	8260D	
310-263235-13	MW-107B_23_08	Total/NA	Water	8260D	
310-263235-14	FD-1_23_08	Total/NA	Water	8260D	
310-263235-15	FB-1_23_08	Total/NA	Water	8260D	
310-263235-16	TB-1_23_08	Total/NA	Water	8260D	
MB 310-397813/5	Method Blank	Total/NA	Water	8260D	
LCS 310-397813/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-397813/7	Lab Control Sample	Total/NA	Water	8260D	
310-263235-9 MS	MW-101A_23_08	Total/NA	Water	8260D	
310-263235-9 MSD	MW-101A_23_08	Total/NA	Water	8260D	

Analysis Batch: 397921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	8260D	
310-263235-2	AW-4_23_08	Total/NA	Water	8260D	
310-263235-3	MW-13_23_08	Total/NA	Water	8260D	
310-263235-4	MW-14_23_08	Total/NA	Water	8260D	
MB 310-397921/5	Method Blank	Total/NA	Water	8260D	
LCS 310-397921/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-397921/7	Lab Control Sample	Total/NA	Water	8260D	
310-263293-C-4 MS	Matrix Spike	Total/NA	Water	8260D	
310-263293-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 397584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	3510C	
310-263235-2	AW-4_23_08	Total/NA	Water	3510C	
310-263235-5	MW-37_23_08	Total/NA	Water	3510C	
310-263235-6	MW-38_23_08	Total/NA	Water	3510C	
310-263235-7	VP-3_23_08	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 397584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-8	VP-4_23_08	Total/NA	Water	3510C	
310-263235-9	MW-101A_23_08	Total/NA	Water	3510C	
310-263235-10	MW-101B_23_08	Total/NA	Water	3510C	
310-263235-15	FB-1_23_08	Total/NA	Water	3510C	
MB 310-397584/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-397584/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-397584/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 398455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	8270E	397584
310-263235-2	AW-4_23_08	Total/NA	Water	8270E	397584
310-263235-5	MW-37_23_08	Total/NA	Water	8270E	397584
310-263235-6	MW-38_23_08	Total/NA	Water	8270E	397584
310-263235-7	VP-3_23_08	Total/NA	Water	8270E	397584
310-263235-8	VP-4_23_08	Total/NA	Water	8270E	397584
310-263235-9	MW-101A_23_08	Total/NA	Water	8270E	397584
310-263235-10	MW-101B_23_08	Total/NA	Water	8270E	397584
310-263235-15	FB-1_23_08	Total/NA	Water	8270E	397584
MB 310-397584/1-A	Method Blank	Total/NA	Water	8270E	397584
LCS 310-397584/2-A	Lab Control Sample	Total/NA	Water	8270E	397584
LCSD 310-397584/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	397584

GC Semi VOA

Prep Batch: 397585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-5	MW-37_23_08	Total/NA	Water	3510C	
310-263235-8	VP-4_23_08	Total/NA	Water	3510C	
310-263235-9	MW-101A_23_08	Total/NA	Water	3510C	
310-263235-15	FB-1_23_08	Total/NA	Water	3510C	
MB 310-397585/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-397585/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-397585/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 398519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-5	MW-37_23_08	Total/NA	Water	8081B	397585
310-263235-8	VP-4_23_08	Total/NA	Water	8081B	397585
310-263235-9	MW-101A_23_08	Total/NA	Water	8081B	397585
310-263235-15	FB-1_23_08	Total/NA	Water	8081B	397585
MB 310-397585/1-A	Method Blank	Total/NA	Water	8081B	397585
LCS 310-397585/2-A	Lab Control Sample	Total/NA	Water	8081B	397585
LCSD 310-397585/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	397585

Leach Batch: 729638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-729638/1-B	Method Blank	Total/NA	Water	1311	
310-262901-C-3-H MS	Matrix Spike	TCLP	Water	1311	

GC Semi VOA

Prep Batch: 729670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-3	MW-13_23_08	Total/NA	Water	8151A	
310-263235-5	MW-37_23_08	Total/NA	Water	8151A	
310-263235-6	MW-38_23_08	Total/NA	Water	8151A	
310-263235-9	MW-101A_23_08	Total/NA	Water	8151A	
310-263235-10	MW-101B_23_08	Total/NA	Water	8151A	
310-263235-15	FB-1_23_08	Total/NA	Water	8151A	
LB 500-729638/1-B	Method Blank	Total/NA	Water	8151A	729638
MB 500-729670/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-729670/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-729670/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
310-262901-C-3-H MS	Matrix Spike	TCLP	Water	8151A	729638

Analysis Batch: 729832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-3	MW-13_23_08	Total/NA	Water	8151A	729670
310-263235-5	MW-37_23_08	Total/NA	Water	8151A	729670
310-263235-6	MW-38_23_08	Total/NA	Water	8151A	729670
310-263235-9	MW-101A_23_08	Total/NA	Water	8151A	729670
310-263235-10	MW-101B_23_08	Total/NA	Water	8151A	729670
310-263235-15	FB-1_23_08	Total/NA	Water	8151A	729670
LB 500-729638/1-B	Method Blank	Total/NA	Water	8151A	729670
MB 500-729670/1-A	Method Blank	Total/NA	Water	8151A	729670
LCS 500-729670/2-A	Lab Control Sample	Total/NA	Water	8151A	729670
LCSD 500-729670/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	729670
310-262901-C-3-H MS	Matrix Spike	TCLP	Water	8151A	729670

Metals

Prep Batch: 397693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	3005A	
310-263235-2	AW-4_23_08	Total/NA	Water	3005A	
310-263235-3	MW-13_23_08	Total/NA	Water	3005A	
310-263235-4	MW-14_23_08	Total/NA	Water	3005A	
310-263235-5	MW-37_23_08	Total/NA	Water	3005A	
310-263235-6	MW-38_23_08	Total/NA	Water	3005A	
310-263235-7	VP-3_23_08	Total/NA	Water	3005A	
310-263235-8	VP-4_23_08	Total/NA	Water	3005A	
MB 310-397693/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-397693/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-262418-A-1-C MS	Matrix Spike	Total/NA	Water	3005A	
310-262418-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-263159-A-15-C DU	Duplicate	Total/NA	Water	3005A	

Prep Batch: 397850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-9	MW-101A_23_08	Total/NA	Water	3005A	
310-263235-10	MW-101B_23_08	Total/NA	Water	3005A	
310-263235-11	MW-106A_23_08	Total/NA	Water	3005A	
310-263235-12	MW-107A_23_08	Total/NA	Water	3005A	
310-263235-13	MW-107B_23_08	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 397850 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-14	FD-1_23_08	Total/NA	Water	3005A	
310-263235-15	FB-1_23_08	Total/NA	Water	3005A	
MB 310-397850/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-397850/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-263421-A-1-B MS	Matrix Spike	Total/NA	Water	3005A	
310-263421-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-263235-9 DU	MW-101A_23_08	Total/NA	Water	3005A	

Prep Batch: 397936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-6	MW-38_23_08	Total/NA	Water	7470A	
310-263235-10	MW-101B_23_08	Total/NA	Water	7470A	
310-263235-15	FB-1_23_08	Total/NA	Water	7470A	
MB 310-397936/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-397936/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-263280-A-5-C MS	Matrix Spike	Total/NA	Water	7470A	
310-263280-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 397969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	6020B	397693
310-263235-2	AW-4_23_08	Total/NA	Water	6020B	397693
310-263235-3	MW-13_23_08	Total/NA	Water	6020B	397693
310-263235-4	MW-14_23_08	Total/NA	Water	6020B	397693
310-263235-5	MW-37_23_08	Total/NA	Water	6020B	397693
310-263235-6	MW-38_23_08	Total/NA	Water	6020B	397693
310-263235-7	VP-3_23_08	Total/NA	Water	6020B	397693
310-263235-8	VP-4_23_08	Total/NA	Water	6020B	397693
MB 310-397693/1-A	Method Blank	Total/NA	Water	6020B	397693
LCS 310-397693/2-A	Lab Control Sample	Total/NA	Water	6020B	397693
310-262418-A-1-C MS	Matrix Spike	Total/NA	Water	6020B	397693
310-262418-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	397693
310-263159-A-15-C DU	Duplicate	Total/NA	Water	6020B	397693

Analysis Batch: 398073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-6	MW-38_23_08	Total/NA	Water	7470A	397936
310-263235-10	MW-101B_23_08	Total/NA	Water	7470A	397936
310-263235-15	FB-1_23_08	Total/NA	Water	7470A	397936
MB 310-397936/1-A	Method Blank	Total/NA	Water	7470A	397936
LCS 310-397936/2-A	Lab Control Sample	Total/NA	Water	7470A	397936
310-263280-A-5-C MS	Matrix Spike	Total/NA	Water	7470A	397936
310-263280-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	397936

Analysis Batch: 398418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-9	MW-101A_23_08	Total/NA	Water	6020B	397850
310-263235-10	MW-101B_23_08	Total/NA	Water	6020B	397850
310-263235-11	MW-106A_23_08	Total/NA	Water	6020B	397850
310-263235-12	MW-107A_23_08	Total/NA	Water	6020B	397850
310-263235-13	MW-107B_23_08	Total/NA	Water	6020B	397850

Metals (Continued)

Analysis Batch: 398418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-14	FD-1_23_08	Total/NA	Water	6020B	397850
310-263235-15	FB-1_23_08	Total/NA	Water	6020B	397850
MB 310-397850/1-A	Method Blank	Total/NA	Water	6020B	397850
LCS 310-397850/2-A	Lab Control Sample	Total/NA	Water	6020B	397850
310-263421-A-1-B MS	Matrix Spike	Total/NA	Water	6020B	397850
310-263421-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	397850
310-263235-9 DU	MW-101A_23_08	Total/NA	Water	6020B	397850

Analysis Batch: 398627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-397850/1-A	Method Blank	Total/NA	Water	6020B	397850
LCS 310-397850/2-A	Lab Control Sample	Total/NA	Water	6020B	397850
310-263421-A-1-B MS	Matrix Spike	Total/NA	Water	6020B	397850
310-263421-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	397850

General Chemistry

Analysis Batch: 397671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-1	AW-2_23_08	Total/NA	Water	I-3765-85	
310-263235-2	AW-4_23_08	Total/NA	Water	I-3765-85	
310-263235-3	MW-13_23_08	Total/NA	Water	I-3765-85	
310-263235-4	MW-14_23_08	Total/NA	Water	I-3765-85	
310-263235-5	MW-37_23_08	Total/NA	Water	I-3765-85	
310-263235-6	MW-38_23_08	Total/NA	Water	I-3765-85	
310-263235-7	VP-3_23_08	Total/NA	Water	I-3765-85	
310-263235-8	VP-4_23_08	Total/NA	Water	I-3765-85	
310-263235-9	MW-101A_23_08	Total/NA	Water	I-3765-85	
310-263235-10	MW-101B_23_08	Total/NA	Water	I-3765-85	
310-263235-11	MW-106A_23_08	Total/NA	Water	I-3765-85	
310-263235-12	MW-107A_23_08	Total/NA	Water	I-3765-85	
310-263235-13	MW-107B_23_08	Total/NA	Water	I-3765-85	
MB 310-397671/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-397671/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-263235-3 DU	MW-13_23_08	Total/NA	Water	I-3765-85	
310-263235-4 DU	MW-14_23_08	Total/NA	Water	I-3765-85	

Analysis Batch: 397756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263235-14	FD-1_23_08	Total/NA	Water	I-3765-85	
310-263235-15	FB-1_23_08	Total/NA	Water	I-3765-85	
MB 310-397756/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-397756/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-263252-C-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Client Sample ID: AW-2_23_08
Lab Sample ID: 310-263235-1

Date Collected: 08/22/23 13:35
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397811	FE5V	EET CF	08/26/23 06:05
Total/NA	Analysis	8260D		1	397921	FE5V	EET CF	08/28/23 12:40
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 16:03
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 16:35
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: AW-4_23_08
Lab Sample ID: 310-263235-2

Date Collected: 08/22/23 14:50
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397811	FE5V	EET CF	08/26/23 06:28
Total/NA	Analysis	8260D		1	397921	FE5V	EET CF	08/28/23 13:02
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 16:30
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 16:40
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-13_23_08
Lab Sample ID: 310-263235-3

Date Collected: 08/22/23 09:15
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397811	FE5V	EET CF	08/26/23 06:50
Total/NA	Analysis	8260D		1	397921	FE5V	EET CF	08/28/23 13:25
Total/NA	Prep	8151A			729670	DAK	EET CHI	08/28/23 08:53
Total/NA	Analysis	8151A		1	729832	SS	EET CHI	08/29/23 11:26
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 16:42
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-14_23_08
Lab Sample ID: 310-263235-4

Date Collected: 08/22/23 10:20
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397811	FE5V	EET CF	08/26/23 07:13
Total/NA	Analysis	8260D		1	397921	FE5V	EET CF	08/28/23 13:47
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 16:53
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-37_23_08

Lab Sample ID: 310-263235-5

Date Collected: 08/21/23 15:45

Matrix: Water

Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 13:36
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 14:16
Total/NA	Prep	3510C			397585	Y6AF	EET CF	08/24/23 06:14
Total/NA	Analysis	8081B		1	398519	BW2O	EET CF	09/02/23 21:36
Total/NA	Prep	8151A			729670	DAK	EET CHI	08/28/23 08:53
Total/NA	Analysis	8151A		1	729832	SS	EET CHI	08/29/23 11:43
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 16:55
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-38_23_08

Lab Sample ID: 310-263235-6

Date Collected: 08/21/23 15:10

Matrix: Water

Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 13:58
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 16:57
Total/NA	Prep	8151A			729670	DAK	EET CHI	08/28/23 08:53
Total/NA	Analysis	8151A		1	729832	SS	EET CHI	08/29/23 12:18
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 16:57
Total/NA	Prep	7470A			397936	NFT2	EET CF	08/28/23 11:25
Total/NA	Analysis	7470A		1	398073	NFT2	EET CF	08/29/23 12:05
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: VP-3_23_08

Lab Sample ID: 310-263235-7

Date Collected: 08/22/23 11:30

Matrix: Water

Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 14:21
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 17:23
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 17:00
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: VP-4_23_08

Lab Sample ID: 310-263235-8

Date Collected: 08/22/23 14:40

Matrix: Water

Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 14:44

Client Sample ID: VP-4_23_08
Lab Sample ID: 310-263235-8

Date Collected: 08/22/23 14:40
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 17:50
Total/NA	Prep	3510C			397585	Y6AF	EET CF	08/24/23 06:14
Total/NA	Analysis	8081B		1	398519	BW2O	EET CF	09/02/23 21:52
Total/NA	Prep	3005A			397693	QTZ5	EET CF	08/25/23 09:30
Total/NA	Analysis	6020B		1	397969	DHM5	EET CF	08/28/23 17:02
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-101A_23_08
Lab Sample ID: 310-263235-9

Date Collected: 08/21/23 13:45
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 15:06
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 14:43
Total/NA	Prep	3510C			397585	Y6AF	EET CF	08/24/23 06:14
Total/NA	Analysis	8081B		1	398519	BW2O	EET CF	09/02/23 22:09
Total/NA	Prep	8151A			729670	DAK	EET CHI	08/28/23 08:53
Total/NA	Analysis	8151A		1	729832	SS	EET CHI	08/29/23 12:36
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:11
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-101B_23_08
Lab Sample ID: 310-263235-10

Date Collected: 08/21/23 14:40
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 15:29
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 18:16
Total/NA	Prep	8151A			729670	DAK	EET CHI	08/28/23 08:53
Total/NA	Analysis	8151A		1	729832	SS	EET CHI	08/29/23 12:53
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:15
Total/NA	Prep	7470A			397936	NFT2	EET CF	08/28/23 11:25
Total/NA	Analysis	7470A		1	398073	NFT2	EET CF	08/29/23 12:08
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-106A_23_08
Lab Sample ID: 310-263235-11

Date Collected: 08/22/23 14:05
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 15:51
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:17
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-107A_23_08
Lab Sample ID: 310-263235-12

Date Collected: 08/22/23 09:30
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 16:14
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:19
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: MW-107B_23_08
Lab Sample ID: 310-263235-13

Date Collected: 08/22/23 11:00
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 16:37
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:22
Total/NA	Analysis	I-3765-85		1	397671	DGU1	EET CF	08/24/23 12:30

Client Sample ID: FD-1_23_08
Lab Sample ID: 310-263235-14

Date Collected: 08/22/23 00:00
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 16:59
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:33
Total/NA	Analysis	I-3765-85		1	397756	DGU1	EET CF	08/25/23 09:15

Client Sample ID: FB-1_23_08
Lab Sample ID: 310-263235-15

Date Collected: 08/22/23 11:15
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 12:51
Total/NA	Prep	3510C			397584	Y6AF	EET CF	08/24/23 06:09
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 15:10
Total/NA	Prep	3510C			397585	Y6AF	EET CF	08/24/23 06:14
Total/NA	Analysis	8081B		1	398519	BW2O	EET CF	09/02/23 22:25

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-1_23_08
Lab Sample ID: 310-263235-15
Date Collected: 08/22/23 11:15
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8151A			729670	DAK	EET CHI	08/28/23 08:53
Total/NA	Analysis	8151A		1	729832	SS	EET CHI	08/29/23 13:11
Total/NA	Prep	3005A			397850	QTZ5	EET CF	08/28/23 09:35
Total/NA	Analysis	6020B		1	398418	DHM5	EET CF	08/31/23 19:35
Total/NA	Prep	7470A			397936	NFT2	EET CF	08/28/23 11:25
Total/NA	Analysis	7470A		1	398073	NFT2	EET CF	08/29/23 12:10
Total/NA	Analysis	I-3765-85		1	397756	DGU1	EET CF	08/25/23 09:15

Client Sample ID: TB-1_23_08
Lab Sample ID: 310-263235-16
Date Collected: 08/22/23 00:00
Matrix: Water
Date Received: 08/23/23 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397813	FE5V	EET CF	08/26/23 13:13

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

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

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

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263235-1
Project/Site: CRLCSWA_1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
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	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

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310-263235 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CR | STATE: IA | Project:

Receipt Information

Date/Time Received: DATE: 6-23-23 | TIME: 1615 | 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 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: P | 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): 3.7 | Corrected Temp (°C): 3.7

• **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

MW-37, 38

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY CR | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 8-23-23 | TIME 1615 | Received By: CE

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 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: P | 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): 3.1 | Corrected Temp (°C): 3.1

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

MW-14, 101A, 101B

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY CR | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 6-23-23 | TIME 1615 | 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 # 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: P | 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): 2.1 | Corrected Temp (°C): 2.1

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

AW 4, FB 1, MW 107B

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Eath

City/State: CITY CR | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 6-23-23 | TIME 1615 | 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 # 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? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: P | 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): 3.5 | Corrected Temp (°C): 3.5

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY CR | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 6-23-23 | TIME 1615 | 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 # 5 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? ↓

MW-106A-23-08, MW107A_23-08, FD-1_23-08

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: P | 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

Chain of Custody Record

603756

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Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: G. Wilming / H. Dubbs	Site Contact: —	Date: 8/23/23	COC No: —
Company Name: Foth I+E	Tel/Email: gwilming@foth.com	Lab Contact: Carner	Carrier: Eurofins	1 of 2 COCs
Address: 411 6th Ave SE	Analysis Turnaround Time			Sampler:
City/State/Zip: Cedar Rapids, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 319-365-9965	TAT if different from Below _____			Walk-in Client:
Fax: 319-365-9681	☐ 2 weeks			Lab Sampling
Project Name: CRLCSWA 1	☐ 1 week			
Site: CRLCSWA	☐ 2 days			Job / SDG No
P O #: —	☐ 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)														Sample Specific Notes
AW-2_23_08	8/22/23	13:35	G	H_2O	7			See	Attached												
AW-4_23_08	8/22	14:50			7				Parameter												
MW-13_23_08	8/22	09:15			7				Sheets												
MW-14_23_08	8/22	10:20			5																
MW-37_23_08	8/21	15:45			11																
MW-38_23_08	8/21	15:10			9																
VP-3_23_08	8/22	11:30			7																
VP-4_23_08	8/22	14:40			9																
MW-101A_23_08	8/21	13:45			11																
MW-101B_23_08	8/21	14:40			9																
MW-106A_23_08	8/22	14:05			5																
MW-107A_23_08	8/22	09:30			5																

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
	O.A. Tedt	8/23/23 1230			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by: CC	Company: 8-23-23	Date/Time 1615

9/14/2023

Chain of Custody Record

603757 eurofins | Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: G.Wilming/H.Dubbs	Site Contact: —	Date: 8/23/23	COC No: —
Company Name: Fox I+E	Tel/Email: gwilming@foxh.com	Lab Contact: CONNER	Carrier: Eurofins	2 of 2 COCs
Address: 411 6th Ave SE	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS			Sampler:
City/State/Zip: CEDAR RAPIDS, IA 52401	TAT if different from Below _____			For Lab Use Only:
Phone: 319-365-9565	☐ 2 weeks			Walk-in Client:
Fax: 319-365-9681	☐ 1 week			Lab Sampling:
Project Name: CRLCSWA #1	☐ 2 days			Job / SDG No:
Site: CRLCSWA #1	☐ 1 day			
P O #				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes
MW-107B-23_08	8/22/23	11:00	G	H2O	5			SEE ATTACHED Sheets
FD-1_23_08	8/22	—	↓	↓	5			
FB-1_23_08	8/22	11:15	↓	↓	11			
TB-1_23_08	—	—		↓	3			

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
	O.A. TECH	8/23/23 12:30			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by: CC	Company: 8-23-23 1615	Date/Time

9/11/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
1	AW-1_23_08	AW-1	WG	G											X	X			X															
2	AW-2_23_08	AW-2	WG	G											X	X			X															
3	AW-3_23_08	AW-3	WG	G											X	X			X									X				X		
4	AW-4_23_08	AW-4	WG	G											X	X			X															
5	AW-5_23_08	AW-5	WG	G											X	X							X											
6	AW-6_23_08	AW-6	WG	G											X	X			X				X									X		
7	CRL-9_23_08	CRL-9	WG	G											X	X	X		X													X		
8	MW-11_23_08	MW-11	WG	G											X	X			X													X		
9	MW-12_23_08	MW-12	WG	G											X	X	X											X				X		
10	MW-13_23_08	MW-13	WG	G											X	X	X						X											
11	MW-14_23_08	MW-14	WG	G											X	X																		
12	MW-15_23_08	MW-15	WG	G											X	X			X															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed:

8/9/2023 3:01:30

9/11/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 2 of 5 **COC Number:** 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4' DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	←	
13	MW-16_23_08	MW-16	WG	G											X	X	X						X									X		
14	MW-17_23_08	MW-17	WG	G											X	X			X				X											
15	MW-18_23_08	MW-18	WG	G											X	X			X												X			
16	MW-19_23_08	MW-19	WG	G											X	X			X															
17	MW-20_23_08	MW-20	WG	G											X	X																X		
18	MW-21_23_08	MW-21	WG	G											X	X							X		X				X			X		
19	MW-22_23_08	MW-22	WG	G											X	X		X	X				X									X		
20	MW-23_23_08	MW-23	WG	G											X	X																X		
21	MW-24_23_08	MW-24	WG	G											X	X	X		X					X								X		
22	MW-25_23_08	MW-25	WG	G											X	X			X													X		
23	MW-26_23_08	MW-26	WG	G											X	X			X							X					X	X		
24	MW-28_23_08	MW-28	WG	G											X	X					X													

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed

8/9/2023

9/11/2023

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	
25	MW-30_23_08	MW-30	WG	G											X	X			X											X	
26	MW-31_23_08	MW-31	WG	G											X	X															
27	MW-32_23_08	MW-32	WG	G											X	X			X				X							X	
28	MW-33_23_08	MW-33	WG	G											X	X			X											X	
29	MW-34_23_08	MW-34	WG	G											X	X	X		X											X	
30	MW-35_23_08	MW-35	WG	G											X	X	X													X	
31	MW-36_23_08	MW-36	WG	G											X	X			X											X	
32	MW-37_23_08	MW-37	WG	G											X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
33	MW-38_23_08	MW-38	WG	G											X	X	X	X	X				X						X	X	
34	VP-3_23_08	VP-3	WG	G											X	X			X	X											
35	VP-4_23_08	VP-4	WG	G											X	X			X										X		
36	MW-101A_23_08	MW-101A	WG	G											X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER

DATE Signed:

9/11/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 4 **of** 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Total Arsenic	REMARKS / Lab ID
															N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	← Filtered (Y/N)
37	MW-101B_23_08	MW-101B	WG	G											X	X	X	X	X				X								X	X		
38	MW-102B_23_08	MW-102B	WG	G											X	X																		
39	MW-104B_23_08	MW-104B	WG	G												X																	X	
40	MW-105A_23_08	MW-105A	WG	G											X	X																		
41	MW-105B_23_08	MW-105B	WG	G											X	X																		
42	MW-106A_23_08	MW-106A	WG	G											X	X																		
43	MW-107A_23_08	MW-107A	WG	G											X	X																		
44	MW-107B_23_08	MW-107B	WG	G											X	X																		
45	MW-108B_23_08	MW-108B	WG	G											X	X																		Do Not Analyze Cobalt
46	MW-109A_23_08	MW-109A	WG	G											X	X																		
47	MW-109B_23_08	MW-109B	WG	G											X	X																		
48	FD-1_23_08		WG	G											X	X																		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER

DATE Signed:

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 5 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	App. I VOCs Only	
49	FD-2_23_08		WG	G											X	X																	
50	FD-3_23_08		WG	G											X	X																	
51	FD-4_23_08		WG	G											X	X																	
52	FD-5_23_08		WG	G											X	X																	
53	FB-1_23_08	FB-1	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
54	FB-2_23_08	FB-2	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
55	FB-3_23_08	FB-3	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
56	TB-1_23_08	Trip Blank	WQ	G													X															X	
57	TB-2_23_08	Trip Blank	WQ	G													X															X	
58	TB-3_23_08	Trip Blank	WQ	G													X															X	
59	TB-4_23_08	Trip Blank	WQ	G													X															X	
60	TB-5_23_08	Trip Blank	WQ	G													X															X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed:

9/14/2023

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone 319-277-2401 Fax 319-277-2425

Chain of Custody Record

eurofins

310-263235 COC

Client Information (Sub Contract Lab)	Sampler	Lab PM: Calhoun Conner M	COC No: 310-64658 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 Program - Iowa	Job #: 310-263235-1
Address: 2417 Bond Street	Due Date Requested: 9/11/2023		
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_1	Project #: 31009776		
Site	SSOW#		

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

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 TCLP	Total Number of containers	Special Instructions/Note
			Preservation Code.						
MW-13_23_08 (310-263235-3)	8/22/23	09 15 Central		Water			X	2	
MW-37_23_08 (310-263235-5)	8/21/23	15 45 Central		Water			X	2	
MW-38_23_08 (310-263235-6)	8/21/23	15 10 Central		Water			X	2	
MW-101A_23_08 (310-263235-9)	8/21/23	13 45 Central		Water			X	2	
MW-101B_23_08 (310-263235-10)	8/21/23	14 40 Central		Water			X	2	
FB-1_23_08 (310-263235-15)	8/22/23	11 15 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 *Unconfirmed*	***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) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:			
Relinquished by	Date/Time 8/24/24 12:20	Company	Received by Stephanie Hemmady 8/25/23 0950 EEA	Date/Time	Company	
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 1.4-0.3, 0.8-0.5

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-263235-1

Login Number: 263235

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Calhoun, Conner M

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: Foth Infrastructure & Environment, LLC

Job Number: 310-263235-1

Login Number: 263235
List Number: 2
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago
List Creation: 08/25/23 07:13 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	0.3,0.5
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

Generated 9/20/2023 10:47:33 AM

JOB DESCRIPTION

CRLCSWA_1

JOB NUMBER

310-263470-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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9/20/2023 10:47:33 AM

Authorized for release by
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Job ID: 310-263470-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-263470-1

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 8/25/2023 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.2°C, 2.9°C and 4.0°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-397921 recovered outside control limits for 2-Hexanone (-21.9%D). The LCS associated with this CCV passes CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-397921/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-398038 recovered above the upper control limit for Vinyl chloride (23.9%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-398038/4).

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

GC/MS Semi VOA
Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-397915.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: Surrogate recovery for the following sample was outside of acceptance limits due to B/N only extraction: FB-2_23_08 (310-263470-12). Only the B/N analytes will be reported.

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

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

Pesticides
Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-397899.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

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

General Chemistry

Job ID: 310-263470-1 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

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

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-263470-1	AW-3_23_08	Water	08/23/23 11:35	08/25/23 10:10
310-263470-2	MW- 11_23_08	Water	08/24/23 08:55	08/25/23 10:10
310-263470-3	MW-12_23_08	Water	08/24/23 09:30	08/25/23 10:10
310-263470-4	MW-15_23_08	Water	08/23/23 09:55	08/25/23 10:10
310-263470-5	MW-16_23_08	Water	08/23/23 10:25	08/25/23 10:10
310-263470-6	MW-34_23_08	Water	08/24/23 10:20	08/25/23 10:10
310-263470-7	MW-105A_23_08	Water	08/23/23 09:20	08/25/23 10:10
310-263470-8	MW-105B_23_08	Water	08/23/23 10:10	08/25/23 10:10
310-263470-9	MW-109A_23_08	Water	08/24/23 09:05	08/25/23 10:10
310-263470-10	MW-109B_23_08	Water	08/24/23 10:30	08/25/23 10:10
310-263470-11	FD-2_23_08	Water	08/23/23 00:00	08/25/23 10:10
310-263470-12	FB-2_23_08	Water	08/24/23 10:40	08/25/23 10:10
310-263470-13	TB-2_23_08	Water	08/24/23 00:00	08/25/23 10:10

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: AW-3_23_08 — Lab Sample ID: 310-263470-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00513		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0619		0.00200	0.000640	mg/L	1		6020B	Total/NA
Zinc	0.00861	J B	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.00		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW- 11_23_08 — Lab Sample ID: 310-263470-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.857	J	1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.000710	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0445		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000822		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00389	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000390	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.88		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-12_23_08 — Lab Sample ID: 310-263470-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.58		1.00	0.220	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.24		1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	2.23		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.55		1.00	0.210	ug/L	1		8260D	Total/NA
Toluene	0.597	J	1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.156		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.417		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00393		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0682		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00211		0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	31.7		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-15_23_08 — Lab Sample ID: 310-263470-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000546	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0400		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00320		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0104		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.63		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-16_23_08 — Lab Sample ID: 310-263470-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.77		1.00	0.220	ug/L	1		8260D	Total/NA
Benzene	0.534		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	2.02		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.721	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.0775		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0678		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00182		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0452		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000269	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0537	B	0.0200	0.00640	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16_23_08 (Continued) — Lab Sample ID: 310-263470-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	36.7		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-34_23_08 — Lab Sample ID: 310-263470-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.75		1.00	0.220	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	2.17		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	1.56		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	2.41		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	6.03		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.02		1.00	0.270	ug/L	1		8260D	Total/NA
Vinyl chloride	6.35		1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0418		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.373		0.00200	0.000640	mg/L	1		6020B	Total/NA
Chromium	0.00131	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.00377		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0640		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00140	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.00676	J B	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	33.7		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-105A_23_08 — Lab Sample ID: 310-263470-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00142	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0734		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000168	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00445		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00876		0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0134		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00285	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.00		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-105B_23_08 — Lab Sample ID: 310-263470-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.49		1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.000868	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.143		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000100	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00315		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0108		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00122	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	0.750	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-109A_23_08 — Lab Sample ID: 310-263470-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000550	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.196		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000296	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Selenium	0.00340	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.00137	J	0.00500	0.00110	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-109A_23_08 (Continued) — Lab Sample ID: 310-263470-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0107	J B	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.13	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-109B_23_08 — Lab Sample ID: 310-263470-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.897	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.856	J	1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	6.68		1.00	0.400	ug/L	1		8260D	Total/NA
Vinyl chloride	0.687	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0192		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.747		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0169		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0347		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00342		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0152	J B	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.3		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-2_23_08 — Lab Sample ID: 310-263470-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00149	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0752		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000170	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00452		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00908		0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0129		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00313	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.00112	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0204	B	0.0200	0.00640	mg/L	1		6020B	Total/NA

Client Sample ID: FB-2_23_08 — Lab Sample ID: 310-263470-12

No Detections.

Client Sample ID: TB-2_23_08 — Lab Sample ID: 310-263470-13

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: AW-3_23_08
Date Collected: 08/23/23 11:35
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/28/23 17:55	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/28/23 17:55	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/28/23 17:55	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/28/23 17:55	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/28/23 17:55	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/28/23 17:55	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/28/23 17:55	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/28/23 17:55	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/28/23 17:55	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/28/23 17:55	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/28/23 17:55	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/28/23 17:55	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/28/23 17:55	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/28/23 17:55	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 17:55	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 17:55	1
Acetone	<3.10		10.0	3.10	ug/L			08/28/23 17:55	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/28/23 17:55	1
Benzene	<0.220		0.500	0.220	ug/L			08/28/23 17:55	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/28/23 17:55	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/28/23 17:55	1
Bromoform	<0.780		5.00	0.780	ug/L			08/28/23 17:55	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/28/23 17:55	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/28/23 17:55	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/28/23 17:55	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/28/23 17:55	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/28/23 17:55	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/28/23 17:55	1
Chloroform	<1.30		3.00	1.30	ug/L			08/28/23 17:55	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/28/23 17:55	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/28/23 17:55	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/28/23 17:55	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/28/23 17:55	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/28/23 17:55	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/28/23 17:55	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/28/23 17:55	1
Styrene	<0.370		1.00	0.370	ug/L			08/28/23 17:55	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/28/23 17:55	1
Toluene	<0.430		1.00	0.430	ug/L			08/28/23 17:55	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/28/23 17:55	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/28/23 17:55	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/28/23 17:55	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/28/23 17:55	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/28/23 17:55	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/28/23 17:55	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/28/23 17:55	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/28/23 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*08/28/23 17:55*	*1*

Client Sample ID: AW-3_23_08
Lab Sample ID: 310-263470-1
Date Collected: 08/23/23 11:35
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/28/23 17:55*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/28/23 17:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.19		9.43	5.19	ug/L		08/28/23 10:00	08/31/23 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*96*		*45 - 129*	*08/28/23 10:00*	*08/31/23 18:09*	*1*
2-Fluorobiphenyl (Surr)	*68*		*39 - 118*	*08/28/23 10:00*	*08/31/23 18:09*	*1*
Terphenyl-d14 (Surr)	*37*		*12 - 144*	*08/28/23 10:00*	*08/31/23 18:09*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	<0.0314		0.0744	0.0314	ug/L		08/28/23 09:05	09/06/23 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*10 - 136*	*08/28/23 09:05*	*09/06/23 18:43*	*1*
Tetrachloro-m-xylene	*81*		*10 - 130*	*08/28/23 09:05*	*09/06/23 18:43*	*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		08/29/23 09:30	09/14/23 19:17	1
Arsenic	**0.00513**		0.00200	0.000530	mg/L		08/29/23 09:30	09/14/23 19:17	1
Barium	**0.0619**		0.00200	0.000640	mg/L		08/29/23 09:30	09/14/23 19:17	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/14/23 19:17	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/14/23 19:17	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/14/23 19:17	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/29/23 09:30	09/14/23 19:17	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/14/23 19:17	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/14/23 19:17	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/29/23 09:30	09/14/23 19:17	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/14/23 19:17	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/14/23 19:17	1
Thallium	<0.000260	F1	0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 18:41	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/14/23 19:17	1
Zinc	**0.00861**	**J B**	0.0200	0.00640	mg/L		08/29/23 09:30	09/14/23 19:17	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/29/23 09:30	09/14/23 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.00**		5.00	1.70	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW- 11_23_08
Date Collected: 08/24/23 08:55
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/28/23 18:18	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/28/23 18:18	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/28/23 18:18	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/28/23 18:18	1
1,1-Dichloroethane	**0.857**	**J**	1.00	0.220	ug/L			08/28/23 18:18	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/28/23 18:18	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/28/23 18:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/28/23 18:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/28/23 18:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/28/23 18:18	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/28/23 18:18	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/28/23 18:18	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/28/23 18:18	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/28/23 18:18	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 18:18	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 18:18	1
Acetone	<3.10		10.0	3.10	ug/L			08/28/23 18:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/28/23 18:18	1
Benzene	<0.220		0.500	0.220	ug/L			08/28/23 18:18	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/28/23 18:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/28/23 18:18	1
Bromoform	<0.780		5.00	0.780	ug/L			08/28/23 18:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/28/23 18:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/28/23 18:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/28/23 18:18	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/28/23 18:18	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/28/23 18:18	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/28/23 18:18	1
Chloroform	<1.30		3.00	1.30	ug/L			08/28/23 18:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/28/23 18:18	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/28/23 18:18	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/28/23 18:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/28/23 18:18	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/28/23 18:18	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/28/23 18:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/28/23 18:18	1
Styrene	<0.370		1.00	0.370	ug/L			08/28/23 18:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/28/23 18:18	1
Toluene	<0.430		1.00	0.430	ug/L			08/28/23 18:18	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/28/23 18:18	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/28/23 18:18	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/28/23 18:18	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/28/23 18:18	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/28/23 18:18	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/28/23 18:18	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/28/23 18:18	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/28/23 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*08/28/23 18:18*	*1*

Client Sample ID: MW- 11_23_08
Lab Sample ID: 310-263470-2
Date Collected: 08/24/23 08:55
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/28/23 18:18*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/23 18:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.19		9.43	5.19	ug/L		08/28/23 10:00	08/31/23 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*45 - 129*	*08/28/23 10:00*	*08/31/23 18:36*	*1*
2-Fluorobiphenyl (Surr)	*65*		*39 - 118*	*08/28/23 10:00*	*08/31/23 18:36*	*1*
Terphenyl-d14 (Surr)	*36*		*12 - 144*	*08/28/23 10:00*	*08/31/23 18:36*	*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		08/29/23 09:30	09/14/23 19:38	1
Arsenic	**0.000710**	**J**	0.00200	0.000530	mg/L		08/29/23 09:30	09/14/23 19:38	1
Barium	**0.0445**		0.00200	0.000640	mg/L		08/29/23 09:30	09/14/23 19:38	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/14/23 19:38	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/14/23 19:38	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/14/23 19:38	1
Cobalt	**0.000822**		0.000500	0.000170	mg/L		08/29/23 09:30	09/14/23 19:38	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/14/23 19:38	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/14/23 19:38	1
Nickel	**0.00389**	**J**	0.00500	0.00190	mg/L		08/29/23 09:30	09/14/23 19:38	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/14/23 19:38	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/14/23 19:38	1
Thallium	**0.000390**	**J**	0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 18:50	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/14/23 19:38	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/29/23 09:30	09/14/23 19:38	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/29/23 09:30	09/14/23 19:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.88**		1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-12_23_08
Lab Sample ID: 310-263470-3
Date Collected: 08/24/23 09:30
Matrix: Water
Date Received: 08/25/23 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 19:58	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 19:58	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 19:58	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 19:58	1
1,1-Dichloroethane	**3.58**		1.00	0.220	ug/L			08/29/23 19:58	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 19:58	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 19:58	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 19:58	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 19:58	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 19:58	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 19:58	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 19:58	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/29/23 19:58	1
1,4-Dichlorobenzene	**1.24**		1.00	0.230	ug/L			08/29/23 19:58	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 19:58	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 19:58	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 19:58	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 19:58	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 19:58	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 19:58	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 19:58	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 19:58	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 19:58	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 19:58	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 19:58	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 19:58	1
Chlorobenzene	**2.23**		1.00	0.400	ug/L			08/29/23 19:58	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 19:58	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 19:58	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 19:58	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 19:58	1
cis-1,2-Dichloroethene	**3.55**		1.00	0.210	ug/L			08/29/23 19:58	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 19:58	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 19:58	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 19:58	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 19:58	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 19:58	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 19:58	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 19:58	1
Toluene	**0.597**	**J**	1.00	0.430	ug/L			08/29/23 19:58	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 19:58	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 19:58	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 19:58	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 19:58	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 19:58	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 19:58	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 19:58	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 19:58	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-12_23_08
Lab Sample ID: 310-263470-3
Date Collected: 08/24/23 09:30
Matrix: Water
Date Received: 08/25/23 10:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*08/29/23 19:58*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/29/23 19:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/23 19:58*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0411		0.0711	0.0411	ug/L		08/28/23 09:05	09/06/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*10 - 136*	*08/28/23 09:05*	*09/06/23 18:56*	*1*
Tetrachloro-m-xylene	*79*		*10 - 130*	*08/28/23 09:05*	*09/06/23 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		08/29/23 09:30	09/15/23 18:52	1
Arsenic	**0.156**		0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 18:52	1
Barium	**0.417**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 18:52	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 18:52	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 18:52	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 18:52	1
Cobalt	**0.00393**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 18:52	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 18:52	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 18:52	1
Nickel	**0.0682**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 18:52	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 18:52	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:01	1
Thallium	**0.00211**		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 18:52	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 18:52	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 18:52	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/29/23 09:30	09/15/23 18:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**31.7**		5.00	1.70	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW-15_23_08
Date Collected: 08/23/23 09:55
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 20:21	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 20:21	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 20:21	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 20:21	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 20:21	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 20:21	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 20:21	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 20:21	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 20:21	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 20:21	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 20:21	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 20:21	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 20:21	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 20:21	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 20:21	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 20:21	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 20:21	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 20:21	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 20:21	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 20:21	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 20:21	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 20:21	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 20:21	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 20:21	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 20:21	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 20:21	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 20:21	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 20:21	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 20:21	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 20:21	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 20:21	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 20:21	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 20:21	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 20:21	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 20:21	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 20:21	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 20:21	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 20:21	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 20:21	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 20:21	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 20:21	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 20:21	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 20:21	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 20:21	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 20:21	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 20:21	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/29/23 20:21*	*1*

Client Sample ID: MW-15_23_08
Lab Sample ID: 310-263470-4
Date Collected: 08/23/23 09:55
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/29/23 20:21*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/23 20:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<6.25		11.4	6.25	ug/L		08/28/23 10:00	08/31/23 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*95*		*45 - 129*	*08/28/23 10:00*	*08/31/23 19:03*	*1*
2-Fluorobiphenyl (Surr)	*68*		*39 - 118*	*08/28/23 10:00*	*08/31/23 19:03*	*1*
Terphenyl-d14 (Surr)	*38*		*12 - 144*	*08/28/23 10:00*	*08/31/23 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		08/29/23 09:30	09/15/23 19:03	1
Arsenic	**0.000546**	**J**	0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:03	1
Barium	**0.0400**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:03	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:03	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:03	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:03	1
Cobalt	**0.00320**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:03	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:03	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:03	1
Nickel	**0.0104**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:03	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:03	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:03	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:03	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:03	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.63**		1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW-16_23_08
Date Collected: 08/23/23 10:25
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 20:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 20:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 20:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 20:43	1
1,1-Dichloroethane	**1.77**		1.00	0.220	ug/L			08/29/23 20:43	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 20:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 20:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 20:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 20:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 20:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 20:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 20:43	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/29/23 20:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 20:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 20:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 20:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 20:43	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 20:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 20:43	1
Benzene	**0.534**		0.500	0.220	ug/L			08/29/23 20:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 20:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 20:43	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 20:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 20:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 20:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 20:43	1
Chlorobenzene	**2.02**		1.00	0.400	ug/L			08/29/23 20:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 20:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 20:43	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 20:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 20:43	1
cis-1,2-Dichloroethene	**0.721**	**J**	1.00	0.210	ug/L			08/29/23 20:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 20:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 20:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 20:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 20:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 20:43	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 20:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 20:43	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 20:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 20:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 20:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 20:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 20:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 20:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 20:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 20:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 20:43	1

Client Sample ID: MW-16_23_08
Lab Sample ID: 310-263470-5
Date Collected: 08/23/23 10:25
Matrix: Water
Date Received: 08/25/23 10:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*08/29/23 20:43*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/29/23 20:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/29/23 20:43*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0969		1.16	0.0969	ug/L		08/30/23 08:47	09/05/23 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*80*		*25 - 130*	*08/30/23 08:47*	*09/05/23 16:37*	*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		08/29/23 09:30	09/15/23 19:05	1
Arsenic	**0.0775**		0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:05	1
Barium	**0.0678**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:05	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:05	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:05	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:05	1
Cobalt	**0.00182**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:05	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:05	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:05	1
Nickel	**0.0452**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:05	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:05	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:05	1
Thallium	**0.000269**	**J**	0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:05	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:05	1
Zinc	**0.0537**	**B**	0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**36.7**		5.00	1.70	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-34_23_08
Lab Sample ID: 310-263470-6
Date Collected: 08/24/23 10:20
Matrix: Water
Date Received: 08/25/23 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 21:06	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 21:06	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 21:06	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 21:06	1
1,1-Dichloroethane	**4.75**		1.00	0.220	ug/L			08/29/23 21:06	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 21:06	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 21:06	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 21:06	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 21:06	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 21:06	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 21:06	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 21:06	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/29/23 21:06	1
1,4-Dichlorobenzene	**2.17**		1.00	0.230	ug/L			08/29/23 21:06	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 21:06	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 21:06	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 21:06	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 21:06	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 21:06	1
Benzene	**1.56**		0.500	0.220	ug/L			08/29/23 21:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 21:06	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 21:06	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 21:06	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 21:06	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 21:06	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 21:06	1
Chlorobenzene	**2.41**		1.00	0.400	ug/L			08/29/23 21:06	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 21:06	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 21:06	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 21:06	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 21:06	1
cis-1,2-Dichloroethene	**6.03**		1.00	0.210	ug/L			08/29/23 21:06	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 21:06	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 21:06	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 21:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 21:06	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 21:06	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 21:06	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 21:06	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 21:06	1
trans-1,2-Dichloroethene	**1.02**		1.00	0.270	ug/L			08/29/23 21:06	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 21:06	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 21:06	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 21:06	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 21:06	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 21:06	1
Vinyl chloride	**6.35**		1.00	0.180	ug/L			08/29/23 21:06	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 21:06	1

Client Sample ID: MW-34_23_08
Lab Sample ID: 310-263470-6
Date Collected: 08/24/23 10:20
Matrix: Water
Date Received: 08/25/23 10:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*08/29/23 21:06*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/29/23 21:06*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*08/29/23 21:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/28/23 10:00	09/01/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*45 - 129*	*08/28/23 10:00*	*09/01/23 19:09*	*1*
2-Fluorobiphenyl (Surr)	*63*		*39 - 118*	*08/28/23 10:00*	*09/01/23 19:09*	*1*
Terphenyl-d14 (Surr)	*42*		*12 - 144*	*08/28/23 10:00*	*09/01/23 19:09*	*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		08/29/23 09:30	09/15/23 19:07	1
Arsenic	**0.0418**		0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:07	1
Barium	**0.373**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:07	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:07	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:07	1
Chromium	**0.00131**	**J**	0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:07	1
Cobalt	**0.00377**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:07	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:07	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:07	1
Nickel	**0.0640**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:07	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:07	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:07	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:07	1
Vanadium	**0.00140**	**J**	0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:07	1
Zinc	**0.00676**	**J B**	0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:07	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/29/23 09:30	09/15/23 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**33.7**		5.00	1.70	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW-105A_23_08
Date Collected: 08/23/23 09:20
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 21:28	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 21:28	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 21:28	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 21:28	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 21:28	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 21:28	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 21:28	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 21:28	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 21:28	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 21:28	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 21:28	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 21:28	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 21:28	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 21:28	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 21:28	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 21:28	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 21:28	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 21:28	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 21:28	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 21:28	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 21:28	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 21:28	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 21:28	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 21:28	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 21:28	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 21:28	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 21:28	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 21:28	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 21:28	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 21:28	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 21:28	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 21:28	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 21:28	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 21:28	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 21:28	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 21:28	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 21:28	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 21:28	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 21:28	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 21:28	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 21:28	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 21:28	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 21:28	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 21:28	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 21:28	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 21:28	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/29/23 21:28*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-105A_23_08
Lab Sample ID: 310-263470-7
Date Collected: 08/23/23 09:20
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/29/23 21:28*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*08/29/23 21:28*	*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		08/29/23 09:30	09/15/23 19:09	1
Arsenic	**0.00142**	**J**	0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:09	1
Barium	**0.0734**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:09	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:09	1
Cadmium	**0.000168**	**J**	0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:09	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:09	1
Cobalt	**0.00445**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:09	1
Copper	**0.00876**		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:09	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:09	1
Nickel	**0.0134**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:09	1
Selenium	**0.00285**	**J**	0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:09	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:09	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:09	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:09	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.00**		1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW-105B_23_08
Date Collected: 08/23/23 10:10
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 21:51	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 21:51	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 21:51	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 21:51	1
1,1-Dichloroethane	**2.49**		1.00	0.220	ug/L			08/29/23 21:51	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 21:51	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 21:51	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 21:51	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 21:51	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 21:51	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 21:51	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 21:51	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 21:51	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 21:51	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 21:51	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 21:51	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 21:51	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 21:51	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 21:51	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 21:51	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 21:51	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 21:51	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 21:51	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 21:51	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 21:51	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 21:51	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 21:51	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 21:51	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 21:51	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 21:51	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 21:51	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 21:51	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 21:51	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 21:51	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 21:51	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 21:51	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 21:51	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 21:51	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 21:51	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 21:51	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 21:51	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 21:51	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 21:51	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 21:51	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 21:51	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 21:51	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*08/29/23 21:51*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-105B_23_08
Lab Sample ID: 310-263470-8
Date Collected: 08/23/23 10:10
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/29/23 21:51*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/23 21:51*	*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		08/29/23 09:30	09/15/23 19:12	1
Arsenic	**0.000868**	**J**	0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:12	1
Barium	**0.143**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:12	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:12	1
Cadmium	**0.000100**	**J**	0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:12	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:12	1
Cobalt	**0.00315**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:12	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:12	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:12	1
Nickel	**0.0108**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:12	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:12	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:12	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:12	1
Vanadium	**0.00122**	**J**	0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:12	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**0.750**	**J**	1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW-109A_23_08
Date Collected: 08/24/23 09:05
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 22:14	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 22:14	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 22:14	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 22:14	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 22:14	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 22:14	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 22:14	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 22:14	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 22:14	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 22:14	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 22:14	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 22:14	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 22:14	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 22:14	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 22:14	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 22:14	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 22:14	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 22:14	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 22:14	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 22:14	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 22:14	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 22:14	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 22:14	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 22:14	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 22:14	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 22:14	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 22:14	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 22:14	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 22:14	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 22:14	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 22:14	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 22:14	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 22:14	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 22:14	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 22:14	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 22:14	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 22:14	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 22:14	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 22:14	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 22:14	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 22:14	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 22:14	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 22:14	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 22:14	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 22:14	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 22:14	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/29/23 22:14*	*1*

Client Sample ID: MW-109A_23_08
Lab Sample ID: 310-263470-9
Date Collected: 08/24/23 09:05
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/29/23 22:14*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*08/29/23 22:14*	*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		08/29/23 09:30	09/15/23 19:14	1
Arsenic	**0.000550**	**J**	0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:14	1
Barium	**0.196**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:14	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:14	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:14	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:14	1
Cobalt	**0.000296**	**J**	0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:14	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:14	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:14	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:14	1
Selenium	**0.00340**	**J**	0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:14	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:14	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:14	1
Vanadium	**0.00137**	**J**	0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:14	1
Zinc	**0.0107**	**J B**	0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.13**	**J**	1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

Client Sample ID: MW-109B_23_08
Date Collected: 08/24/23 10:30
Date Received: 08/25/23 10:10

Lab Sample ID: 310-263470-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 22:36	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 22:36	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 22:36	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 22:36	1
1,1-Dichloroethane	**0.897**	**J**	1.00	0.220	ug/L			08/29/23 22:36	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 22:36	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 22:36	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 22:36	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 22:36	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 22:36	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 22:36	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 22:36	1
1,4-Dichlorobenzene	**0.856**	**J**	1.00	0.230	ug/L			08/29/23 22:36	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 22:36	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 22:36	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 22:36	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 22:36	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 22:36	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 22:36	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 22:36	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 22:36	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 22:36	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 22:36	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 22:36	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 22:36	1
Chlorobenzene	**6.68**		1.00	0.400	ug/L			08/29/23 22:36	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 22:36	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 22:36	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 22:36	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 22:36	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 22:36	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 22:36	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 22:36	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 22:36	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 22:36	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 22:36	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 22:36	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 22:36	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 22:36	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 22:36	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 22:36	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 22:36	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 22:36	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 22:36	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 22:36	1
Vinyl chloride	**0.687**	**J**	1.00	0.180	ug/L			08/29/23 22:36	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/29/23 22:36*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-109B_23_08
Lab Sample ID: 310-263470-10
Date Collected: 08/24/23 10:30
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/29/23 22:36*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/29/23 22:36*	*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		08/29/23 09:30	09/15/23 19:16	1
Arsenic	**0.0192**		0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:16	1
Barium	**0.747**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:16	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:16	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:16	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:16	1
Cobalt	**0.0169**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:16	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:16	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:16	1
Nickel	**0.0347**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:16	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:16	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:16	1
Thallium	**0.00342**		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:16	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:16	1
Zinc	**0.0152**	**J B**	0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**11.3**		1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-2_23_08
Lab Sample ID: 310-263470-11
Date Collected: 08/23/23 00:00
Matrix: Water
Date Received: 08/25/23 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 22:58	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 22:58	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 22:58	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 22:58	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 22:58	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 22:58	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 22:58	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 22:58	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 22:58	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 22:58	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 22:58	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 22:58	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 22:58	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 22:58	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 22:58	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 22:58	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 22:58	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 22:58	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 22:58	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 22:58	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 22:58	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 22:58	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 22:58	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 22:58	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 22:58	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 22:58	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 22:58	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 22:58	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 22:58	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 22:58	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 22:58	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 22:58	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 22:58	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 22:58	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 22:58	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 22:58	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 22:58	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 22:58	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 22:58	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 22:58	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 22:58	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 22:58	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 22:58	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 22:58	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 22:58	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 22:58	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*08/29/23 22:58*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-2_23_08
Lab Sample ID: 310-263470-11

Date Collected: 08/23/23 00:00
Matrix: Water
Date Received: 08/25/23 10:10

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/29/23 22:58*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/23 22:58*	*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		08/29/23 09:30	09/15/23 19:18	1
Arsenic	**0.00149**	**J**	0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:18	1
Barium	**0.0752**		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:18	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:18	1
Cadmium	**0.000170**	**J**	0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:18	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:18	1
Cobalt	**0.00452**		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:18	1
Copper	**0.00908**		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:18	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:18	1
Nickel	**0.0129**		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:18	1
Selenium	**0.00313**	**J**	0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:18	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:18	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:18	1
Vanadium	**0.00112**	**J**	0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:18	1
Zinc	**0.0204**	**B**	0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-2_23_08
Lab Sample ID: 310-263470-12
Date Collected: 08/24/23 10:40
Matrix: Water
Date Received: 08/25/23 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 18:51	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 18:51	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 18:51	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 18:51	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 18:51	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 18:51	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 18:51	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 18:51	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 18:51	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 18:51	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 18:51	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 18:51	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/29/23 18:51	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 18:51	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 18:51	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 18:51	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 18:51	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 18:51	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 18:51	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 18:51	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 18:51	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 18:51	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 18:51	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 18:51	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 18:51	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 18:51	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 18:51	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 18:51	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 18:51	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 18:51	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 18:51	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 18:51	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 18:51	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 18:51	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 18:51	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 18:51	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 18:51	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 18:51	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 18:51	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 18:51	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 18:51	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 18:51	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 18:51	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 18:51	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 18:51	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 18:51	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 18:51	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 18:51	1

Client Sample ID: FB-2_23_08
Lab Sample ID: 310-263470-12
Date Collected: 08/24/23 10:40
Matrix: Water
Date Received: 08/25/23 10:10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/29/23 18:51*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/29/23 18:51*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/23 18:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.551		10.2	0.551	ug/L		08/28/23 10:00	09/01/23 19:36	1
Bis(2-ethylhexyl) phthalate	<5.61		10.2	5.61	ug/L		08/28/23 10:00	09/01/23 19:36	1
Di-n-butyl phthalate	<5.71		10.2	5.71	ug/L		08/28/23 10:00	09/01/23 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*96*		*45 - 129*	*08/28/23 10:00*	*09/01/23 19:36*	*1*
2-Fluorobiphenyl (Surr)	*67*		*39 - 118*	*08/28/23 10:00*	*09/01/23 19:36*	*1*
Terphenyl-d14 (Surr)	*72*		*12 - 144*	*08/28/23 10:00*	*09/01/23 19:36*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0309		0.0681	0.0309	ug/L		08/28/23 09:05	09/06/23 19:09	1
beta-BHC	<0.0394		0.0681	0.0394	ug/L		08/28/23 09:05	09/06/23 19:09	1
4,4'-DDT	<0.0447		0.0681	0.0447	ug/L		08/28/23 09:05	09/06/23 19:09	1
delta-BHC	<0.0287		0.0681	0.0287	ug/L		08/28/23 09:05	09/06/23 19:09	1
Dieldrin	<0.0277		0.0681	0.0277	ug/L		08/28/23 09:05	09/06/23 19:09	1
Heptachlor	<0.0351		0.0681	0.0351	ug/L		08/28/23 09:05	09/06/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*10 - 136*	*08/28/23 09:05*	*09/06/23 19:09*	*1*
Tetrachloro-m-xylene	*102*		*10 - 130*	*08/28/23 09:05*	*09/06/23 19:09*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.338		1.10	0.338	ug/L		08/30/23 08:47	09/05/23 16:55	1
2,4,5-TP	<0.0918		1.10	0.0918	ug/L		08/30/23 08:47	09/05/23 16:55	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		08/29/23 09:30	09/15/23 19:23	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/29/23 09:30	09/15/23 19:23	1
Barium	<0.000640		0.00200	0.000640	mg/L		08/29/23 09:30	09/15/23 19:23	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/15/23 19:23	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/15/23 19:23	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:23	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/29/23 09:30	09/15/23 19:23	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/15/23 19:23	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/15/23 19:23	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/29/23 09:30	09/15/23 19:23	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/15/23 19:23	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/19/23 09:34	1
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 19:23	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/15/23 19:23	1
Zinc	<0.00640		0.0200	0.00640	mg/L		08/29/23 09:30	09/15/23 19:23	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/29/23 09:30	09/15/23 19:23	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-2_23_08
Lab Sample ID: 310-263470-12
Date Collected: 08/24/23 10:40
Matrix: Water
Date Received: 08/25/23 10:10

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		08/30/23 11:42	08/31/23 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/28/23 20:28	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-2_23_08
Lab Sample ID: 310-263470-13
Date Collected: 08/24/23 00:00
Matrix: Water
Date Received: 08/25/23 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 19:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 19:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 19:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 19:13	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 19:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 19:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 19:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 19:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 19:13	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 19:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 19:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 19:13	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/29/23 19:13	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 19:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 19:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 19:13	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 19:13	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 19:13	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 19:13	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 19:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 19:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 19:13	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 19:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 19:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 19:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 19:13	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 19:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 19:13	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 19:13	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 19:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 19:13	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 19:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 19:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 19:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 19:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 19:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 19:13	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 19:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 19:13	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 19:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 19:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 19:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 19:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 19:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 19:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 19:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 19:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 19:13	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-2_23_08
Lab Sample ID: 310-263470-13
Date Collected: 08/24/23 00:00
Matrix: Water
Date Received: 08/25/23 10:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	93		80 - 128		08/29/23 19:13	1
Toluene-d8 (Surr)	98		80 - 120		08/29/23 19:13	1
4-Bromofluorobenzene (Surr)	103		80 - 120		08/29/23 19:13	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263470-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)
310-263293-C-4 MS	Matrix Spike	98	99	99
310-263293-C-4 MSD	Matrix Spike Duplicate	98	102	97
310-263470-1	AW-3_23_08	98	98	103
310-263470-2	MW- 11_23_08	96	99	104
310-263470-3	MW-12_23_08	96	98	104
310-263470-4	MW-15_23_08	94	99	104
310-263470-5	MW-16_23_08	96	97	103
310-263470-6	MW-34_23_08	96	98	102
310-263470-7	MW-105A_23_08	95	97	105
310-263470-8	MW-105B_23_08	97	97	104
310-263470-9	MW-109A_23_08	95	98	106
310-263470-10	MW-109B_23_08	95	97	103
310-263470-11	FD-2_23_08	94	98	104
310-263470-12	FB-2_23_08	95	99	104
310-263470-13	TB-2_23_08	93	98	103
310-263503-G-2 MS	Matrix Spike	96	100	102
310-263503-G-2 MSD	Matrix Spike Duplicate	99	101	100
LCS 310-397921/6	Lab Control Sample	97	101	97
LCS 310-397921/7	Lab Control Sample	94	99	103
LCS 310-398038/6	Lab Control Sample	96	100	98
LCS 310-398038/7	Lab Control Sample	96	97	103
MB 310-397921/5	Method Blank	95	99	104
MB 310-398038/5	Method Blank	95	98	104

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(45-129)	(39-118)	(12-144)
310-263470-1	AW-3_23_08	96	68	37
310-263470-2	MW- 11_23_08	91	65	36
310-263470-4	MW-15_23_08	95	68	38
310-263470-6	MW-34_23_08	91	63	42
310-263470-12	FB-2_23_08	96	67	72
LCS 310-397915/2-A	Lab Control Sample	78	55	64
LCSD 310-397915/3-A	Lab Control Sample Dup	82	62	67
MB 310-397915/1-A	Method Blank	68	46	56

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

FBP = 2-Fluorobiphenyl (Surr)

TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB2	TCX2								
Lab Sample ID	Client Sample ID	(10-136)	(10-130)								
310-263470-1	AW-3_23_08	81	81								
310-263470-3	MW-12_23_08	76	79								
310-263470-12	FB-2_23_08	89	102								
LCS 310-397899/2-A	Lab Control Sample	80	82								
LCSD 310-397899/3-A	Lab Control Sample Dup	76	70								
MB 310-397899/1-A	Method Blank	86	76								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1									
Lab Sample ID	Client Sample ID	(25-130)									
310-263470-5	MW-16_23_08	80									
LB 500-729643/1-B	Method Blank	81									
LCS 500-730088/2-A	Lab Control Sample	86									
LCSD 500-730088/3-A	Lab Control Sample Dup	87									
MB 500-730088/1-A	Method Blank	79									

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1									
Lab Sample ID	Client Sample ID	(25-130)									
310-263040-A-2-I MS	Matrix Spike	88									

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-397921/5
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/28/23 11:32	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/28/23 11:32	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/28/23 11:32	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/28/23 11:32	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/28/23 11:32	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/28/23 11:32	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/28/23 11:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/28/23 11:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/28/23 11:32	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/28/23 11:32	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/28/23 11:32	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/28/23 11:32	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/28/23 11:32	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/28/23 11:32	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/28/23 11:32	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/28/23 11:32	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/28/23 11:32	1
Acetone	<3.10		10.0	3.10	ug/L			08/28/23 11:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/28/23 11:32	1
Benzene	<0.220		0.500	0.220	ug/L			08/28/23 11:32	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/28/23 11:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/28/23 11:32	1
Bromoform	<0.780		5.00	0.780	ug/L			08/28/23 11:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/28/23 11:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/28/23 11:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/28/23 11:32	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/28/23 11:32	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/28/23 11:32	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/28/23 11:32	1
Chloroform	<1.30		3.00	1.30	ug/L			08/28/23 11:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/28/23 11:32	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/28/23 11:32	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/28/23 11:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/28/23 11:32	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/28/23 11:32	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/28/23 11:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/28/23 11:32	1
Styrene	<0.370		1.00	0.370	ug/L			08/28/23 11:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/28/23 11:32	1
Toluene	<0.430		1.00	0.430	ug/L			08/28/23 11:32	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/28/23 11:32	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/28/23 11:32	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/28/23 11:32	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/28/23 11:32	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/28/23 11:32	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/28/23 11:32	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/28/23 11:32	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/28/23 11:32	1

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

Lab Sample ID: MB 310-397921/5
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		80 - 128		08/28/23 11:32	1
Toluene-d8 (Surr)	99		80 - 120		08/28/23 11:32	1
4-Bromofluorobenzene (Surr)	104		80 - 120		08/28/23 11:32	1

Lab Sample ID: LCS 310-397921/6
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	17.19		ug/L		86	68 - 123
1,1,1-Trichloroethane	20.0	19.28		ug/L		96	71 - 128
1,1,2,2-Tetrachloroethane	20.0	16.92		ug/L		85	64 - 124
1,1,2-Trichloroethane	20.0	17.96		ug/L		90	70 - 124
1,1-Dichloroethane	20.0	19.58		ug/L		98	71 - 123
1,1-Dichloroethene	20.0	19.92		ug/L		100	61 - 129
1,2,3-Trichloropropane	20.0	18.27		ug/L		91	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.64		ug/L		93	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.70		ug/L		89	73 - 125
1,2-Dichlorobenzene	20.0	19.31		ug/L		97	68 - 120
1,2-Dichloroethane	20.0	17.59		ug/L		88	70 - 124
1,2-Dichloropropane	20.0	19.18		ug/L		96	73 - 121
1,3-Dichlorobenzene	20.0	19.56		ug/L		98	67 - 123
1,4-Dichlorobenzene	20.0	19.37		ug/L		97	67 - 120
2-Butanone (MEK)	40.0	29.48		ug/L		74	50 - 150
2-Hexanone	40.0	33.04		ug/L		83	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	31.09		ug/L		78	62 - 130
Acetone	40.0	33.26		ug/L		83	50 - 150
Acrylonitrile	200	171.0		ug/L		85	50 - 150
Benzene	20.0	19.10		ug/L		95	73 - 122
Bromochloromethane	20.0	19.44		ug/L		97	68 - 132
Bromodichloromethane	20.0	18.23		ug/L		91	72 - 121
Bromoform	20.0	15.79		ug/L		79	55 - 129
Carbon disulfide	20.0	19.87		ug/L		99	58 - 131
Carbon tetrachloride	20.0	16.69		ug/L		83	67 - 132
Chlorobenzene	20.0	18.20		ug/L		91	69 - 121
Chlorodibromomethane	20.0	18.01		ug/L		90	69 - 122
Chloroform	20.0	18.62		ug/L		93	72 - 120
cis-1,2-Dichloroethene	20.0	19.18		ug/L		96	74 - 120
cis-1,3-Dichloropropene	20.0	17.99		ug/L		90	71 - 126
Dibromomethane	20.0	16.91		ug/L		85	72 - 123
Ethylbenzene	20.0	18.19		ug/L		91	69 - 122
Iodomethane	20.0	17.10		ug/L		85	10 - 150
Methylene Chloride	20.0	19.83		ug/L		99	50 - 150
Styrene	20.0	18.24		ug/L		91	67 - 125
Tetrachloroethene	20.0	19.60		ug/L		98	69 - 131
Toluene	20.0	19.69		ug/L		98	72 - 121
trans-1,2-Dichloroethene	20.0	19.46		ug/L		97	68 - 125
trans-1,3-Dichloropropene	20.0	17.83		ug/L		89	68 - 124

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

Lab Sample ID: LCS 310-397921/6
Matrix: Water
Analysis Batch: 397921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,4-Dichloro-2-butene	20.0	16.03		ug/L		80	48 - 150
Trichloroethene	20.0	19.49		ug/L		97	73 - 126
Vinyl acetate	40.0	38.15		ug/L		95	50 - 150
Xylenes, Total	40.0	37.73		ug/L		94	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: LCS 310-397921/7
Matrix: Water
Analysis Batch: 397921

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	18.10		ug/L		91	24 - 150
Chloroethane	20.0	16.55		ug/L		83	51 - 137
Chloromethane	20.0	18.18		ug/L		91	37 - 150
Trichlorofluoromethane	20.0	18.08		ug/L		90	56 - 144
Vinyl chloride	20.0	19.46		ug/L		97	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-263293-C-4 MS
Matrix: Water
Analysis Batch: 397921

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.97		ug/L		75	52 - 130
1,1,1-Trichloroethane	<0.190		20.0	15.76		ug/L		79	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	17.41		ug/L		87	51 - 130
1,1,2-Trichloroethane	<0.450		20.0	15.90		ug/L		79	56 - 130
1,1-Dichloroethane	<0.220		20.0	16.66		ug/L		83	53 - 130
1,1-Dichloroethene	<0.560		20.0	15.22		ug/L		76	39 - 130
1,2,3-Trichloropropane	<0.590		20.0	16.88		ug/L		84	50 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.97		ug/L		85	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	16.02		ug/L		80	59 - 130
1,2-Dichlorobenzene	<0.370		20.0	17.10		ug/L		85	53 - 130
1,2-Dichloroethane	<0.390		20.0	16.60		ug/L		83	57 - 130
1,2-Dichloropropane	<0.270		20.0	15.93		ug/L		80	60 - 130
1,3-Dichlorobenzene	<0.300		20.0	17.25		ug/L		86	54 - 130
1,4-Dichlorobenzene	<0.230		20.0	17.22		ug/L		86	53 - 130
2-Butanone (MEK)	<2.10		40.0	27.94		ug/L		70	47 - 150
2-Hexanone	<2.00		40.0	30.42		ug/L		76	45 - 132
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	28.95		ug/L		72	46 - 132

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

Lab Sample ID: 310-263293-C-4 MS
Matrix: Water
Analysis Batch: 397921

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
Acetone	<3.10		40.0	34.31		ug/L		86	35 - 150
Acrylonitrile	<2.20		200	153.9		ug/L		77	50 - 150
Benzene	0.745		20.0	16.40		ug/L		78	47 - 130
Bromochloromethane	<0.540		20.0	17.63		ug/L		88	54 - 132
Bromodichloromethane	<0.390		20.0	16.15		ug/L		81	58 - 130
Bromoform	<0.780		20.0	14.69		ug/L		73	42 - 130
Carbon disulfide	<0.450		20.0	18.05		ug/L		90	39 - 131
Carbon tetrachloride	<0.650		20.0	13.95		ug/L		70	45 - 132
Chlorobenzene	<0.400		20.0	16.16		ug/L		81	54 - 130
Chlorodibromomethane	<0.750		20.0	16.01		ug/L		80	53 - 130
Chloroform	<1.30		20.0	16.13		ug/L		81	55 - 130
cis-1,2-Dichloroethene	<0.210		20.0	16.78		ug/L		84	52 - 130
cis-1,3-Dichloropropene	<0.250		20.0	15.64		ug/L		78	55 - 130
Dibromomethane	<0.330		20.0	15.74		ug/L		79	61 - 130
Ethylbenzene	1.56		20.0	15.72		ug/L		71	48 - 130
Iodomethane	<7.00		20.0	16.72		ug/L		84	10 - 150
Methylene Chloride	<1.70		20.0	17.77		ug/L		89	50 - 150
Styrene	<0.370		20.0	15.80		ug/L		79	46 - 130
Tetrachloroethene	<0.480		20.0	15.95		ug/L		80	42 - 131
Toluene	<0.430		20.0	16.90		ug/L		84	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	16.45		ug/L		82	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	16.06		ug/L		80	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.63		ug/L		78	33 - 150
Trichloroethene	<0.430		20.0	16.19		ug/L		81	55 - 130
Vinyl acetate	<2.50		40.0	29.72		ug/L		74	34 - 150
Xylenes, Total	2.21	J	40.0	32.53		ug/L		76	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-263293-C-4 MSD
Matrix: Water
Analysis Batch: 397921

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.65		ug/L		73	52 - 130	2	20
1,1,1-Trichloroethane	<0.190		20.0	15.64		ug/L		78	49 - 130	1	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	15.52		ug/L		78	51 - 130	11	20
1,1,2-Trichloroethane	<0.450		20.0	16.05		ug/L		80	56 - 130	1	20
1,1-Dichloroethane	<0.220		20.0	16.90		ug/L		84	53 - 130	1	20
1,1-Dichloroethene	<0.560		20.0	16.10		ug/L		81	39 - 130	6	28
1,2,3-Trichloropropane	<0.590		20.0	17.32		ug/L		87	50 - 130	3	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.66		ug/L		83	45 - 150	2	20
1,2-Dibromoethane (EDB)	<0.340		20.0	16.40		ug/L		82	59 - 130	2	20
1,2-Dichlorobenzene	<0.370		20.0	17.32		ug/L		87	53 - 130	1	20
1,2-Dichloroethane	<0.390		20.0	17.64		ug/L		88	57 - 130	6	21

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

Lab Sample ID: 310-263293-C-4 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397921

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloropropane	<0.270		20.0	15.89		ug/L		79	60 - 130	0	31
1,3-Dichlorobenzene	<0.300		20.0	17.34		ug/L		87	54 - 130	1	20
1,4-Dichlorobenzene	<0.230		20.0	17.18		ug/L		86	53 - 130	0	20
2-Butanone (MEK)	<2.10		40.0	29.01		ug/L		73	47 - 150	4	20
2-Hexanone	<2.00		40.0	31.59		ug/L		79	45 - 132	4	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	29.98		ug/L		75	46 - 132	3	20
Acetone	<3.10		40.0	35.28		ug/L		88	35 - 150	3	26
Acrylonitrile	<2.20		200	157.8		ug/L		79	50 - 150	3	21
Benzene	0.745		20.0	16.51		ug/L		79	47 - 130	1	20
Bromochloromethane	<0.540		20.0	17.34		ug/L		87	54 - 132	2	20
Bromodichloromethane	<0.390		20.0	16.40		ug/L		82	58 - 130	2	20
Bromoform	<0.780		20.0	14.61		ug/L		73	42 - 130	1	20
Carbon disulfide	<0.450		20.0	16.41		ug/L		82	39 - 131	10	32
Carbon tetrachloride	<0.650		20.0	13.77		ug/L		69	45 - 132	1	20
Chlorobenzene	<0.400		20.0	15.89		ug/L		79	54 - 130	2	20
Chlorodibromomethane	<0.750		20.0	15.83		ug/L		79	53 - 130	1	20
Chloroform	<1.30		20.0	16.16		ug/L		81	55 - 130	0	20
cis-1,2-Dichloroethene	<0.210		20.0	16.86		ug/L		84	52 - 130	0	20
cis-1,3-Dichloropropene	<0.250		20.0	16.45		ug/L		82	55 - 130	5	20
Dibromomethane	<0.330		20.0	16.00		ug/L		80	61 - 130	2	20
Ethylbenzene	1.56		20.0	15.53		ug/L		70	48 - 130	1	20
Iodomethane	<7.00		20.0	16.79		ug/L		84	10 - 150	0	35
Methylene Chloride	<1.70		20.0	17.89		ug/L		89	50 - 150	1	24
Styrene	<0.370		20.0	15.67		ug/L		78	46 - 130	1	20
Tetrachloroethene	<0.480		20.0	15.95		ug/L		80	42 - 131	0	20
Toluene	<0.430		20.0	16.91		ug/L		85	48 - 130	0	20
trans-1,2-Dichloroethene	<0.270		20.0	16.31		ug/L		82	54 - 130	1	24
trans-1,3-Dichloropropene	<0.560		20.0	16.40		ug/L		82	51 - 130	2	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	13.22		ug/L		66	33 - 150	17	20
Trichloroethene	<0.430		20.0	15.99		ug/L		80	55 - 130	1	20
Vinyl acetate	<2.50		40.0	31.30		ug/L		78	34 - 150	5	27
Xylenes, Total	2.21	J	40.0	32.63		ug/L		76	44 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 310-398038/5
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398038

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			08/29/23 17:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			08/29/23 17:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			08/29/23 17:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			08/29/23 17:43	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			08/29/23 17:43	1

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

Lab Sample ID: MB 310-398038/5
Matrix: Water
Analysis Batch: 398038

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			08/29/23 17:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			08/29/23 17:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			08/29/23 17:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			08/29/23 17:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			08/29/23 17:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			08/29/23 17:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			08/29/23 17:43	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			08/29/23 17:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			08/29/23 17:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			08/29/23 17:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			08/29/23 17:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			08/29/23 17:43	1
Acetone	<3.10		10.0	3.10	ug/L			08/29/23 17:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			08/29/23 17:43	1
Benzene	<0.220		0.500	0.220	ug/L			08/29/23 17:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			08/29/23 17:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			08/29/23 17:43	1
Bromoform	<0.780		5.00	0.780	ug/L			08/29/23 17:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			08/29/23 17:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			08/29/23 17:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			08/29/23 17:43	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			08/29/23 17:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			08/29/23 17:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			08/29/23 17:43	1
Chloroform	<1.30		3.00	1.30	ug/L			08/29/23 17:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			08/29/23 17:43	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			08/29/23 17:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			08/29/23 17:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			08/29/23 17:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			08/29/23 17:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			08/29/23 17:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			08/29/23 17:43	1
Styrene	<0.370		1.00	0.370	ug/L			08/29/23 17:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			08/29/23 17:43	1
Toluene	<0.430		1.00	0.430	ug/L			08/29/23 17:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			08/29/23 17:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			08/29/23 17:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			08/29/23 17:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			08/29/23 17:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			08/29/23 17:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			08/29/23 17:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			08/29/23 17:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			08/29/23 17:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*08/29/23 17:43*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/29/23 17:43*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/23 17:43*	*1*

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

Lab Sample ID: LCS 310-398038/6
Matrix: Water
Analysis Batch: 398038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	17.57		ug/L		88	68 - 123
1,1,1-Trichloroethane	20.0	19.01		ug/L		95	71 - 128
1,1,2,2-Tetrachloroethane	20.0	17.97		ug/L		90	64 - 124
1,1,2-Trichloroethane	20.0	17.95		ug/L		90	70 - 124
1,1-Dichloroethane	20.0	19.70		ug/L		98	71 - 123
1,1-Dichloroethene	20.0	17.97		ug/L		90	61 - 129
1,2,3-Trichloropropane	20.0	19.01		ug/L		95	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	19.12		ug/L		96	50 - 150
1,2-Dibromoethane (EDB)	20.0	18.30		ug/L		92	73 - 125
1,2-Dichlorobenzene	20.0	19.48		ug/L		97	68 - 120
1,2-Dichloroethane	20.0	18.26		ug/L		91	70 - 124
1,2-Dichloropropane	20.0	18.01		ug/L		90	73 - 121
1,3-Dichlorobenzene	20.0	19.47		ug/L		97	67 - 123
1,4-Dichlorobenzene	20.0	19.17		ug/L		96	67 - 120
2-Butanone (MEK)	40.0	30.73		ug/L		77	50 - 150
2-Hexanone	40.0	34.76		ug/L		87	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	32.90		ug/L		82	62 - 130
Acetone	40.0	34.18		ug/L		85	50 - 150
Acrylonitrile	200	176.7		ug/L		88	50 - 150
Benzene	20.0	18.97		ug/L		95	73 - 122
Bromochloromethane	20.0	20.04		ug/L		100	68 - 132
Bromodichloromethane	20.0	18.18		ug/L		91	72 - 121
Bromoform	20.0	17.50		ug/L		88	55 - 129
Carbon disulfide	20.0	20.06		ug/L		100	58 - 131
Carbon tetrachloride	20.0	17.11		ug/L		86	67 - 132
Chlorobenzene	20.0	18.21		ug/L		91	69 - 121
Chlorodibromomethane	20.0	18.40		ug/L		92	69 - 122
Chloroform	20.0	18.05		ug/L		90	72 - 120
cis-1,2-Dichloroethene	20.0	18.77		ug/L		94	74 - 120
cis-1,3-Dichloropropene	20.0	17.67		ug/L		88	71 - 126
Dibromomethane	20.0	17.13		ug/L		86	72 - 123
Ethylbenzene	20.0	18.40		ug/L		92	69 - 122
Iodomethane	20.0	16.66		ug/L		83	10 - 150
Methylene Chloride	20.0	19.64		ug/L		98	50 - 150
Styrene	20.0	17.69		ug/L		88	67 - 125
Tetrachloroethene	20.0	19.94		ug/L		100	69 - 131
Toluene	20.0	19.81		ug/L		99	72 - 121
trans-1,2-Dichloroethene	20.0	19.28		ug/L		96	68 - 125
trans-1,3-Dichloropropene	20.0	17.71		ug/L		89	68 - 124
trans-1,4-Dichloro-2-butene	20.0	19.08		ug/L		95	48 - 150
Trichloroethene	20.0	19.04		ug/L		95	73 - 126
Vinyl acetate	40.0	35.72		ug/L		89	50 - 150
Xylenes, Total	40.0	37.59		ug/L		94	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

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

Lab Sample ID: LCS 310-398038/7
Matrix: Water
Analysis Batch: 398038

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	15.34		ug/L		77	24 - 150		
Chloroethane			20.0	18.24		ug/L		91	51 - 137		
Chloromethane			20.0	17.09		ug/L		85	37 - 150		
Trichlorofluoromethane			20.0	19.75		ug/L		99	56 - 144		
Vinyl chloride			20.0	18.09		ug/L		90	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-263503-G-2 MS
Matrix: Water
Analysis Batch: 398038

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		
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.07		ug/L		70	52 - 130		
1,1,1-Trichloroethane	<0.190		20.0	15.14		ug/L		76	49 - 130		
1,1,2,2-Tetrachloroethane	<0.470		20.0	14.68		ug/L		73	51 - 130		
1,1,2-Trichloroethane	<0.450		20.0	15.11		ug/L		76	56 - 130		
1,1-Dichloroethane	<0.220		20.0	15.93		ug/L		80	53 - 130		
1,1-Dichloroethene	<0.560		20.0	15.70		ug/L		79	39 - 130		
1,2,3-Trichloropropane	<0.590		20.0	15.50		ug/L		78	50 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		20.0	15.55		ug/L		78	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		20.0	15.28		ug/L		76	59 - 130		
1,2-Dichlorobenzene	<0.370		20.0	16.67		ug/L		83	53 - 130		
1,2-Dichloroethane	<0.390		20.0	15.54		ug/L		78	57 - 130		
1,2-Dichloropropane	<0.270		20.0	15.34		ug/L		77	60 - 130		
1,3-Dichlorobenzene	<0.300		20.0	16.45		ug/L		82	54 - 130		
1,4-Dichlorobenzene	4.86		20.0	22.16		ug/L		86	53 - 130		
2-Butanone (MEK)	<2.10		40.0	26.33		ug/L		66	47 - 150		
2-Hexanone	<2.00		40.0	28.83		ug/L		72	45 - 132		
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	26.95		ug/L		67	46 - 132		
Acetone	<3.10		40.0	28.95		ug/L		72	35 - 150		
Acrylonitrile	<2.20		200	150.0		ug/L		75	50 - 150		
Benzene	1.37		20.0	16.68		ug/L		77	47 - 130		
Bromochloromethane	<0.540		20.0	16.36		ug/L		82	54 - 132		
Bromodichloromethane	<0.390		20.0	15.39		ug/L		77	58 - 130		
Bromoform	<0.780		20.0	14.28		ug/L		71	42 - 130		
Carbon disulfide	<0.450		20.0	17.62		ug/L		88	39 - 131		
Carbon tetrachloride	<0.650		20.0	13.52		ug/L		68	45 - 132		
Chlorobenzene	<0.400		20.0	16.03		ug/L		80	54 - 130		
Chlorodibromomethane	<0.750		20.0	15.48		ug/L		77	53 - 130		
Chloroform	<1.30		20.0	14.75		ug/L		74	55 - 130		
cis-1,2-Dichloroethene	0.599	J	20.0	16.46		ug/L		79	52 - 130		
cis-1,3-Dichloropropene	<0.250		20.0	14.73		ug/L		74	55 - 130		
Dibromomethane	<0.330		20.0	14.64		ug/L		73	61 - 130		
Ethylbenzene	<0.310		20.0	15.14		ug/L		76	48 - 130		

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

Lab Sample ID: 310-263503-G-2 MS
Matrix: Water
Analysis Batch: 398038

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
Iodomethane	<7.00		20.0	16.72		ug/L		84	10 - 150
Methylene Chloride	<1.70		20.0	17.07		ug/L		85	50 - 150
Styrene	<0.370		20.0	15.42		ug/L		77	46 - 130
Tetrachloroethene	<0.480		20.0	15.64		ug/L		78	42 - 131
Toluene	<0.430		20.0	16.22		ug/L		81	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	15.71		ug/L		79	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	14.42		ug/L		72	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	14.22		ug/L		71	33 - 150
Trichloroethene	<0.430		20.0	15.59		ug/L		78	55 - 130
Vinyl acetate	<2.50		40.0	29.48		ug/L		74	34 - 150
Xylenes, Total	<0.400		40.0	31.58		ug/L		79	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 310-263503-G-2 MSD
Matrix: Water
Analysis Batch: 398038

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	13.86		ug/L		69	52 - 130	2	20
1,1,1-Trichloroethane	<0.190		20.0	14.71		ug/L		74	49 - 130	3	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	14.27		ug/L		71	51 - 130	3	20
1,1,2-Trichloroethane	<0.450		20.0	14.34		ug/L		72	56 - 130	5	20
1,1-Dichloroethane	<0.220		20.0	15.79		ug/L		79	53 - 130	1	20
1,1-Dichloroethene	<0.560		20.0	15.29		ug/L		76	39 - 130	3	28
1,2,3-Trichloropropane	<0.590		20.0	13.32		ug/L		67	50 - 130	15	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	15.14		ug/L		76	45 - 150	3	20
1,2-Dibromoethane (EDB)	<0.340		20.0	14.67		ug/L		73	59 - 130	4	20
1,2-Dichlorobenzene	<0.370		20.0	16.37		ug/L		82	53 - 130	2	20
1,2-Dichloroethane	<0.390		20.0	15.45		ug/L		77	57 - 130	1	21
1,2-Dichloropropane	<0.270		20.0	15.17		ug/L		76	60 - 130	1	31
1,3-Dichlorobenzene	<0.300		20.0	16.13		ug/L		81	54 - 130	2	20
1,4-Dichlorobenzene	4.86		20.0	21.70		ug/L		84	53 - 130	2	20
2-Butanone (MEK)	<2.10		40.0	26.35		ug/L		66	47 - 150	0	20
2-Hexanone	<2.00		40.0	27.39		ug/L		68	45 - 132	5	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	26.62		ug/L		67	46 - 132	1	20
Acetone	<3.10		40.0	29.20		ug/L		73	35 - 150	1	26
Acrylonitrile	<2.20		200	141.4		ug/L		71	50 - 150	6	21
Benzene	1.37		20.0	16.35		ug/L		75	47 - 130	2	20
Bromochloromethane	<0.540		20.0	15.86		ug/L		79	54 - 132	3	20
Bromodichloromethane	<0.390		20.0	14.92		ug/L		75	58 - 130	3	20
Bromoform	<0.780		20.0	13.76		ug/L		69	42 - 130	4	20
Carbon disulfide	<0.450		20.0	15.67		ug/L		78	39 - 131	12	32
Carbon tetrachloride	<0.650		20.0	12.97		ug/L		65	45 - 132	4	20
Chlorobenzene	<0.400		20.0	15.69		ug/L		78	54 - 130	2	20

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

Lab Sample ID: 310-263503-G-2 MSD
Matrix: Water
Analysis Batch: 398038

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
Chlorodibromomethane	<0.750		20.0	15.06		ug/L		75	53 - 130	3	20
Chloroform	<1.30		20.0	14.56		ug/L		73	55 - 130	1	20
cis-1,2-Dichloroethene	0.599	J	20.0	16.13		ug/L		78	52 - 130	2	20
cis-1,3-Dichloropropene	<0.250		20.0	14.31		ug/L		72	55 - 130	3	20
Dibromomethane	<0.330		20.0	14.54		ug/L		73	61 - 130	1	20
Ethylbenzene	<0.310		20.0	14.56		ug/L		73	48 - 130	4	20
Iodomethane	<7.00		20.0	17.30		ug/L		86	10 - 150	3	35
Methylene Chloride	<1.70		20.0	16.42		ug/L		82	50 - 150	4	24
Styrene	<0.370		20.0	15.01		ug/L		75	46 - 130	3	20
Tetrachloroethene	<0.480		20.0	15.23		ug/L		76	42 - 131	3	20
Toluene	<0.430		20.0	15.61		ug/L		78	48 - 130	4	20
trans-1,2-Dichloroethene	<0.270		20.0	15.12		ug/L		76	54 - 130	4	24
trans-1,3-Dichloropropene	<0.560		20.0	14.19		ug/L		71	51 - 130	2	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	13.78		ug/L		69	33 - 150	3	20
Trichloroethene	<0.430		20.0	15.09		ug/L		75	55 - 130	3	20
Vinyl acetate	<2.50		40.0	28.13		ug/L		70	34 - 150	5	27
Xylenes, Total	<0.400		40.0	30.76		ug/L		77	44 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

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

Lab Sample ID: MB 310-397915/1-A
Matrix: Water
Analysis Batch: 398247

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397915

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/28/23 10:00	08/31/23 14:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*68*		*45 - 129*	*08/28/23 10:00*	*08/31/23 14:32*	*1*
2-Fluorobiphenyl (Surr)	*46*		*39 - 118*	*08/28/23 10:00*	*08/31/23 14:32*	*1*
Terphenyl-d14 (Surr)	*56*		*12 - 144*	*08/28/23 10:00*	*08/31/23 14:32*	*1*

Lab Sample ID: LCS 310-397915/2-A
Matrix: Water
Analysis Batch: 398247

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397915

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bis(2-ethylhexyl) phthalate			100	59.96		ug/L		60	43 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*78*		*45 - 129*
2-Fluorobiphenyl (Surr)	*55*		*39 - 118*
Terphenyl-d14 (Surr)	*64*		*12 - 144*

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

Lab Sample ID: LCSD 310-397915/3-A
Matrix: Water
Analysis Batch: 398247

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 397915

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			100	60.00		ug/L		60	43 - 143	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*82*		*45 - 129*
2-Fluorobiphenyl (Surr)	*62*		*39 - 118*
Terphenyl-d14 (Surr)	*67*		*12 - 144*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-397899/1-A
Matrix: Water
Analysis Batch: 398750

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		08/28/23 09:05	09/06/23 18:04	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		08/28/23 09:05	09/06/23 18:04	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		08/28/23 09:05	09/06/23 18:04	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		08/28/23 09:05	09/06/23 18:04	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		08/28/23 09:05	09/06/23 18:04	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		08/28/23 09:05	09/06/23 18:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*10 - 136*	*08/28/23 09:05*	*09/06/23 18:04*	*1*
Tetrachloro-m-xylene	*76*		*10 - 130*	*08/28/23 09:05*	*09/06/23 18:04*	*1*

Lab Sample ID: LCS 310-397899/2-A
Matrix: Water
Analysis Batch: 398750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397899

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*80*		*10 - 136*
Tetrachloro-m-xylene	*82*		*10 - 130*

Lab Sample ID: LCSD 310-397899/3-A
Matrix: Water
Analysis Batch: 398750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 397899

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*76*		*10 - 136*
Tetrachloro-m-xylene	*70*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: LB 500-729643/1-B
Matrix: Water
Analysis Batch: 730753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730088

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<8.34		100	8.34	ug/L		08/30/23 08:47	09/05/23 10:31	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*81*		*25 - 130*	*08/30/23 08:47*	*09/05/23 10:31*	*1*

Lab Sample ID: MB 500-730088/1-A
Matrix: Water
Analysis Batch: 730753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.307		1.00	0.307	ug/L		08/30/23 08:47	09/05/23 09:39	1
2,4,5-TP	<0.0834		1.00	0.0834	ug/L		08/30/23 08:47	09/05/23 09:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*79*		*25 - 130*	*08/30/23 08:47*	*09/05/23 09:39*	*1*

Lab Sample ID: LCS 500-730088/2-A
Matrix: Water
Analysis Batch: 730753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 730088

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			10.1	8.056		ug/L		80	30 - 115		
2,4,5-TP			2.50	2.124		ug/L		85	32 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*86*		*25 - 130*

Lab Sample ID: LCSD 500-730088/3-A
Matrix: Water
Analysis Batch: 730753

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 730088

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			10.1	7.995		ug/L		80	30 - 115	1	20
2,4,5-TP			2.50	2.082		ug/L		83	32 - 115	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*87*		*25 - 130*

Lab Sample ID: 310-263040-A-2-I MS
Matrix: Water
Analysis Batch: 730753

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 730088

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D	<30.7		1010	820.6		ug/L		82	30 - 115		
2,4,5-TP	<8.34		250	218.1		ug/L		87	32 - 115		

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 310-263040-A-2-I MS
Matrix: Water
Analysis Batch: 730753

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 730088

Surrogate	MS %Recovery	MS Qualifier	Limits
DCAA	88		25 - 130

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-397966/1-A
Matrix: Water
Analysis Batch: 399708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		08/29/23 09:30	09/14/23 19:06	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		08/29/23 09:30	09/14/23 19:06	1
Barium	<0.000640		0.00200	0.000640	mg/L		08/29/23 09:30	09/14/23 19:06	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		08/29/23 09:30	09/14/23 19:06	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		08/29/23 09:30	09/14/23 19:06	1
Chromium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/14/23 19:06	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		08/29/23 09:30	09/14/23 19:06	1
Copper	<0.00180		0.00500	0.00180	mg/L		08/29/23 09:30	09/14/23 19:06	1
Lead	<0.000240		0.000500	0.000240	mg/L		08/29/23 09:30	09/14/23 19:06	1
Nickel	<0.00190		0.00500	0.00190	mg/L		08/29/23 09:30	09/14/23 19:06	1
Selenium	<0.00140		0.00500	0.00140	mg/L		08/29/23 09:30	09/14/23 19:06	1
Silver	<0.000500		0.00100	0.000500	mg/L		08/29/23 09:30	09/14/23 19:06	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		08/29/23 09:30	09/14/23 19:06	1
Zinc	0.008738	J	0.0200	0.00640	mg/L		08/29/23 09:30	09/14/23 19:06	1
Tin	<0.00230		0.00500	0.00230	mg/L		08/29/23 09:30	09/14/23 19:06	1

Lab Sample ID: MB 310-397966/1-A
Matrix: Water
Analysis Batch: 399799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.000260		0.00100	0.000260	mg/L		08/29/23 09:30	09/15/23 18:34	1

Lab Sample ID: LCS 310-397966/2-A
Matrix: Water
Analysis Batch: 399708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2063		mg/L		103	80 - 120
Arsenic	0.200	0.1781		mg/L		89	80 - 120
Barium	0.100	0.08726		mg/L		87	80 - 120
Beryllium	0.100	0.08963		mg/L		90	80 - 120
Cadmium	0.100	0.08575		mg/L		86	80 - 120
Chromium	0.100	0.08969		mg/L		90	80 - 120
Cobalt	0.100	0.09183		mg/L		92	80 - 120
Copper	0.200	0.1760		mg/L		88	80 - 120
Lead	0.200	0.1765		mg/L		88	80 - 120
Nickel	0.200	0.1819		mg/L		91	80 - 120
Selenium	0.400	0.3465		mg/L		87	80 - 120
Silver	0.100	0.1001		mg/L		100	80 - 120

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

Lab Sample ID: LCS 310-397966/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 399708
Prep Batch: 397966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vanadium	0.100	0.08696		mg/L		87	80 - 120
Zinc	0.200	0.1736		mg/L		87	80 - 120
Tin	0.200	0.1844		mg/L		92	80 - 120

Lab Sample ID: LCS 310-397966/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 399799
Prep Batch: 397966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.200	0.1592		mg/L		80	80 - 120

Lab Sample ID: 310-263470-1 MS
Client Sample ID: AW-3_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 399708
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00100		0.200	0.2148		mg/L		107	75 - 125
Arsenic	0.00513		0.200	0.1930		mg/L		94	75 - 125
Barium	0.0619		0.100	0.1508		mg/L		89	75 - 125
Beryllium	<0.000330		0.100	0.09446		mg/L		94	75 - 125
Cadmium	<0.000100		0.100	0.08697		mg/L		87	75 - 125
Chromium	<0.00110		0.100	0.09146		mg/L		91	75 - 125
Cobalt	<0.000170		0.100	0.09124		mg/L		91	75 - 125
Copper	<0.00180		0.200	0.1749		mg/L		87	75 - 125
Lead	<0.000240		0.200	0.1801		mg/L		90	75 - 125
Nickel	<0.00190		0.200	0.1802		mg/L		90	75 - 125
Selenium	<0.00140		0.400	0.3646		mg/L		91	75 - 125
Silver	<0.000500		0.100	0.09612		mg/L		96	75 - 125
Vanadium	<0.00110		0.100	0.08917		mg/L		89	75 - 125
Zinc	0.00861	J B	0.200	0.1800		mg/L		86	75 - 125
Tin	<0.00230		0.200	0.1812		mg/L		91	75 - 125

Lab Sample ID: 310-263470-1 MS
Client Sample ID: AW-3_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 399799
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	<0.000260	F1	0.200	0.1475	F1	mg/L		74	75 - 125

Lab Sample ID: 310-263470-1 MSD
Client Sample ID: AW-3_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 399708
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2246		mg/L		112	75 - 125	4	20
Arsenic	0.00513		0.200	0.1976		mg/L		96	75 - 125	2	20
Barium	0.0619		0.100	0.1572		mg/L		95	75 - 125	4	20
Beryllium	<0.000330		0.100	0.09886		mg/L		99	75 - 125	5	20
Cadmium	<0.000100		0.100	0.09101		mg/L		91	75 - 125	5	20
Chromium	<0.00110		0.100	0.09374		mg/L		94	75 - 125	2	20

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

Lab Sample ID: 310-263470-1 MSD
Matrix: Water
Analysis Batch: 399708

Client Sample ID: AW-3_23_08
Prep Type: Total/NA
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	<0.000170		0.100	0.09307		mg/L		93	75 - 125	2	20
Copper	<0.00180		0.200	0.1778		mg/L		89	75 - 125	2	20
Lead	<0.000240		0.200	0.1831		mg/L		92	75 - 125	2	20
Nickel	<0.00190		0.200	0.1877		mg/L		94	75 - 125	4	20
Selenium	<0.00140		0.400	0.3778		mg/L		94	75 - 125	4	20
Silver	<0.000500		0.100	0.09853		mg/L		99	75 - 125	2	20
Vanadium	<0.00110		0.100	0.09208		mg/L		92	75 - 125	3	20
Zinc	0.00861	J B	0.200	0.1840		mg/L		88	75 - 125	2	20
Tin	<0.00230		0.200	0.2000		mg/L		100	75 - 125	10	20

Lab Sample ID: 310-263470-1 MSD
Matrix: Water
Analysis Batch: 399799

Client Sample ID: AW-3_23_08
Prep Type: Total/NA
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	<0.000260	F1	0.200	0.1528		mg/L		76	75 - 125	3	20

Lab Sample ID: 310-263470-11 DU
Matrix: Water
Analysis Batch: 399799

Client Sample ID: FD-2_23_08
Prep Type: Total/NA
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	<0.00100	^+		<0.00100	^+	mg/L				NC	20
Arsenic	0.00149	J		0.001435	J	mg/L				4	20
Barium	0.0752			0.07437		mg/L				1	20
Beryllium	<0.000330			<0.000330		mg/L				NC	20
Cadmium	0.000170	J		0.0001970	J	mg/L				15	20
Chromium	<0.00110			<0.00110		mg/L				NC	20
Cobalt	0.00452			0.004458		mg/L				1	20
Copper	0.00908			0.009096		mg/L				0.2	20
Lead	<0.000240			<0.000240		mg/L				NC	20
Nickel	0.0129			0.01312		mg/L				2	20
Selenium	0.00313	J		0.003138	J	mg/L				0.4	20
Thallium	<0.000260			<0.000260		mg/L				NC	20
Vanadium	0.00112	J		<0.00110		mg/L				NC	20
Zinc	0.0204	B		0.01416	J F5	mg/L				36	20
Tin	<0.00230			<0.00230		mg/L				NC	20

Lab Sample ID: 310-263470-11 DU
Matrix: Water
Analysis Batch: 400008

Client Sample ID: FD-2_23_08
Prep Type: Total/NA
Prep Batch: 397966

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Silver	<0.000500			<0.000500		mg/L				NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-398169/1-A
Matrix: Water
Analysis Batch: 398357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		08/30/23 11:42	08/31/23 10:37	1

Lab Sample ID: LCS 310-398169/2-A
Matrix: Water
Analysis Batch: 398357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001680		mg/L		101	80 - 120

Lab Sample ID: 310-263388-A-2-C MS
Matrix: Water
Analysis Batch: 398357

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 398169

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.000140		0.00167	0.001631		mg/L		98	80 - 120

Lab Sample ID: 310-263388-A-2-D MSD
Matrix: Water
Analysis Batch: 398357

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 398169

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000140		0.00167	0.001578		mg/L		95	80 - 120	3	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-397973/1
Matrix: Water
Analysis Batch: 397973

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	<1.70		5.00	1.70	mg/L			08/28/23 20:28	1

Lab Sample ID: LCS 310-397973/2
Matrix: Water
Analysis Batch: 397973

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: 310-263394-C-1 DU
Matrix: Water
Analysis Batch: 397973

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	73.0		67.00		mg/L		9	35

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: 310-263395-C-1 DU
Client Sample ID: Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 397973

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	196			188.0		mg/L				4	35

GC/MS VOA

Analysis Batch: 397921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	8260D	
310-263470-2	MW- 11_23_08	Total/NA	Water	8260D	
MB 310-397921/5	Method Blank	Total/NA	Water	8260D	
LCS 310-397921/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-397921/7	Lab Control Sample	Total/NA	Water	8260D	
310-263293-C-4 MS	Matrix Spike	Total/NA	Water	8260D	
310-263293-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 398038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-3	MW-12_23_08	Total/NA	Water	8260D	
310-263470-4	MW-15_23_08	Total/NA	Water	8260D	
310-263470-5	MW-16_23_08	Total/NA	Water	8260D	
310-263470-6	MW-34_23_08	Total/NA	Water	8260D	
310-263470-7	MW-105A_23_08	Total/NA	Water	8260D	
310-263470-8	MW-105B_23_08	Total/NA	Water	8260D	
310-263470-9	MW-109A_23_08	Total/NA	Water	8260D	
310-263470-10	MW-109B_23_08	Total/NA	Water	8260D	
310-263470-11	FD-2_23_08	Total/NA	Water	8260D	
310-263470-12	FB-2_23_08	Total/NA	Water	8260D	
310-263470-13	TB-2_23_08	Total/NA	Water	8260D	
MB 310-398038/5	Method Blank	Total/NA	Water	8260D	
LCS 310-398038/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-398038/7	Lab Control Sample	Total/NA	Water	8260D	
310-263503-G-2 MS	Matrix Spike	Total/NA	Water	8260D	
310-263503-G-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 397915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	3510C	
310-263470-2	MW- 11_23_08	Total/NA	Water	3510C	
310-263470-4	MW-15_23_08	Total/NA	Water	3510C	
310-263470-6	MW-34_23_08	Total/NA	Water	3510C	
310-263470-12	FB-2_23_08	Total/NA	Water	3510C	
MB 310-397915/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-397915/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-397915/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 398247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	8270E	397915
310-263470-2	MW- 11_23_08	Total/NA	Water	8270E	397915
310-263470-4	MW-15_23_08	Total/NA	Water	8270E	397915
MB 310-397915/1-A	Method Blank	Total/NA	Water	8270E	397915
LCS 310-397915/2-A	Lab Control Sample	Total/NA	Water	8270E	397915
LCSD 310-397915/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	397915

GC/MS Semi VOA

Analysis Batch: 398455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-6	MW-34_23_08	Total/NA	Water	8270E	397915
310-263470-12	FB-2_23_08	Total/NA	Water	8270E	397915

GC Semi VOA

Prep Batch: 397899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	3510C	
310-263470-3	MW-12_23_08	Total/NA	Water	3510C	
310-263470-12	FB-2_23_08	Total/NA	Water	3510C	
MB 310-397899/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-397899/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-397899/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 398750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	8081B	397899
310-263470-3	MW-12_23_08	Total/NA	Water	8081B	397899
310-263470-12	FB-2_23_08	Total/NA	Water	8081B	397899
MB 310-397899/1-A	Method Blank	Total/NA	Water	8081B	397899
LCS 310-397899/2-A	Lab Control Sample	Total/NA	Water	8081B	397899
LCSD 310-397899/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	397899

Leach Batch: 729643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-729643/1-B	Method Blank	Total/NA	Water	1311	
310-263040-A-2-I MS	Matrix Spike	TCLP	Water	1311	

Prep Batch: 730088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-5	MW-16_23_08	Total/NA	Water	8151A	
310-263470-12	FB-2_23_08	Total/NA	Water	8151A	
LB 500-729643/1-B	Method Blank	Total/NA	Water	8151A	729643
MB 500-730088/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-730088/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-730088/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
310-263040-A-2-I MS	Matrix Spike	TCLP	Water	8151A	729643

Analysis Batch: 730753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-5	MW-16_23_08	Total/NA	Water	8151A	730088
310-263470-12	FB-2_23_08	Total/NA	Water	8151A	730088
LB 500-729643/1-B	Method Blank	Total/NA	Water	8151A	730088
MB 500-730088/1-A	Method Blank	Total/NA	Water	8151A	730088
LCS 500-730088/2-A	Lab Control Sample	Total/NA	Water	8151A	730088
LCSD 500-730088/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	730088
310-263040-A-2-I MS	Matrix Spike	TCLP	Water	8151A	730088

Metals

Prep Batch: 397966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	3005A	
310-263470-2	MW- 11_23_08	Total/NA	Water	3005A	
310-263470-3	MW-12_23_08	Total/NA	Water	3005A	
310-263470-4	MW-15_23_08	Total/NA	Water	3005A	
310-263470-5	MW-16_23_08	Total/NA	Water	3005A	
310-263470-6	MW-34_23_08	Total/NA	Water	3005A	
310-263470-7	MW-105A_23_08	Total/NA	Water	3005A	
310-263470-8	MW-105B_23_08	Total/NA	Water	3005A	
310-263470-9	MW-109A_23_08	Total/NA	Water	3005A	
310-263470-10	MW-109B_23_08	Total/NA	Water	3005A	
310-263470-11	FD-2_23_08	Total/NA	Water	3005A	
310-263470-12	FB-2_23_08	Total/NA	Water	3005A	
MB 310-397966/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-397966/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-263470-1 MS	AW-3_23_08	Total/NA	Water	3005A	
310-263470-1 MSD	AW-3_23_08	Total/NA	Water	3005A	
310-263470-11 DU	FD-2_23_08	Total/NA	Water	3005A	

Prep Batch: 398169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-12	FB-2_23_08	Total/NA	Water	7470A	
MB 310-398169/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-398169/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-263388-A-2-C MS	Matrix Spike	Dissolved	Water	7470A	
310-263388-A-2-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 398357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-12	FB-2_23_08	Total/NA	Water	7470A	398169
MB 310-398169/1-A	Method Blank	Total/NA	Water	7470A	398169
LCS 310-398169/2-A	Lab Control Sample	Total/NA	Water	7470A	398169
310-263388-A-2-C MS	Matrix Spike	Dissolved	Water	7470A	398169
310-263388-A-2-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	398169

Analysis Batch: 399708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	6020B	397966
310-263470-2	MW- 11_23_08	Total/NA	Water	6020B	397966
MB 310-397966/1-A	Method Blank	Total/NA	Water	6020B	397966
LCS 310-397966/2-A	Lab Control Sample	Total/NA	Water	6020B	397966
310-263470-1 MS	AW-3_23_08	Total/NA	Water	6020B	397966
310-263470-1 MSD	AW-3_23_08	Total/NA	Water	6020B	397966

Analysis Batch: 399799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	6020B	397966
310-263470-2	MW- 11_23_08	Total/NA	Water	6020B	397966
310-263470-3	MW-12_23_08	Total/NA	Water	6020B	397966
310-263470-4	MW-15_23_08	Total/NA	Water	6020B	397966
310-263470-5	MW-16_23_08	Total/NA	Water	6020B	397966
310-263470-6	MW-34_23_08	Total/NA	Water	6020B	397966

Metals (Continued)

Analysis Batch: 399799 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-7	MW-105A_23_08	Total/NA	Water	6020B	397966
310-263470-8	MW-105B_23_08	Total/NA	Water	6020B	397966
310-263470-9	MW-109A_23_08	Total/NA	Water	6020B	397966
310-263470-10	MW-109B_23_08	Total/NA	Water	6020B	397966
310-263470-11	FD-2_23_08	Total/NA	Water	6020B	397966
310-263470-12	FB-2_23_08	Total/NA	Water	6020B	397966
MB 310-397966/1-A	Method Blank	Total/NA	Water	6020B	397966
LCS 310-397966/2-A	Lab Control Sample	Total/NA	Water	6020B	397966
310-263470-1 MS	AW-3_23_08	Total/NA	Water	6020B	397966
310-263470-1 MSD	AW-3_23_08	Total/NA	Water	6020B	397966
310-263470-11 DU	FD-2_23_08	Total/NA	Water	6020B	397966

Analysis Batch: 400008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-3	MW-12_23_08	Total/NA	Water	6020B	397966
310-263470-4	MW-15_23_08	Total/NA	Water	6020B	397966
310-263470-5	MW-16_23_08	Total/NA	Water	6020B	397966
310-263470-6	MW-34_23_08	Total/NA	Water	6020B	397966
310-263470-7	MW-105A_23_08	Total/NA	Water	6020B	397966
310-263470-8	MW-105B_23_08	Total/NA	Water	6020B	397966
310-263470-9	MW-109A_23_08	Total/NA	Water	6020B	397966
310-263470-10	MW-109B_23_08	Total/NA	Water	6020B	397966
310-263470-11	FD-2_23_08	Total/NA	Water	6020B	397966
310-263470-12	FB-2_23_08	Total/NA	Water	6020B	397966
310-263470-11 DU	FD-2_23_08	Total/NA	Water	6020B	397966

General Chemistry

Analysis Batch: 397973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263470-1	AW-3_23_08	Total/NA	Water	I-3765-85	
310-263470-2	MW- 11_23_08	Total/NA	Water	I-3765-85	
310-263470-3	MW-12_23_08	Total/NA	Water	I-3765-85	
310-263470-4	MW-15_23_08	Total/NA	Water	I-3765-85	
310-263470-5	MW-16_23_08	Total/NA	Water	I-3765-85	
310-263470-6	MW-34_23_08	Total/NA	Water	I-3765-85	
310-263470-7	MW-105A_23_08	Total/NA	Water	I-3765-85	
310-263470-8	MW-105B_23_08	Total/NA	Water	I-3765-85	
310-263470-9	MW-109A_23_08	Total/NA	Water	I-3765-85	
310-263470-10	MW-109B_23_08	Total/NA	Water	I-3765-85	
310-263470-11	FD-2_23_08	Total/NA	Water	I-3765-85	
310-263470-12	FB-2_23_08	Total/NA	Water	I-3765-85	
MB 310-397973/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-397973/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-263394-C-1 DU	Duplicate	Total/NA	Water	I-3765-85	
310-263395-C-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Client Sample ID: AW-3_23_08
Lab Sample ID: 310-263470-1

Date Collected: 08/23/23 11:35
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397921	FE5V	EET CF	08/28/23 17:55
Total/NA	Prep	3510C			397915	Y6AF	EET CF	08/28/23 10:00
Total/NA	Analysis	8270E		1	398247	L0FS	EET CF	08/31/23 18:09
Total/NA	Prep	3510C			397899	Y6AF	EET CF	08/28/23 09:05
Total/NA	Analysis	8081B		1	398750	BW2O	EET CF	09/06/23 18:43
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399708	DHM5	EET CF	09/14/23 19:17
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 18:41
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW- 11_23_08
Lab Sample ID: 310-263470-2

Date Collected: 08/24/23 08:55
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	397921	FE5V	EET CF	08/28/23 18:18
Total/NA	Prep	3510C			397915	Y6AF	EET CF	08/28/23 10:00
Total/NA	Analysis	8270E		1	398247	L0FS	EET CF	08/31/23 18:36
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399708	DHM5	EET CF	09/14/23 19:38
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 18:50
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-12_23_08
Lab Sample ID: 310-263470-3

Date Collected: 08/24/23 09:30
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 19:58
Total/NA	Prep	3510C			397899	Y6AF	EET CF	08/28/23 09:05
Total/NA	Analysis	8081B		1	398750	BW2O	EET CF	09/06/23 18:56
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 18:52
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:01
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-15_23_08
Lab Sample ID: 310-263470-4

Date Collected: 08/23/23 09:55
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 20:21

Client Sample ID: MW-15_23_08
Lab Sample ID: 310-263470-4

Date Collected: 08/23/23 09:55
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			397915	Y6AF	EET CF	08/28/23 10:00
Total/NA	Analysis	8270E		1	398247	L0FS	EET CF	08/31/23 19:03
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:03
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:03
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-16_23_08
Lab Sample ID: 310-263470-5

Date Collected: 08/23/23 10:25
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 20:43
Total/NA	Prep	8151A			730088	DAK	EET CHI	08/30/23 08:47
Total/NA	Analysis	8151A		1	730753	SB	EET CHI	09/05/23 16:37
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:05
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:05
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-34_23_08
Lab Sample ID: 310-263470-6

Date Collected: 08/24/23 10:20
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 21:06
Total/NA	Prep	3510C			397915	Y6AF	EET CF	08/28/23 10:00
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 19:09
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:07
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:07
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-105A_23_08
Lab Sample ID: 310-263470-7

Date Collected: 08/23/23 09:20
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 21:28
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:09

Client Sample ID: MW-105A_23_08
Lab Sample ID: 310-263470-7

Date Collected: 08/23/23 09:20
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:09
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-105B_23_08
Lab Sample ID: 310-263470-8

Date Collected: 08/23/23 10:10
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 21:51
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:12
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:12
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-109A_23_08
Lab Sample ID: 310-263470-9

Date Collected: 08/24/23 09:05
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 22:14
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:14
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:14
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: MW-109B_23_08
Lab Sample ID: 310-263470-10

Date Collected: 08/24/23 10:30
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 22:36
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:16
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:16
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-2_23_08
Lab Sample ID: 310-263470-11
Date Collected: 08/23/23 00:00
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 22:58
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:18
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:18
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: FB-2_23_08
Lab Sample ID: 310-263470-12
Date Collected: 08/24/23 10:40
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 18:51
Total/NA	Prep	3510C			397915	Y6AF	EET CF	08/28/23 10:00
Total/NA	Analysis	8270E		1	398455	L0FS	EET CF	09/01/23 19:36
Total/NA	Prep	3510C			397899	Y6AF	EET CF	08/28/23 09:05
Total/NA	Analysis	8081B		1	398750	BW2O	EET CF	09/06/23 19:09
Total/NA	Prep	8151A			730088	DAK	EET CHI	08/30/23 08:47
Total/NA	Analysis	8151A		1	730753	SB	EET CHI	09/05/23 16:55
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	399799	A6US	EET CF	09/15/23 19:23
Total/NA	Prep	3005A			397966	KCK5	EET CF	08/29/23 09:30
Total/NA	Analysis	6020B		1	400008	DHM5	EET CF	09/19/23 09:34
Total/NA	Prep	7470A			398169	NFT2	EET CF	08/30/23 11:42
Total/NA	Analysis	7470A		1	398357	NFT2	EET CF	08/31/23 11:28
Total/NA	Analysis	I-3765-85		1	397973	D7CP	EET CF	08/28/23 20:28

Client Sample ID: TB-2_23_08
Lab Sample ID: 310-263470-13
Date Collected: 08/24/23 00:00
Matrix: Water
Date Received: 08/25/23 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398038	FE5V	EET CF	08/29/23 19:13

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

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

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

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263470-1
Project/Site: CRLCSWA_1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
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	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

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310-263470 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client:			Foth	
City/State:	CITY	STATE	IA	Project:
Receipt Information				
Date/Time Received:	DATE 8/25/23	TIME 1430		Received By: SL
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 3	
Cooler Custody Seals Present? ☑ Yes ☐ No			*If yes.* Cooler custody seals intact? ☐ Yes ☐ No	
Sample Custody Seals Present? ☐ Yes ☑ No			*If yes:* Sample custody seals intact? ☐ Yes ☐ No	
Trip Blank Present? ☐ Yes ☑ No			*If yes:* Which VOA samples are in cooler? ↓	
Temperature Record				
Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE				
Thermometer ID: 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): 2.9			Corrected Temp (°C): 2.9	
• **Sample Container Temperature**				
Container(s) used:	CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No				
a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No				
NOTE If yes, contact PM before proceeding If no, proceed with login				
Additional Comments				

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client.	Foth		
City/State. CITY		STATE IA	Project:
Receipt Information			
Date/Time Received:	DATE 8/25/23	TIME 1430	Received By: SL

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 3
Cooler Custody Seals Present?	☑ Yes ☐ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes ☑ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes ☑ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant. ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 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): 2.2	Corrected Temp (°C): 2.2

• **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: R Foth

City/State: CITY | STATE IA | Project.

Receipt Information

Date/Time Received: DATE 8/25/22 | TIME 1430 | Received By: SL

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☑ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # _____ of _____

Cooler Custody Seals Present? ☑ Yes ☐ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☑ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

MW 11, 12, 34, FB-2

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): 4.0 | Corrected Temp (°C): 4.0

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used.		
Uncorrected Temp (°C)		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Chain of Custody Record

603760 eurofins | Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: G. Wilming / H. Dubbs	Site Contact: —	Date: 8/25/23	COC No —
Company Name: Foth I & E	Tel/Email: gwilming@foth.com	Lab Contact: Conner	Carrier: Eurofins	1 of 1 COCs
Address: 411 6th Ave SE	Analysis Turnaround Time			Sampler: Randy Gavin / Tyler Merritt
City/State/Zip: Cedar Rapids, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (319) 365-9565	TAT if different from Below _____			Walk-in Client:
Fax: (319) 365-9681	☐ 2 weeks			Lab Sampling
Project Name: CRLCSWA Site 1	☐ 1 week			
Site: —	☐ 2 days			Job / SDG No
P O #: —	☐ 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)	Sample Specific Notes
AW-3_23_08	8/23	11:35	G	H_2O	9	N	N	
MW-11_23_08	8/24	8:55			7			See Attached Parameter Sheet
MW-12_23_08	8/24	9:30			7			
MW-15_23_08	8/23	9:55			7			
MW-16_23_08	8/23	10:25			7			
MW-34_23_08	8/24	10:20			7			
MW-105A_23_08	8/23	9:20			5			
MW-105B_23_08	8/23	10:10			5			
MW-109A_23_08	8/24	9:05			5			
MW-109B_23_08	8/24	10:30			5			
FD-2_23_08	8/23	—			5			
FB-2_23_08	8/24	10:40	↓	↓	11	↓	↓	
TB-2_23_08	—	—			3			

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
Tyler Merritt	O.A. Technical Services	8/25/23			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time.	Received in Laboratory by	Company	Date/Time
			SL	Eurofins	8/25/23 1430

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9/20/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heplachlor	Mercury	Tin	
1	AW-1_23_08	AW-1	WG	G											X	X			X												X		
2	AW-2_23_08	AW-2	WG	G											X	X			X												X		
3	AW-3_23_08	AW-3	WG	G											X	X			X											X	X		
4	AW-4_23_08	AW-4	WG	G											X	X			X														
5	AW-5_23_08	AW-5	WG	G											X	X							X										
6	AW-6_23_08	AW-6	WG	G											X	X			X				X								X		
7	CRL-9_23_08	CRL-9	WG	G											X	X	X		X												X		
8	MW-11_23_08	MW-11	WG	G											X	X			X												X		
9	MW-12_23_08	MW-12	WG	G											X	X	X											X			X		
10	MW-13_23_08	MW-13	WG	G											X	X	X						X										
11	MW-14_23_08	MW-14	WG	G											X	X																	
12	MW-15_23_08	MW-15	WG	G											X	X			X														

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS

ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER

DATE Signed:

Page 1 of 5

9/20/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 2 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	←	
13	MW-16_23_08	MW-16	WG	G											X	X	X						X											
14	MW-17_23_08	MW-17	WG	G											X	X			X				X											
15	MW-18_23_08	MW-18	WG	G											X	X			X												X			
16	MW-19_23_08	MW-19	WG	G											X	X			X															
17	MW-20_23_08	MW-20	WG	G											X	X																X		
18	MW-21_23_08	MW-21	WG	G											X	X							X		X				X			X		
19	MW-22_23_08	MW-22	WG	G											X	X		X	X				X									X		
20	MW-23_23_08	MW-23	WG	G											X	X																X		
21	MW-24_23_08	MW-24	WG	G											X	X	X		X						X							X		
22	MW-25_23_08	MW-25	WG	G											X	X			X													X		
23	MW-26_23_08	MW-26	WG	G											X	X			X							X				X		X		
24	MW-28_23_08	MW-28	WG	G											X	X					X													

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed:

3/20/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 of 5

COC Number: 1-3865545471-071823-903257

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Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
25	MW-30_23_08	MW-30	WG	G											X	X	X			X													X		
26	MW-31_23_08	MW-31	WG	G											X	X																			
27	MW-32_23_08	MW-32	WG	G											X	X				X				X									X		
28	MW-33_23_08	MW-33	WG	G											X	X				X													X		
29	MW-34_23_08	MW-34	WG	G											X	X	X			X													X		
30	MW-35_23_08	MW-35	WG	G											X	X	X																X		
31	MW-36_23_08	MW-36	WG	G											X	X				X													X		
32	MW-37_23_08	MW-37	WG	G											X	X	X			X	X	X	X	X	X	X	X	X	X	X	X		X		
33	MW-38_23_08	MW-38	WG	G											X	X	X	X		X				X								X	X		
34	VP-3_23_08	VP-3	WG	G											X	X				X	X														
35	VP-4_23_08	VP-4	WG	G											X	X				X												X			
36	MW-101A_23_08	MW-101A	WG	G											X	X	X			X	X	X	X	X	X	X	X	X	X	X	X		X		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed

9/20/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 4 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: 1A Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4' DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Total Arsenic	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
37	MW-101B_23_08	MW-101B	WG	G											X	X	X	X	X				X								X	X			
38	MW-102B_23_08	MW-102B	WG	G											X	X																			
39	MW-104B_23_08	MW-104B	WG	G												X																		X	
40	MW-105A_23_08	MW-105A	WG	G											X	X																			
41	MW-105B_23_08	MW-105B	WG	G											X	X																			
42	MW-106A_23_08	MW-106A	WG	G											X	X																			
43	MW-107A_23_08	MW-107A	WG	G											X	X																			
44	MW-107B_23_08	MW-107B	WG	G											X	X																			
45	MW-108B_23_08	MW-108B	WG	G											X	X																			Do Not Analyze Cobalt
46	MW-109A_23_08	MW-109A	WG	G											X	X																			
47	MW-109B_23_08	MW-109B	WG	G											X	X																			
48	FD-1_23_08		WG	G											X	X																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER

DATE Signed:

Page 4 of 5

9/20/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 5 of 5 | **COC Number: 1-3865545471-071823-903257**

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	App. I VOCs Only	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
49	FD-2_23_08		WG	G											X	X																				
50	FD-3_23_08		WG	G											X	X																				
51	FD-4_23_08		WG	G											X	X																				
52	FD-5_23_08		WG	G											X	X																				
53	FB-1_23_08	FB-1	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
54	FB-2_23_08	FB-2	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
55	FB-3_23_08	FB-3	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
56	TB-1_23_08	Trip Blank	WQ	G													X																X			
57	TB-2_23_08	Trip Blank	WQ	G													X																X			
58	TB-3_23_08	Trip Blank	WQ	G													X																X			
59	TB-4_23_08	Trip Blank	WQ	G													X																X			
60	TB-5_23_08	Trip Blank	WQ	G													X																X			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed:

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9/20/2023

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone 319-277-2401 Fax. 319-277-2425

Chain of Custody Record

eurofins

310-263470 COC

Client Information (Sub Contract Lab)	Sampler	Lab PM: Calhoun Conner M	(s)	COC No.: 310-64779 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Conner Calhoun@et eurofinsus com	Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-263470-1
Address: 2417 Bond Street	Due Date Requested: 9/11/2023			
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 Site 1	Project #: 31009776			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

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) TCLP	8151A/8151A_AP TCLP	Total Number of containers	Special Instructions/Note.
			Preservation Code:							
MW-16_23_08 (310-263470-5)	8/23/23	10 25 Central		Water			X		2	
FB-2_23_08 (310-263470-12)	8/24/23	10 40 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
	8/24/23 1435		Stephanie Hernandez	8/29/23 1010	EETIA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinqu shed 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

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-263470-1

Login Number: 263470

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Lage, Sydney

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: Foth Infrastructure & Environment, LLC

Job Number: 310-263470-1

Login Number: 263470
List Number: 2
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago
List Creation: 08/29/23 01:49 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	5.4
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

Generated 10/2/2023 1:44:29 PM

JOB DESCRIPTION

CRLCSWA_1

JOB NUMBER

310-263688-1

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
10/2/2023 1:44:29 PM

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

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QC Sample Results 56
QC Association 69
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Job ID: 310-263688-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-263688-1

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 8/30/2023 4:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 0.9°C, 1.5°C, 2.1°C, 2.3°C, 2.4°C and 2.8°C

GC/MS VOA
Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: MW-20_23_08 (310-263688-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-398344 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane (22.6%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 310-398344/3).

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

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

Herbicides
Method 8151A: Surrogate recovery for the following sample was outside the upper control limit: AW-6_23_08 (310-263688-3). 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.

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

Metals
Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of >2: CRL-9_23_08 (310-263688-4) and MW-32_23_08 (310-263688-13). The sample(s) was preserved to the appropriate pH in the laboratory.

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: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-263688-1	AW-1_23_08	Water	08/28/23 11:35	08/30/23 16:25
310-263688-2	AW-5_23_08	Water	08/28/23 14:30	08/30/23 16:25
310-263688-3	AW-6_23_08	Water	08/29/23 09:10	08/30/23 16:25
310-263688-4	CRL-9_23_08	Water	08/28/23 13:55	08/30/23 16:25
310-263688-5	MW-17_23_08	Water	08/29/23 09:35	08/30/23 16:25
310-263688-6	MW-18_23_08	Water	08/29/23 10:20	08/30/23 16:25
310-263688-7	MW-19_23_08	Water	08/28/23 13:50	08/30/23 16:25
310-263688-8	MW-20_23_08	Water	08/28/23 09:35	08/30/23 16:25
310-263688-9	MW-21_23_08	Water	08/28/23 15:00	08/30/23 16:25
310-263688-10	MW-23_23_08	Water	08/28/23 13:10	08/30/23 16:25
310-263688-11	MW-30_23_08	Water	08/29/23 12:45	08/30/23 16:25
310-263688-12	MW-31_23_08	Water	08/29/23 11:45	08/30/23 16:25
310-263688-13	MW-32_23_08	Water	08/29/23 14:55	08/30/23 16:25
310-263688-14	MW-33_23_08	Water	08/29/23 14:20	08/30/23 16:25
310-263688-15	MW-35_23_08	Water	08/28/23 10:40	08/30/23 16:25
310-263688-16	MW-36_23_08	Water	08/28/23 10:00	08/30/23 16:25
310-263688-17	FD-3_23_08	Water	08/28/23 00:00	08/30/23 16:25
310-263688-18	FD-4_23_08	Water	08/29/23 00:00	08/30/23 16:25
310-263688-19	FB-3_23_08	Water	08/29/23 11:10	08/30/23 16:25
310-263688-20	TB-3_23_08	Water	08/29/23 00:00	08/30/23 16:25

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: AW-1_23_08 — Lab Sample ID: 310-263688-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.539	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.19		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.225	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	4.09		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.628	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.0678		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.153		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000191	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00202		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000974		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0332		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00154	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Thallium	0.00120	F1	0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0261		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	25.0		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: AW-5_23_08 — Lab Sample ID: 310-263688-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0133		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.255		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000219		0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.00260	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.00292		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000760		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.00830		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00204	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Thallium	0.00314		0.00100	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00347	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.00717	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	89.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: AW-6_23_08 — Lab Sample ID: 310-263688-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.29		1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.000696	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.178		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0100		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00211	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0318		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000504	J	0.00100	0.000260	mg/L	1		6020B	Total/NA

Client Sample ID: CRL-9_23_08 — Lab Sample ID: 310-263688-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.05		0.500	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.0335		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.518		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000107	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.00236	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.00489		0.000500	0.000170	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: CRL-9_23_08 (Continued) — Lab Sample ID: 310-263688-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0217		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00183	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0245		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	22.7		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-17_23_08 — Lab Sample ID: 310-263688-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0480		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.134		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00649		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0130		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	47.3		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-18_23_08 — Lab Sample ID: 310-263688-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00207		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0248		0.00200	0.000640	mg/L	1		6020B	Total/NA
Nickel	0.00671		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00116	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.87		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-19_23_08 — Lab Sample ID: 310-263688-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000621	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0351		0.00200	0.000640	mg/L	1		6020B	Total/NA
Nickel	0.0150		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.13		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-20_23_08 — Lab Sample ID: 310-263688-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00565		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.150		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000141	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00176		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0218		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00153		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0820		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	6.25		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-21_23_08 — Lab Sample ID: 310-263688-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.844	J	1.00	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	2.14		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.478	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.0371		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.333		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00424		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0573		0.00500	0.00190	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21_23_08 (Continued) — Lab Sample ID: 310-263688-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.00156		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0627		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	21.7		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-23_23_08 — Lab Sample ID: 310-263688-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000545	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.148		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000228		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00234		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00210	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0291		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00139		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.100		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.88		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-30_23_08 — Lab Sample ID: 310-263688-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	7.97		1.00	0.220	ug/L	1		8260D	Total/NA
Benzene	1.29		0.500	0.220	ug/L	1		8260D	Total/NA
Chloroethane	8.67		4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	5.56		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.516	J	1.00	0.270	ug/L	1		8260D	Total/NA
Vinyl chloride	1.65		1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.00927		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.203		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000740		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0118		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000636	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0833		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	17.5		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-31_23_08 — Lab Sample ID: 310-263688-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0999		0.00200	0.000640	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.00		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-32_23_08 — Lab Sample ID: 310-263688-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.739	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	3.42		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.647		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	8.06		1.00	0.400	ug/L	1		8260D	Total/NA
Toluene	0.815	J	1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.207		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.918		0.00200	0.000640	mg/L	1		6020B	Total/NA
Chromium	0.00119	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.00238		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0200		0.00500	0.00190	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-32_23_08 (Continued) — Lab Sample ID: 310-263688-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.00179	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	76.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-33_23_08 — Lab Sample ID: 310-263688-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.19		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.560		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	7.10		1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0496		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.819		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00147		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00841		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	13.5		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-35_23_08 — Lab Sample ID: 310-263688-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00536		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.167		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00535		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0249		0.00500	0.00190	mg/L	1		6020B	Total/NA
Zinc	0.0324		0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.00		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-36_23_08 — Lab Sample ID: 310-263688-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.69		1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	6.29		1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0720		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.735		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00126		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00711		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	17.3		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-3_23_08 — Lab Sample ID: 310-263688-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.65		1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	6.27		1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0706		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.713		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00126		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00688		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	26.3		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-4_23_08 — Lab Sample ID: 310-263688-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.100		0.00200	0.000640	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.75		1.88	0.638	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-3_23_08
Lab Sample ID: 310-263688-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.489	J	1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: TB-3_23_08
Lab Sample ID: 310-263688-20

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: AW-1_23_08
Date Collected: 08/28/23 11:35
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 03:00	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 03:00	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 03:00	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 03:00	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 03:00	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 03:00	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 03:00	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 03:00	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 03:00	1
1,2-Dichlorobenzene	**0.539**	**J**	1.00	0.370	ug/L			09/01/23 03:00	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 03:00	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 03:00	1
1,4-Dichlorobenzene	**1.19**		1.00	0.230	ug/L			09/01/23 03:00	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 03:00	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 03:00	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 03:00	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 03:00	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 03:00	1
Benzene	**0.225**	**J**	0.500	0.220	ug/L			09/01/23 03:00	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 03:00	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 03:00	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 03:00	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 03:00	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 03:00	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 03:00	1
Chlorobenzene	**4.09**		1.00	0.400	ug/L			09/01/23 03:00	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 03:00	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 03:00	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 03:00	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 03:00	1
cis-1,2-Dichloroethene	**0.628**	**J**	1.00	0.210	ug/L			09/01/23 03:00	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 03:00	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 03:00	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 03:00	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 03:00	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 03:00	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 03:00	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 03:00	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 03:00	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 03:00	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 03:00	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 03:00	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 03:00	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 03:00	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 03:00	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 03:00	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 03:00*	*1*

Client Sample ID: AW-1_23_08
Lab Sample ID: 310-263688-1
Date Collected: 08/28/23 11:35
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 03:00*	*1*
4-Bromofluorobenzene (Surr)	*112*		*80 - 120*		*09/01/23 03:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.61		10.2	5.61	ug/L		08/31/23 06:15	09/11/23 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*76*		*45 - 129*	*08/31/23 06:15*	*09/11/23 16:09*	*1*
2-Fluorobiphenyl (Surr)	*67*		*39 - 118*	*08/31/23 06:15*	*09/11/23 16:09*	*1*
Terphenyl-d14 (Surr)	*45*		*12 - 144*	*08/31/23 06:15*	*09/11/23 16:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100	F1	0.00200	0.00100	mg/L		09/01/23 09:00	09/19/23 19:07	1
Arsenic	**0.0678**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:07	1
Barium	**0.153**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:07	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:07	1
Cadmium	**0.000191**	**J**	0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:07	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:07	1
Cobalt	**0.00202**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:07	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:07	1
Lead	**0.000974**		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:07	1
Nickel	**0.0332**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:07	1
Selenium	**0.00154**	**J**	0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:07	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:07	1
Thallium	**0.00120**	**F1**	0.00100	0.000260	mg/L		09/01/23 09:00	09/28/23 18:11	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:07	1
Zinc	**0.0261**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**25.0**		5.00	1.70	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: AW-5_23_08
Date Collected: 08/28/23 14:30
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 03:23	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 03:23	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 03:23	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 03:23	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 03:23	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 03:23	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 03:23	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 03:23	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 03:23	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 03:23	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 03:23	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 03:23	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 03:23	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 03:23	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 03:23	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 03:23	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 03:23	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 03:23	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 03:23	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 03:23	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 03:23	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 03:23	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 03:23	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 03:23	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 03:23	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 03:23	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 03:23	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 03:23	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 03:23	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 03:23	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 03:23	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 03:23	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 03:23	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 03:23	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 03:23	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 03:23	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 03:23	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 03:23	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 03:23	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 03:23	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 03:23	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 03:23	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 03:23	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 03:23	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 03:23	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 03:23	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 03:23*	*1*

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: AW-5_23_08

Date Collected: 08/28/23 14:30
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-2

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/01/23 03:23*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*09/01/23 03:23*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0839		1.01	0.0839	ug/L		09/01/23 16:59	09/07/23 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*78*		*25 - 130*	*09/01/23 16:59*	*09/07/23 11:29*	*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		09/01/23 09:00	09/19/23 19:32	1
Arsenic	**0.0133**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:32	1
Barium	**0.255**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:32	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:32	1
Cadmium	**0.000219**		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:32	1
Chromium	**0.00260**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:32	1
Cobalt	**0.00292**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:32	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:32	1
Lead	**0.000760**		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:32	1
Nickel	**0.00830**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:32	1
Selenium	**0.00204**	**J**	0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:32	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:32	1
Thallium	**0.00314**		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:32	1
Vanadium	**0.00347**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:32	1
Zinc	**0.00717**	**J**	0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**89.0**		15.0	5.10	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: AW-6_23_08
Date Collected: 08/29/23 09:10
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 03:46	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 03:46	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 03:46	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 03:46	1
1,1-Dichloroethane	**1.29**		1.00	0.220	ug/L			09/01/23 03:46	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 03:46	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 03:46	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 03:46	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 03:46	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 03:46	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 03:46	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 03:46	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 03:46	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 03:46	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 03:46	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 03:46	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 03:46	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 03:46	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 03:46	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 03:46	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 03:46	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 03:46	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 03:46	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 03:46	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 03:46	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 03:46	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 03:46	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 03:46	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 03:46	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 03:46	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 03:46	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 03:46	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 03:46	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 03:46	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 03:46	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 03:46	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 03:46	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 03:46	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 03:46	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 03:46	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 03:46	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 03:46	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 03:46	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 03:46	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 03:46	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 03:46	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 03:46*	*1*

Client Sample ID: AW-6_23_08
Lab Sample ID: 310-263688-3
Date Collected: 08/29/23 09:10
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 03:46*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/01/23 03:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		08/31/23 06:15	09/11/23 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*64*		*45 - 129*	*08/31/23 06:15*	*09/11/23 16:34*	*1*
2-Fluorobiphenyl (Surr)	*57*		*39 - 118*	*08/31/23 06:15*	*09/11/23 16:34*	*1*
Terphenyl-d14 (Surr)	*39*		*12 - 144*	*08/31/23 06:15*	*09/11/23 16:34*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0855		1.02	0.0855	ug/L		09/05/23 09:51	09/07/23 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*756*	*S1+*	*25 - 130*	*09/05/23 09:51*	*09/07/23 12:04*	*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		09/01/23 09:00	09/19/23 19:34	1
Arsenic	**0.000696**	**J**	0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:34	1
Barium	**0.178**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:34	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:34	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:34	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:34	1
Cobalt	**0.0100**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:34	1
Copper	**0.00211**	**J**	0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:34	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:34	1
Nickel	**0.0318**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:34	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:34	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:34	1
Thallium	**0.000504**	**J**	0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:34	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:34	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:34	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 19:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: CRL-9_23_08
Lab Sample ID: 310-263688-4
Date Collected: 08/28/23 13:55
Matrix: Water
Date Received: 08/30/23 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 04:08	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 04:08	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 04:08	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 04:08	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 04:08	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 04:08	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 04:08	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 04:08	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 04:08	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 04:08	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 04:08	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 04:08	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 04:08	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 04:08	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 04:08	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 04:08	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 04:08	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 04:08	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 04:08	1
Benzene	**3.05**		0.500	0.220	ug/L			09/01/23 04:08	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 04:08	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 04:08	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 04:08	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 04:08	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 04:08	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 04:08	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 04:08	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 04:08	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 04:08	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 04:08	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 04:08	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 04:08	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 04:08	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 04:08	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 04:08	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 04:08	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 04:08	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 04:08	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 04:08	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 04:08	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 04:08	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 04:08	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 04:08	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 04:08	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 04:08	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 04:08	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 04:08	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 04:08	1

Client Sample ID: CRL-9_23_08
Lab Sample ID: 310-263688-4
Date Collected: 08/28/23 13:55
Matrix: Water
Date Received: 08/30/23 16:25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 04:08*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/01/23 04:08*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/01/23 04:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		08/31/23 06:15	09/11/23 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*61*		*45 - 129*	*08/31/23 06:15*	*09/11/23 17:00*	*1*
2-Fluorobiphenyl (Surr)	*56*		*39 - 118*	*08/31/23 06:15*	*09/11/23 17:00*	*1*
Terphenyl-d14 (Surr)	*40*		*12 - 144*	*08/31/23 06:15*	*09/11/23 17:00*	*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		09/01/23 09:00	09/19/23 19:36	1
Arsenic	**0.0335**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:36	1
Barium	**0.518**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:36	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:36	1
Cadmium	**0.000107**	**J**	0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:36	1
Chromium	**0.00236**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:36	1
Cobalt	**0.00489**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:36	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:36	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:36	1
Nickel	**0.0217**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:36	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:36	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:36	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:36	1
Vanadium	**0.00183**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:36	1
Zinc	**0.0245**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:36	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 19:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**22.7**		5.00	1.70	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-17_23_08
Date Collected: 08/29/23 09:35
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 04:31	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 04:31	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 04:31	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 04:31	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 04:31	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 04:31	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 04:31	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 04:31	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 04:31	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 04:31	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 04:31	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 04:31	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 04:31	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 04:31	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 04:31	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 04:31	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 04:31	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 04:31	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 04:31	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 04:31	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 04:31	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 04:31	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 04:31	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 04:31	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 04:31	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 04:31	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 04:31	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 04:31	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 04:31	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 04:31	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 04:31	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 04:31	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 04:31	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 04:31	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 04:31	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 04:31	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 04:31	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 04:31	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 04:31	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 04:31	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 04:31	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 04:31	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 04:31	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 04:31	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 04:31	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 04:31	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 04:31*	*1*

Client Sample ID: MW-17_23_08
Lab Sample ID: 310-263688-5
Date Collected: 08/29/23 09:35
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 04:31*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/01/23 04:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/31/23 06:15	09/11/23 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*45 - 129*	*08/31/23 06:15*	*09/11/23 17:26*	*1*
2-Fluorobiphenyl (Surr)	*70*		*39 - 118*	*08/31/23 06:15*	*09/11/23 17:26*	*1*
Terphenyl-d14 (Surr)	*55*		*12 - 144*	*08/31/23 06:15*	*09/11/23 17:26*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0840		1.01	0.0840	ug/L		09/05/23 09:51	09/07/23 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*99*		*25 - 130*	*09/05/23 09:51*	*09/07/23 12:21*	*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		09/01/23 09:00	09/19/23 19:38	1
Arsenic	**0.0480**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:38	1
Barium	**0.134**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:38	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:38	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:38	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:38	1
Cobalt	**0.00649**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:38	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:38	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:38	1
Nickel	**0.0130**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:38	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:38	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:38	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:38	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:38	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**47.3**		5.00	1.70	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-18_23_08
Date Collected: 08/29/23 10:20
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 04:53	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 04:53	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 04:53	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 04:53	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 04:53	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 04:53	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 04:53	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 04:53	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 04:53	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 04:53	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 04:53	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 04:53	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 04:53	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 04:53	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 04:53	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 04:53	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 04:53	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 04:53	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 04:53	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 04:53	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 04:53	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 04:53	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 04:53	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 04:53	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 04:53	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 04:53	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 04:53	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 04:53	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 04:53	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 04:53	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 04:53	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 04:53	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 04:53	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 04:53	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 04:53	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 04:53	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 04:53	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 04:53	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 04:53	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 04:53	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 04:53	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 04:53	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 04:53	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 04:53	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 04:53	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 04:53	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 04:53*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-18_23_08
Lab Sample ID: 310-263688-6
Date Collected: 08/29/23 10:20
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/01/23 04:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/01/23 04:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<6.11		11.1	6.11	ug/L		08/31/23 06:15	09/11/23 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*78*		*45 - 129*	*08/31/23 06:15*	*09/11/23 17:52*	*1*
2-Fluorobiphenyl (Surr)	*70*		*39 - 118*	*08/31/23 06:15*	*09/11/23 17:52*	*1*
Terphenyl-d14 (Surr)	*49*		*12 - 144*	*08/31/23 06:15*	*09/11/23 17:52*	*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		09/01/23 09:00	09/19/23 19:40	1
Arsenic	**0.00207**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:40	1
Barium	**0.0248**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:40	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:40	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:40	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:40	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:40	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:40	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:40	1
Nickel	**0.00671**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:40	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:40	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:40	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:40	1
Vanadium	**0.00116**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:40	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		09/08/23 10:26	09/11/23 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.87**		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-19_23_08
Date Collected: 08/28/23 13:50
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 05:16	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 05:16	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 05:16	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 05:16	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 05:16	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 05:16	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 05:16	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 05:16	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 05:16	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 05:16	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 05:16	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 05:16	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 05:16	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 05:16	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 05:16	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 05:16	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 05:16	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 05:16	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 05:16	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 05:16	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 05:16	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 05:16	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 05:16	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 05:16	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 05:16	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 05:16	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 05:16	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 05:16	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 05:16	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 05:16	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 05:16	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 05:16	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 05:16	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 05:16	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 05:16	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 05:16	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 05:16	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 05:16	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 05:16	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 05:16	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 05:16	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 05:16	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 05:16	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 05:16	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 05:16	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 05:16	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 05:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 05:16*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-19_23_08
Lab Sample ID: 310-263688-7
Date Collected: 08/28/23 13:50
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 05:16*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*09/01/23 05:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/31/23 06:15	09/11/23 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*61*		*45 - 129*	*08/31/23 06:15*	*09/11/23 18:17*	*1*
2-Fluorobiphenyl (Surr)	*56*		*39 - 118*	*08/31/23 06:15*	*09/11/23 18:17*	*1*
Terphenyl-d14 (Surr)	*36*		*12 - 144*	*08/31/23 06:15*	*09/11/23 18:17*	*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		09/01/23 09:00	09/19/23 19:43	1
Arsenic	**0.000621**	**J**	0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:43	1
Barium	**0.0351**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:43	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:43	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:43	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:43	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:43	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:43	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:43	1
Nickel	**0.0150**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:43	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:43	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:43	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:43	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:43	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.13**		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-20_23_08
Date Collected: 08/28/23 09:35
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 05:38	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 05:38	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 05:38	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 05:38	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 05:38	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 05:38	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 05:38	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 05:38	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 05:38	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 05:38	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 05:38	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 05:38	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 05:38	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 05:38	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 05:38	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 05:38	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 05:38	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 05:38	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 05:38	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 05:38	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 05:38	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 05:38	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 05:38	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 05:38	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 05:38	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 05:38	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 05:38	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 05:38	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 05:38	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 05:38	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 05:38	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 05:38	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 05:38	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 05:38	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 05:38	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 05:38	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 05:38	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 05:38	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 05:38	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 05:38	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 05:38	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 05:38	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 05:38	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 05:38	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 05:38	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 05:38	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 05:38*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-20_23_08
Lab Sample ID: 310-263688-8
Date Collected: 08/28/23 09:35
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/01/23 05:38*	*1*
4-Bromofluorobenzene (Surr)	*125*	*S1+*	*80 - 120*		*09/01/23 05:38*	*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		09/01/23 09:00	09/19/23 19:45	1
Arsenic	**0.00565**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:45	1
Barium	**0.150**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:45	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:45	1
Cadmium	**0.000141**	**J**	0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:45	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:45	1
Cobalt	**0.00176**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:45	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:45	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:45	1
Nickel	**0.0218**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:45	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:45	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:45	1
Thallium	**0.00153**		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:45	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:45	1
Zinc	**0.0820**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:45	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**6.25**		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-21_23_08
Date Collected: 08/28/23 15:00
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 06:01	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 06:01	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 06:01	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 06:01	1
1,1-Dichloroethane	**0.844**	**J**	1.00	0.220	ug/L			09/01/23 06:01	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 06:01	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 06:01	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 06:01	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 06:01	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 06:01	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 06:01	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 06:01	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 06:01	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 06:01	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 06:01	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 06:01	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 06:01	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 06:01	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 06:01	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 06:01	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 06:01	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 06:01	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 06:01	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 06:01	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 06:01	1
Chlorobenzene	**2.14**		1.00	0.400	ug/L			09/01/23 06:01	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 06:01	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 06:01	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 06:01	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 06:01	1
cis-1,2-Dichloroethene	**0.478**	**J**	1.00	0.210	ug/L			09/01/23 06:01	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 06:01	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 06:01	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 06:01	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 06:01	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 06:01	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 06:01	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 06:01	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 06:01	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 06:01	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 06:01	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 06:01	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 06:01	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 06:01	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 06:01	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 06:01	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 06:01*	*1*

Client Sample ID: MW-21_23_08
Lab Sample ID: 310-263688-9
Date Collected: 08/28/23 15:00
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 06:01*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/01/23 06:01*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0488		0.0744	0.0488	ug/L		08/31/23 06:12	09/12/23 13:05	1
Dieldrin	<0.0302		0.0744	0.0302	ug/L		08/31/23 06:12	09/12/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*10 - 136*	*08/31/23 06:12*	*09/12/23 13:05*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0951		1.14	0.0951	ug/L		09/01/23 16:59	09/07/23 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*74*		*25 - 130*	*09/01/23 16:59*	*09/07/23 11:46*	*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		09/01/23 09:00	09/19/23 19:47	1
Arsenic	**0.0371**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:47	1
Barium	**0.333**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:47	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:47	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:47	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:47	1
Cobalt	**0.00424**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:47	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:47	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:47	1
Nickel	**0.0573**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:47	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:47	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:47	1
Thallium	**0.00156**		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:47	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:47	1
Zinc	**0.0627**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:47	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**21.7**		5.00	1.70	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-23_23_08
Date Collected: 08/28/23 13:10
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 06:23	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 06:23	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 06:23	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 06:23	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 06:23	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 06:23	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 06:23	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 06:23	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 06:23	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 06:23	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 06:23	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 06:23	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 06:23	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 06:23	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 06:23	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 06:23	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 06:23	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 06:23	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 06:23	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 06:23	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 06:23	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 06:23	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 06:23	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 06:23	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 06:23	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 06:23	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 06:23	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 06:23	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 06:23	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 06:23	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 06:23	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 06:23	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 06:23	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 06:23	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 06:23	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 06:23	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 06:23	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 06:23	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 06:23	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 06:23	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 06:23	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 06:23	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 06:23	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 06:23	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 06:23	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 06:23	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 06:23*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-23_23_08
Lab Sample ID: 310-263688-10
Date Collected: 08/28/23 13:10
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/01/23 06:23*	*1*
4-Bromofluorobenzene (Surr)	*115*		*80 - 120*		*09/01/23 06:23*	*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		09/01/23 09:00	09/19/23 20:03	1
Arsenic	**0.000545**	**J**	0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:03	1
Barium	**0.148**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:03	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:03	1
Cadmium	**0.000228**		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:03	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:03	1
Cobalt	**0.00234**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:03	1
Copper	**0.00210**	**J**	0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:03	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:03	1
Nickel	**0.0291**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:03	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:03	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:03	1
Thallium	**0.00139**		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:03	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:03	1
Zinc	**0.100**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:03	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.88**		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-30_23_08
Date Collected: 08/29/23 12:45
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 06:46	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 06:46	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 06:46	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 06:46	1
1,1-Dichloroethane	**7.97**		1.00	0.220	ug/L			09/01/23 06:46	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 06:46	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 06:46	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 06:46	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 06:46	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 06:46	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 06:46	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 06:46	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 06:46	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 06:46	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 06:46	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 06:46	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 06:46	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 06:46	1
Benzene	**1.29**		0.500	0.220	ug/L			09/01/23 06:46	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 06:46	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 06:46	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 06:46	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 06:46	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 06:46	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 06:46	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 06:46	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 06:46	1
Chloroethane	**8.67**		4.00	0.790	ug/L			09/01/23 06:46	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 06:46	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 06:46	1
cis-1,2-Dichloroethene	**5.56**		1.00	0.210	ug/L			09/01/23 06:46	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 06:46	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 06:46	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 06:46	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 06:46	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 06:46	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 06:46	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 06:46	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 06:46	1
trans-1,2-Dichloroethene	**0.516**	**J**	1.00	0.270	ug/L			09/01/23 06:46	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 06:46	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 06:46	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 06:46	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 06:46	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 06:46	1
Vinyl chloride	**1.65**		1.00	0.180	ug/L			09/01/23 06:46	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 06:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 06:46*	*1*

Client Sample ID: MW-30_23_08
Lab Sample ID: 310-263688-11
Date Collected: 08/29/23 12:45
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/01/23 06:46*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*09/01/23 06:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.61		10.2	5.61	ug/L		08/31/23 06:15	09/11/23 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*76*		*45 - 129*	*08/31/23 06:15*	*09/11/23 18:43*	*1*
2-Fluorobiphenyl (Surr)	*70*		*39 - 118*	*08/31/23 06:15*	*09/11/23 18:43*	*1*
Terphenyl-d14 (Surr)	*46*		*12 - 144*	*08/31/23 06:15*	*09/11/23 18:43*	*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		09/01/23 09:00	09/19/23 20:05	1
Arsenic	**0.00927**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:05	1
Barium	**0.203**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:05	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:05	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:05	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:05	1
Cobalt	**0.000740**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:05	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:05	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:05	1
Nickel	**0.0118**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:05	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:05	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:05	1
Thallium	**0.000636**	**J**	0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:05	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:05	1
Zinc	**0.0833**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:05	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**17.5**		7.50	2.55	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-31_23_08
Date Collected: 08/29/23 11:45
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 07:08	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 07:08	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 07:08	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 07:08	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 07:08	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 07:08	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 07:08	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 07:08	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 07:08	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 07:08	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 07:08	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 07:08	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 07:08	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 07:08	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 07:08	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 07:08	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 07:08	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 07:08	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 07:08	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 07:08	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 07:08	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 07:08	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 07:08	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 07:08	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 07:08	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 07:08	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 07:08	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 07:08	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 07:08	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 07:08	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 07:08	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 07:08	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 07:08	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 07:08	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 07:08	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 07:08	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 07:08	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 07:08	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 07:08	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 07:08	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 07:08	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 07:08	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 07:08	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 07:08	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 07:08	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 07:08	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 07:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 07:08*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-31_23_08
Lab Sample ID: 310-263688-12
Date Collected: 08/29/23 11:45
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 07:08*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/01/23 07:08*	*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		09/01/23 09:00	09/19/23 20:09	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:09	1
Barium	**0.0999**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:09	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:09	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:09	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:09	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:09	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:09	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:09	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:09	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:09	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:09	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:09	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:09	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:09	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	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-32_23_08
Date Collected: 08/29/23 14:55
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 07:31	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 07:31	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 07:31	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 07:31	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 07:31	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 07:31	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 07:31	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 07:31	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 07:31	1
1,2-Dichlorobenzene	**0.739**	**J**	1.00	0.370	ug/L			09/01/23 07:31	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 07:31	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 07:31	1
1,4-Dichlorobenzene	**3.42**		1.00	0.230	ug/L			09/01/23 07:31	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 07:31	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 07:31	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 07:31	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 07:31	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 07:31	1
Benzene	**0.647**		0.500	0.220	ug/L			09/01/23 07:31	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 07:31	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 07:31	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 07:31	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 07:31	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 07:31	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 07:31	1
Chlorobenzene	**8.06**		1.00	0.400	ug/L			09/01/23 07:31	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 07:31	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 07:31	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 07:31	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 07:31	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 07:31	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 07:31	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 07:31	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 07:31	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 07:31	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 07:31	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 07:31	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 07:31	1
Toluene	**0.815**	**J**	1.00	0.430	ug/L			09/01/23 07:31	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 07:31	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 07:31	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 07:31	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 07:31	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 07:31	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 07:31	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 07:31	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 128*		*09/01/23 07:31*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-32_23_08
Lab Sample ID: 310-263688-13
Date Collected: 08/29/23 14:55
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 07:31*	*1*
4-Bromofluorobenzene (Surr)	*116*		*80 - 120*		*09/01/23 07:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.73		10.4	5.73	ug/L		08/31/23 06:15	09/11/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*81*		*45 - 129*	*08/31/23 06:15*	*09/11/23 19:09*	*1*
2-Fluorobiphenyl (Surr)	*70*		*39 - 118*	*08/31/23 06:15*	*09/11/23 19:09*	*1*
Terphenyl-d14 (Surr)	*57*		*12 - 144*	*08/31/23 06:15*	*09/11/23 19:09*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0817		0.979	0.0817	ug/L		09/05/23 09:51	09/07/23 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*74*		*25 - 130*	*09/05/23 09:51*	*09/07/23 12:39*	*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		09/01/23 09:00	09/19/23 20:12	1
Arsenic	**0.207**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:12	1
Barium	**0.918**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:12	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:12	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:12	1
Chromium	**0.00119**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:12	1
Cobalt	**0.00238**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:12	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:12	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:12	1
Nickel	**0.0200**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:12	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:12	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:12	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:12	1
Vanadium	**0.00179**	**J**	0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:12	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:12	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**76.0**		15.0	5.10	mg/L			08/31/23 10:32	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-33_23_08
Date Collected: 08/29/23 14:20
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 07:53	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 07:53	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 07:53	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 07:53	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 07:53	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 07:53	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 07:53	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 07:53	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 07:53	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 07:53	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 07:53	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 07:53	1
1,4-Dichlorobenzene	**1.19**		1.00	0.230	ug/L			09/01/23 07:53	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 07:53	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 07:53	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 07:53	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 07:53	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 07:53	1
Benzene	**0.560**		0.500	0.220	ug/L			09/01/23 07:53	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 07:53	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 07:53	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 07:53	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 07:53	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 07:53	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 07:53	1
Chlorobenzene	**7.10**		1.00	0.400	ug/L			09/01/23 07:53	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 07:53	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 07:53	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 07:53	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 07:53	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 07:53	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 07:53	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 07:53	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 07:53	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 07:53	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 07:53	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 07:53	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 07:53	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 07:53	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 07:53	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 07:53	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 07:53	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 07:53	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 07:53	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 07:53	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 07:53	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 07:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 07:53*	*1*

Client Sample ID: MW-33_23_08
Lab Sample ID: 310-263688-14
Date Collected: 08/29/23 14:20
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/01/23 07:53*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/01/23 07:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		08/31/23 06:15	09/11/23 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*85*		*45 - 129*	*08/31/23 06:15*	*09/11/23 20:00*	*1*
2-Fluorobiphenyl (Surr)	*76*		*39 - 118*	*08/31/23 06:15*	*09/11/23 20:00*	*1*
Terphenyl-d14 (Surr)	*61*		*12 - 144*	*08/31/23 06:15*	*09/11/23 20:00*	*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		09/01/23 09:00	09/19/23 20:14	1
Arsenic	**0.0496**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:14	1
Barium	**0.819**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:14	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:14	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:14	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:14	1
Cobalt	**0.00147**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:14	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:14	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:14	1
Nickel	**0.00841**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:14	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:14	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:14	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:14	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:14	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:14	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**13.5**		7.50	2.55	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-35_23_08
Lab Sample ID: 310-263688-15
Date Collected: 08/28/23 10:40
Matrix: Water
Date Received: 08/30/23 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 08:16	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 08:16	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 08:16	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 08:16	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 08:16	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 08:16	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 08:16	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 08:16	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 08:16	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 08:16	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 08:16	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 08:16	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 08:16	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 08:16	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 08:16	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 08:16	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 08:16	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 08:16	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 08:16	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 08:16	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 08:16	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 08:16	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 08:16	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 08:16	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 08:16	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 08:16	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 08:16	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 08:16	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 08:16	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 08:16	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 08:16	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 08:16	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 08:16	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 08:16	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 08:16	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 08:16	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 08:16	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 08:16	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 08:16	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 08:16	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 08:16	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 08:16	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 08:16	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 08:16	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 08:16	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 08:16	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 08:16	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 08:16	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-35_23_08

Lab Sample ID: 310-263688-15

Date Collected: 08/28/23 10:40

Matrix: Water

Date Received: 08/30/23 16:25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 08:16*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 08:16*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/01/23 08:16*	*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		09/01/23 09:00	09/19/23 20:16	1
Arsenic	**0.00536**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:16	1
Barium	**0.167**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:16	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:16	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:16	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:16	1
Cobalt	**0.00535**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:16	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:16	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:16	1
Nickel	**0.0249**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:16	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:16	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:16	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:16	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:16	1
Zinc	**0.0324**		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:16	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**8.00**		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: MW-36_23_08
Date Collected: 08/28/23 10:00
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 08:38	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 08:38	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 08:38	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 08:38	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 08:38	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 08:38	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 08:38	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 08:38	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 08:38	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 08:38	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 08:38	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 08:38	1
1,4-Dichlorobenzene	**1.69**		1.00	0.230	ug/L			09/01/23 08:38	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 08:38	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 08:38	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 08:38	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 08:38	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 08:38	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 08:38	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 08:38	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 08:38	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 08:38	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 08:38	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 08:38	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 08:38	1
Chlorobenzene	**6.29**		1.00	0.400	ug/L			09/01/23 08:38	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 08:38	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 08:38	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 08:38	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 08:38	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 08:38	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 08:38	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 08:38	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 08:38	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 08:38	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 08:38	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 08:38	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 08:38	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 08:38	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 08:38	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 08:38	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 08:38	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 08:38	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 08:38	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 08:38	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 08:38	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 08:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 08:38*	*1*

Client Sample ID: MW-36_23_08
Lab Sample ID: 310-263688-16
Date Collected: 08/28/23 10:00
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 08:38*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*09/01/23 08:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/31/23 06:15	09/11/23 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*45 - 129*	*08/31/23 06:15*	*09/11/23 19:35*	*1*
2-Fluorobiphenyl (Surr)	*68*		*39 - 118*	*08/31/23 06:15*	*09/11/23 19:35*	*1*
Terphenyl-d14 (Surr)	*52*		*12 - 144*	*08/31/23 06:15*	*09/11/23 19:35*	*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		09/01/23 09:00	09/19/23 20:18	1
Arsenic	**0.0720**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:18	1
Barium	**0.735**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:18	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:18	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:18	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:18	1
Cobalt	**0.00126**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:18	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:18	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:18	1
Nickel	**0.00711**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:18	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:18	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:18	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:18	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:18	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:18	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**17.3**		5.00	1.70	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: FD-3_23_08
Date Collected: 08/28/23 00:00
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 09:01	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 09:01	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 09:01	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 09:01	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 09:01	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 09:01	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 09:01	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 09:01	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 09:01	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 09:01	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 09:01	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 09:01	1
1,4-Dichlorobenzene	**1.65**		1.00	0.230	ug/L			09/01/23 09:01	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 09:01	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 09:01	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 09:01	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 09:01	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 09:01	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 09:01	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 09:01	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 09:01	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 09:01	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 09:01	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 09:01	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 09:01	1
Chlorobenzene	**6.27**		1.00	0.400	ug/L			09/01/23 09:01	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 09:01	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 09:01	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 09:01	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 09:01	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 09:01	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 09:01	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 09:01	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 09:01	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 09:01	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 09:01	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 09:01	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 09:01	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 09:01	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 09:01	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 09:01	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 09:01	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 09:01	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 09:01	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 09:01	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 09:01	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 09:01*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-3_23_08
Lab Sample ID: 310-263688-17

Date Collected: 08/28/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/01/23 09:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/01/23 09:01*	*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		09/01/23 09:00	09/19/23 20:20	1
Arsenic	**0.0706**		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:20	1
Barium	**0.713**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:20	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:20	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:20	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:20	1
Cobalt	**0.00126**		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:20	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:20	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:20	1
Nickel	**0.00688**		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:20	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:20	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:20	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:20	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:20	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**26.3**		5.00	1.70	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-4_23_08
Lab Sample ID: 310-263688-18
Date Collected: 08/29/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 09:24	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 09:24	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 09:24	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 09:24	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 09:24	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 09:24	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 09:24	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 09:24	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 09:24	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 09:24	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 09:24	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 09:24	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 09:24	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 09:24	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 09:24	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 09:24	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 09:24	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 09:24	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 09:24	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 09:24	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 09:24	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 09:24	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 09:24	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 09:24	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 09:24	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 09:24	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 09:24	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 09:24	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 09:24	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 09:24	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 09:24	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 09:24	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 09:24	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 09:24	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 09:24	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 09:24	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 09:24	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 09:24	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 09:24	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 09:24	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 09:24	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 09:24	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 09:24	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 09:24	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 09:24	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 09:24	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*09/01/23 09:24*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-4_23_08
Lab Sample ID: 310-263688-18
Date Collected: 08/29/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/01/23 09:24*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/01/23 09:24*	*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		09/01/23 09:00	09/19/23 20:23	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:23	1
Barium	**0.100**		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:23	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:23	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:23	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:23	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:23	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:23	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:23	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:23	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:23	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:23	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:23	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:23	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.75**		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

Client Sample ID: FB-3_23_08
Date Collected: 08/29/23 11:10
Date Received: 08/30/23 16:25

Lab Sample ID: 310-263688-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 02:15	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 02:15	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 02:15	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 02:15	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 02:15	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 02:15	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 02:15	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 02:15	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 02:15	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 02:15	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 02:15	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 02:15	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 02:15	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 02:15	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 02:15	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 02:15	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 02:15	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 02:15	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 02:15	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 02:15	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 02:15	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 02:15	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 02:15	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 02:15	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 02:15	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 02:15	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 02:15	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 02:15	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 02:15	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 02:15	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 02:15	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 02:15	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 02:15	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 02:15	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 02:15	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 02:15	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 02:15	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 02:15	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 02:15	1
Toluene	**0.489**	**J**	1.00	0.430	ug/L			09/01/23 02:15	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 02:15	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 02:15	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 02:15	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 02:15	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 02:15	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 02:15	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 02:15	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 02:15	1

Client Sample ID: FB-3_23_08
Lab Sample ID: 310-263688-19
Date Collected: 08/29/23 11:10
Matrix: Water
Date Received: 08/30/23 16:25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 128*		*09/01/23 02:15*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/01/23 02:15*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/01/23 02:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m & p-Cresol	<0.700		10.0	0.700	ug/L		08/31/23 06:15	09/11/23 15:43	1
2,2'-oxybis(1-chloropropane)	<0.540		10.0	0.540	ug/L		08/31/23 06:15	09/11/23 15:43	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/31/23 06:15	09/11/23 15:43	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		08/31/23 06:15	09/11/23 15:43	1
Phenol	<1.10		10.0	1.10	ug/L		08/31/23 06:15	09/11/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*76*		*25 - 110*	*08/31/23 06:15*	*09/11/23 15:43*	*1*
Phenol-d5 (Surr)	*62*		*21 - 110*	*08/31/23 06:15*	*09/11/23 15:43*	*1*
Nitrobenzene-d5 (Surr)	*91*		*45 - 129*	*08/31/23 06:15*	*09/11/23 15:43*	*1*
2-Fluorobiphenyl (Surr)	*83*		*39 - 118*	*08/31/23 06:15*	*09/11/23 15:43*	*1*
2,4,6-Tribromophenol (Surr)	*95*		*27 - 136*	*08/31/23 06:15*	*09/11/23 15:43*	*1*
Terphenyl-d14 (Surr)	*97*		*12 - 144*	*08/31/23 06:15*	*09/11/23 15:43*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0558		0.123	0.0558	ug/L		08/31/23 06:12	09/13/23 15:04	2
beta-BHC	<0.0712		0.123	0.0712	ug/L		08/31/23 06:12	09/13/23 15:04	2
4,4'-DDT	<0.0808		0.123	0.0808	ug/L		08/31/23 06:12	09/13/23 15:04	2
delta-BHC	<0.0519		0.123	0.0519	ug/L		08/31/23 06:12	09/13/23 15:04	2
Dieldrin	<0.0500		0.123	0.0500	ug/L		08/31/23 06:12	09/13/23 15:04	2
Heptachlor	<0.0635		0.123	0.0635	ug/L		08/31/23 06:12	09/13/23 15:04	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*60*		*10 - 136*	*08/31/23 06:12*	*09/13/23 15:04*	*2*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.329		1.07	0.329	ug/L		09/05/23 09:51	09/07/23 12:56	1
2,4,5-TP	<0.0893		1.07	0.0893	ug/L		09/05/23 09:51	09/07/23 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*79*		*25 - 130*	*09/05/23 09:51*	*09/07/23 12:56*	*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		09/01/23 09:00	09/19/23 20:38	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 20:38	1
Barium	<0.000640		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 20:38	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 20:38	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 20:38	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:38	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 20:38	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 20:38	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 20:38	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 20:38	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: FB-3_23_08
Lab Sample ID: 310-263688-19
Date Collected: 08/29/23 11:10
Matrix: Water
Date Received: 08/30/23 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 20:38	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 20:38	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 20:38	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 20:38	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 20:38	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 20:38	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		09/08/23 10:26	09/11/23 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			08/31/23 09:44	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-3_23_08
Lab Sample ID: 310-263688-20
Date Collected: 08/29/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 02:38	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 02:38	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 02:38	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 02:38	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 02:38	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 02:38	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 02:38	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 02:38	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 02:38	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 02:38	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 02:38	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 02:38	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 02:38	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 02:38	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 02:38	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 02:38	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 02:38	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 02:38	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 02:38	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 02:38	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 02:38	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 02:38	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 02:38	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 02:38	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 02:38	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 02:38	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 02:38	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 02:38	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 02:38	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 02:38	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 02:38	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 02:38	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 02:38	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 02:38	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 02:38	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 02:38	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 02:38	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 02:38	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 02:38	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 02:38	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 02:38	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 02:38	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 02:38	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 02:38	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 02:38	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 02:38	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 02:38	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 02:38	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-3_23_08
Lab Sample ID: 310-263688-20
Date Collected: 08/29/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		80 - 128		09/01/23 02:38	1
Toluene-d8 (Surr)	100		80 - 120		09/01/23 02:38	1
4-Bromofluorobenzene (Surr)	103		80 - 120		09/01/23 02:38	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
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
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: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263688-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		DBFM	TOL	BFB					
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)					
310-263688-1	AW-1_23_08	95	100	112					
310-263688-1 MS	AW-1_23_08	98	102	99					
310-263688-1 MSD	AW-1_23_08	97	104	112					
310-263688-2	AW-5_23_08	96	98	104					
310-263688-3	AW-6_23_08	95	100	93					
310-263688-4	CRL-9_23_08	97	99	91					
310-263688-5	MW-17_23_08	95	100	105					
310-263688-6	MW-18_23_08	97	99	96					
310-263688-7	MW-19_23_08	97	100	104					
310-263688-8	MW-20_23_08	97	99	125 S1+					
310-263688-9	MW-21_23_08	96	100	93					
310-263688-10	MW-23_23_08	95	101	115					
310-263688-11	MW-30_23_08	97	99	107					
310-263688-12	MW-31_23_08	96	100	105					
310-263688-13	MW-32_23_08	98	100	116					
310-263688-14	MW-33_23_08	95	99	95					
310-263688-15	MW-35_23_08	95	100	105					
310-263688-16	MW-36_23_08	97	100	102					
310-263688-17	FD-3_23_08	96	99	103					
310-263688-18	FD-4_23_08	94	102	105					
310-263688-19	FB-3_23_08	97	101	103					
310-263688-20	TB-3_23_08	97	100	103					
LCS 310-398344/6	Lab Control Sample	98	104	97					
LCS 310-398344/7	Lab Control Sample	98	100	101					
MB 310-398344/5	Method Blank	95	98	104					

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
		NBZ	FBP	TPHL	2FP	PHL	TBP		
Lab Sample ID	Client Sample ID	(45-129)	(39-118)	(12-144)	(25-110)	(21-110)	(27-136)		
310-263688-1	AW-1_23_08	76	67	45					
310-263688-3	AW-6_23_08	64	57	39					
310-263688-4	CRL-9_23_08	61	56	40					
310-263688-5	MW-17_23_08	80	70	55					
310-263688-6	MW-18_23_08	78	70	49					
310-263688-7	MW-19_23_08	61	56	36					
310-263688-11	MW-30_23_08	76	70	46					
310-263688-13	MW-32_23_08	81	70	57					
310-263688-14	MW-33_23_08	85	76	61					
310-263688-16	MW-36_23_08	74	68	52					
310-263688-19	FB-3_23_08	91	83	97	76	62	95		
LCS 310-398231/2-A	Lab Control Sample	90	86	99	73	60	91		
LCSD 310-398231/3-A	Lab Control Sample Dup	89	86	99	73	61	92		

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	FBP	TPHL	2FP	PHL	TBP
Lab Sample ID	Client Sample ID	(45-129)	(39-118)	(12-144)	(25-110)	(21-110)	(27-136)
MB 310-398231/1-A	Method Blank	96	89	116	83	67	104

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)
2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-263688-9	MW-21_23_08	88	
310-263688-19	FB-3_23_08	60	
LCS 310-398230/4-A	Lab Control Sample	54	79
LCSD 310-398230/5-A	Lab Control Sample Dup	49	72
MB 310-398230/1-A	Method Blank	74	86

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1
Lab Sample ID	Client Sample ID	(25-130)
310-263688-2	AW-5_23_08	78
310-263688-3	AW-6_23_08	756 S1+
310-263688-5	MW-17_23_08	99
310-263688-9	MW-21_23_08	74
310-263688-13	MW-32_23_08	74
310-263688-19	FB-3_23_08	79
LB 500-730789/1-B	Method Blank	74
LCS 500-730641/2-A	Lab Control Sample	82
LCSD 500-730641/3-A	Lab Control Sample Dup	86
MB 500-730641/1-A	Method Blank	73

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1
Lab Sample ID	Client Sample ID	(25-130)
310-263073-B-1-J MS	Matrix Spike	84

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-398344/5
Matrix: Water
Analysis Batch: 398344

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 01:08	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 01:08	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 01:08	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 01:08	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 01:08	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 01:08	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 01:08	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 01:08	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 01:08	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 01:08	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 01:08	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 01:08	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 01:08	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 01:08	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 01:08	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 01:08	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 01:08	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 01:08	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 01:08	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 01:08	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 01:08	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 01:08	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 01:08	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 01:08	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 01:08	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 01:08	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 01:08	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 01:08	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 01:08	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 01:08	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 01:08	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 01:08	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 01:08	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 01:08	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 01:08	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 01:08	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 01:08	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 01:08	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 01:08	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 01:08	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 01:08	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 01:08	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 01:08	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 01:08	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 01:08	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 01:08	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 01:08	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 01:08	1

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

Lab Sample ID: MB 310-398344/5
Matrix: Water
Analysis Batch: 398344

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/01/23 01:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/01/23 01:08*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*09/01/23 01:08*	*1*

Lab Sample ID: LCS 310-398344/6
Matrix: Water
Analysis Batch: 398344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	17.85		ug/L		89	68 - 123
1,1,1-Trichloroethane	20.0	18.67		ug/L		93	71 - 128
1,1,2,2-Tetrachloroethane	20.0	20.48		ug/L		102	64 - 124
1,1,2-Trichloroethane	20.0	18.78		ug/L		94	70 - 124
1,1-Dichloroethane	20.0	17.84		ug/L		89	71 - 123
1,1-Dichloroethene	20.0	19.56		ug/L		98	61 - 129
1,2,3-Trichloropropane	20.0	17.77		ug/L		89	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	19.54		ug/L		98	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.01		ug/L		95	73 - 125
1,2-Dichlorobenzene	20.0	19.15		ug/L		96	68 - 120
1,2-Dichloroethane	20.0	16.76		ug/L		84	70 - 124
1,2-Dichloropropane	20.0	18.19		ug/L		91	73 - 121
1,3-Dichlorobenzene	20.0	18.82		ug/L		94	67 - 123
1,4-Dichlorobenzene	20.0	19.17		ug/L		96	67 - 120
2-Butanone (MEK)	40.0	35.08		ug/L		88	50 - 150
2-Hexanone	40.0	37.96		ug/L		95	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	39.24		ug/L		98	62 - 130
Acetone	40.0	37.42		ug/L		94	50 - 150
Acrylonitrile	200	178.3		ug/L		89	50 - 150
Benzene	20.0	18.03		ug/L		90	73 - 122
Bromochloromethane	20.0	17.56		ug/L		88	68 - 132
Bromodichloromethane	20.0	18.42		ug/L		92	72 - 121
Bromoform	20.0	18.10		ug/L		91	55 - 129
Carbon disulfide	20.0	18.87		ug/L		94	58 - 131
Carbon tetrachloride	20.0	18.50		ug/L		93	67 - 132
Chlorobenzene	20.0	19.07		ug/L		95	69 - 121
Chlorodibromomethane	20.0	17.25		ug/L		86	69 - 122
Chloroform	20.0	18.12		ug/L		91	72 - 120
cis-1,2-Dichloroethene	20.0	18.68		ug/L		93	74 - 120
cis-1,3-Dichloropropene	20.0	18.15		ug/L		91	71 - 126
Dibromomethane	20.0	16.91		ug/L		85	72 - 123
Ethylbenzene	20.0	18.96		ug/L		95	69 - 122
Iodomethane	20.0	17.36		ug/L		87	10 - 150
Methylene Chloride	20.0	18.31		ug/L		92	50 - 150
Styrene	20.0	18.93		ug/L		95	67 - 125
Tetrachloroethene	20.0	19.58		ug/L		98	69 - 131
Toluene	20.0	18.85		ug/L		94	72 - 121
trans-1,2-Dichloroethene	20.0	18.89		ug/L		94	68 - 125
trans-1,3-Dichloropropene	20.0	17.21		ug/L		86	68 - 124

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

Lab Sample ID: LCS 310-398344/6
Matrix: Water
Analysis Batch: 398344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,4-Dichloro-2-butene	20.0	17.86		ug/L		89	48 - 150
Trichloroethene	20.0	18.77		ug/L		94	73 - 126
Vinyl acetate	40.0	40.79		ug/L		102	50 - 150
Xylenes, Total	40.0	38.07		ug/L		95	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: LCS 310-398344/7
Matrix: Water
Analysis Batch: 398344

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	9.741		ug/L		49	24 - 150
Chloroethane	20.0	16.01		ug/L		80	51 - 137
Chloromethane	20.0	17.94		ug/L		90	37 - 150
Trichlorofluoromethane	20.0	18.07		ug/L		90	56 - 144
Vinyl chloride	20.0	18.75		ug/L		94	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: 310-263688-1 MS
Matrix: Water
Analysis Batch: 398344

Client Sample ID: AW-1_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.11		ug/L		86	52 - 130
1,1,1-Trichloroethane	<0.190		20.0	16.90		ug/L		84	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	19.51		ug/L		98	51 - 130
1,1,2-Trichloroethane	<0.450		20.0	18.63		ug/L		93	56 - 130
1,1-Dichloroethane	<0.220		20.0	17.81		ug/L		89	53 - 130
1,1-Dichloroethene	<0.560		20.0	18.25		ug/L		91	39 - 130
1,2,3-Trichloropropane	<0.590		20.0	16.98		ug/L		85	50 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	19.64		ug/L		98	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	18.87		ug/L		94	59 - 130
1,2-Dichlorobenzene	0.539	J	20.0	18.88		ug/L		92	53 - 130
1,2-Dichloroethane	<0.390		20.0	16.79		ug/L		84	57 - 130
1,2-Dichloropropane	<0.270		20.0	18.06		ug/L		90	60 - 130
1,3-Dichlorobenzene	<0.300		20.0	18.37		ug/L		92	54 - 130
1,4-Dichlorobenzene	1.19		20.0	19.59		ug/L		92	53 - 130
2-Butanone (MEK)	<2.10		40.0	36.30		ug/L		91	47 - 150
2-Hexanone	<2.00		40.0	38.92		ug/L		97	45 - 132
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	40.05		ug/L		100	46 - 132

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

Lab Sample ID: 310-263688-1 MS
Matrix: Water
Analysis Batch: 398344

Client Sample ID: AW-1_23_08
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	38.25		ug/L		96	35 - 150
Acrylonitrile	<2.20		200	174.3		ug/L		87	50 - 150
Benzene	0.225	J	20.0	17.17		ug/L		85	47 - 130
Bromochloromethane	<0.540		20.0	17.10		ug/L		86	54 - 132
Bromodichloromethane	<0.390		20.0	17.73		ug/L		89	58 - 130
Bromoform	<0.780		20.0	18.25		ug/L		91	42 - 130
Carbon disulfide	<0.450		20.0	18.77		ug/L		94	39 - 131
Carbon tetrachloride	<0.650		20.0	16.54		ug/L		83	45 - 132
Chlorobenzene	4.09		20.0	21.65		ug/L		88	54 - 130
Chlorodibromomethane	<0.750		20.0	17.64		ug/L		88	53 - 130
Chloroform	<1.30		20.0	17.49		ug/L		87	55 - 130
cis-1,2-Dichloroethene	0.628	J	20.0	19.09		ug/L		92	52 - 130
cis-1,3-Dichloropropene	<0.250		20.0	17.53		ug/L		88	55 - 130
Dibromomethane	<0.330		20.0	16.79		ug/L		84	61 - 130
Ethylbenzene	<0.310		20.0	17.69		ug/L		88	48 - 130
Iodomethane	<7.00		20.0	16.01		ug/L		80	10 - 150
Methylene Chloride	<1.70		20.0	17.66		ug/L		88	50 - 150
Styrene	<0.370		20.0	18.07		ug/L		90	46 - 130
Tetrachloroethene	<0.480		20.0	17.53		ug/L		88	42 - 131
Toluene	<0.430		20.0	18.22		ug/L		91	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	18.10		ug/L		90	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	16.66		ug/L		83	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.25		ug/L		76	33 - 150
Trichloroethene	<0.430		20.0	17.98		ug/L		90	55 - 130
Vinyl acetate	<2.50		40.0	37.23		ug/L		93	34 - 150
Xylenes, Total	<0.400		40.0	35.77		ug/L		89	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-263688-1 MSD
Matrix: Water
Analysis Batch: 398344

Client Sample ID: AW-1_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.58		ug/L		88	52 - 130	3	20
1,1,1-Trichloroethane	<0.190		20.0	16.75		ug/L		84	49 - 130	1	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	20.19		ug/L		101	51 - 130	3	20
1,1,2-Trichloroethane	<0.450		20.0	18.96		ug/L		95	56 - 130	2	20
1,1-Dichloroethane	<0.220		20.0	17.53		ug/L		88	53 - 130	2	20
1,1-Dichloroethene	<0.560		20.0	18.26		ug/L		91	39 - 130	0	28
1,2,3-Trichloropropane	<0.590		20.0	18.31		ug/L		92	50 - 130	8	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	21.86		ug/L		109	45 - 150	11	20
1,2-Dibromoethane (EDB)	<0.340		20.0	18.96		ug/L		95	59 - 130	1	20
1,2-Dichlorobenzene	0.539	J	20.0	20.67		ug/L		101	53 - 130	9	20
1,2-Dichloroethane	<0.390		20.0	16.62		ug/L		83	57 - 130	1	21

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

Lab Sample ID: 310-263688-1 MSD
Client Sample ID: AW-1_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398344

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloropropane	<0.270		20.0	17.90		ug/L		90	60 - 130	1	31
1,3-Dichlorobenzene	<0.300		20.0	19.59		ug/L		98	54 - 130	6	20
1,4-Dichlorobenzene	1.19		20.0	20.68		ug/L		97	53 - 130	5	20
2-Butanone (MEK)	<2.10		40.0	35.82		ug/L		90	47 - 150	1	20
2-Hexanone	<2.00		40.0	40.32		ug/L		101	45 - 132	4	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	39.79		ug/L		99	46 - 132	1	20
Acetone	<3.10		40.0	38.35		ug/L		96	35 - 150	0	26
Acrylonitrile	<2.20		200	176.4		ug/L		88	50 - 150	1	21
Benzene	0.225	J	20.0	17.06		ug/L		84	47 - 130	1	20
Bromochloromethane	<0.540		20.0	17.11		ug/L		86	54 - 132	0	20
Bromodichloromethane	<0.390		20.0	18.46		ug/L		92	58 - 130	4	20
Bromoform	<0.780		20.0	18.08		ug/L		90	42 - 130	1	20
Carbon disulfide	<0.450		20.0	17.71		ug/L		89	39 - 131	6	32
Carbon tetrachloride	<0.650		20.0	16.24		ug/L		81	45 - 132	2	20
Chlorobenzene	4.09		20.0	22.27		ug/L		91	54 - 130	3	20
Chlorodibromomethane	<0.750		20.0	17.61		ug/L		88	53 - 130	0	20
Chloroform	<1.30		20.0	17.47		ug/L		87	55 - 130	0	20
cis-1,2-Dichloroethene	0.628	J	20.0	18.98		ug/L		92	52 - 130	1	20
cis-1,3-Dichloropropene	<0.250		20.0	17.74		ug/L		89	55 - 130	1	20
Dibromomethane	<0.330		20.0	16.59		ug/L		83	61 - 130	1	20
Ethylbenzene	<0.310		20.0	18.38		ug/L		92	48 - 130	4	20
Iodomethane	<7.00		20.0	16.09		ug/L		80	10 - 150	0	35
Methylene Chloride	<1.70		20.0	17.85		ug/L		89	50 - 150	1	24
Styrene	<0.370		20.0	18.80		ug/L		94	46 - 130	4	20
Tetrachloroethene	<0.480		20.0	17.69		ug/L		88	42 - 131	1	20
Toluene	<0.430		20.0	18.54		ug/L		93	48 - 130	2	20
trans-1,2-Dichloroethene	<0.270		20.0	17.45		ug/L		87	54 - 130	4	24
trans-1,3-Dichloropropene	<0.560		20.0	16.86		ug/L		84	51 - 130	1	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.15		ug/L		76	33 - 150	1	20
Trichloroethene	<0.430		20.0	17.85		ug/L		89	55 - 130	1	20
Vinyl acetate	<2.50		40.0	36.73		ug/L		92	34 - 150	1	27
Xylenes, Total	<0.400		40.0	37.13		ug/L		93	44 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*112*		*80 - 120*

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

Lab Sample ID: MB 310-398231/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 399079
Prep Batch: 398231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m & p-Cresol	<0.700		10.0	0.700	ug/L		08/31/23 06:15	09/11/23 13:08	1
2,2'-oxybis(1-chloropropane)	<0.540		10.0	0.540	ug/L		08/31/23 06:15	09/11/23 13:08	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		08/31/23 06:15	09/11/23 13:08	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		08/31/23 06:15	09/11/23 13:08	1

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

Lab Sample ID: MB 310-398231/1-A
Matrix: Water
Analysis Batch: 399079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<1.10		10.0	1.10	ug/L		08/31/23 06:15	09/11/23 13:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*83*		*25 - 110*	*08/31/23 06:15*	*09/11/23 13:08*	*1*
Phenol-d5 (Surr)	*67*		*21 - 110*	*08/31/23 06:15*	*09/11/23 13:08*	*1*
Nitrobenzene-d5 (Surr)	*96*		*45 - 129*	*08/31/23 06:15*	*09/11/23 13:08*	*1*
2-Fluorobiphenyl (Surr)	*89*		*39 - 118*	*08/31/23 06:15*	*09/11/23 13:08*	*1*
2,4,6-Tribromophenol (Surr)	*104*		*27 - 136*	*08/31/23 06:15*	*09/11/23 13:08*	*1*
Terphenyl-d14 (Surr)	*116*		*12 - 144*	*08/31/23 06:15*	*09/11/23 13:08*	*1*

Lab Sample ID: LCS 310-398231/2-A
Matrix: Water
Analysis Batch: 399079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
m & p-Cresol	100	87.72		ug/L		88	46 - 117
2,2'-oxybis(1-chloropropane)	100	83.74		ug/L		84	34 - 123
Bis(2-ethylhexyl) phthalate	100	105.5		ug/L		105	43 - 143
Diethyl phthalate	100	104.0		ug/L		104	43 - 135
Di-n-butyl phthalate	100	97.54		ug/L		98	50 - 133
Phenol	100	60.75		ug/L		61	29 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*73*		*25 - 110*
Phenol-d5 (Surr)	*60*		*21 - 110*
Nitrobenzene-d5 (Surr)	*90*		*45 - 129*
2-Fluorobiphenyl (Surr)	*86*		*39 - 118*
2,4,6-Tribromophenol (Surr)	*91*		*27 - 136*
Terphenyl-d14 (Surr)	*99*		*12 - 144*

Lab Sample ID: LCSD 310-398231/3-A
Matrix: Water
Analysis Batch: 399079

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 398231

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m & p-Cresol	100	83.38		ug/L		83	46 - 117	5	35
2,2'-oxybis(1-chloropropane)	100	79.22		ug/L		79	34 - 123	6	35
Bis(2-ethylhexyl) phthalate	100	99.48		ug/L		99	43 - 143	6	35
Diethyl phthalate	100	101.0		ug/L		101	43 - 135	3	35
Di-n-butyl phthalate	100	93.11		ug/L		93	50 - 133	5	35
Phenol	100	58.57		ug/L		59	29 - 110	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*73*		*25 - 110*
Phenol-d5 (Surr)	*61*		*21 - 110*
Nitrobenzene-d5 (Surr)	*89*		*45 - 129*
2-Fluorobiphenyl (Surr)	*86*		*39 - 118*
2,4,6-Tribromophenol (Surr)	*92*		*27 - 136*

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

Lab Sample ID: LCSD 310-398231/3-A
Matrix: Water
Analysis Batch: 399079

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 398231

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14 (Surr)	*99*		*12 - 144*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-398230/1-A
Matrix: Water
Analysis Batch: 399217

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398230

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		08/31/23 06:12	09/12/23 11:10	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		08/31/23 06:12	09/12/23 11:10	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		08/31/23 06:12	09/12/23 11:10	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		08/31/23 06:12	09/12/23 11:10	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		08/31/23 06:12	09/12/23 11:10	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		08/31/23 06:12	09/12/23 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*74*		*10 - 136*	*08/31/23 06:12*	*09/12/23 11:10*	*1*

Lab Sample ID: LCS 310-398230/4-A
Matrix: Water
Analysis Batch: 399217

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398230

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4,4'-DDT			1.00	0.3152		ug/L		32	23 - 150		
Dieldrin			1.00	0.7618		ug/L		76	39 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*54*		*10 - 136*
Tetrachloro-m-xylene	*79*		*10 - 130*

Lab Sample ID: LCSD 310-398230/5-A
Matrix: Water
Analysis Batch: 399217

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 398230

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDT			1.00	0.3402		ug/L		34	23 - 150	8	35
Dieldrin			1.00	0.8006		ug/L		80	39 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*49*		*10 - 136*
Tetrachloro-m-xylene	*72*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: LB 500-730789/1-B
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730641

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<30.7		100	30.7	ug/L		09/05/23 09:52	09/07/23 09:27	1
2,4,5-TP	<8.34		100	8.34	ug/L		09/05/23 09:52	09/07/23 09:27	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*74*		*25 - 130*	*09/05/23 09:52*	*09/07/23 09:27*	*1*

Lab Sample ID: MB 500-730641/1-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.307		1.00	0.307	ug/L		09/01/23 16:59	09/07/23 08:35	1
2,4,5-TP	<0.0834		1.00	0.0834	ug/L		09/01/23 16:59	09/07/23 08:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*73*		*25 - 130*	*09/01/23 16:59*	*09/07/23 08:35*	*1*

Lab Sample ID: LCS 500-730641/2-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 730641

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-TP			2.50	1.963		ug/L		79	32 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*82*		*25 - 130*

Lab Sample ID: LCSD 500-730641/3-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 730641

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-TP			2.50	2.008		ug/L		80	32 - 115	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*86*		*25 - 130*

Lab Sample ID: 310-263073-B-1-J MS
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 730641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-TP	<8.34		250	197.1		ug/L		79	32 - 115		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCAA	*84*		*25 - 130*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-398374/1-A
Matrix: Water
Analysis Batch: 400043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		09/01/23 09:00	09/19/23 19:03	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/01/23 09:00	09/19/23 19:03	1
Barium	<0.000640		0.00200	0.000640	mg/L		09/01/23 09:00	09/19/23 19:03	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/01/23 09:00	09/19/23 19:03	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/01/23 09:00	09/19/23 19:03	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:03	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/01/23 09:00	09/19/23 19:03	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/01/23 09:00	09/19/23 19:03	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/01/23 09:00	09/19/23 19:03	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/01/23 09:00	09/19/23 19:03	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/01/23 09:00	09/19/23 19:03	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/01/23 09:00	09/19/23 19:03	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/19/23 19:03	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/01/23 09:00	09/19/23 19:03	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/01/23 09:00	09/19/23 19:03	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/01/23 09:00	09/19/23 19:03	1

Lab Sample ID: MB 310-398374/1-A
Matrix: Water
Analysis Batch: 400895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.000260		0.00100	0.000260	mg/L		09/01/23 09:00	09/27/23 19:00	1

Lab Sample ID: LCS 310-398374/2-A
Matrix: Water
Analysis Batch: 400043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2318		mg/L		116	80 - 120
Arsenic	0.200	0.2102		mg/L		105	80 - 120
Barium	0.100	0.1128		mg/L		113	80 - 120
Beryllium	0.100	0.1022		mg/L		102	80 - 120
Cadmium	0.100	0.1045		mg/L		104	80 - 120
Chromium	0.100	0.1086		mg/L		109	80 - 120
Cobalt	0.100	0.1026		mg/L		103	80 - 120
Copper	0.200	0.2110		mg/L		106	80 - 120
Lead	0.200	0.2242		mg/L		112	80 - 120
Nickel	0.200	0.2149		mg/L		107	80 - 120
Selenium	0.400	0.4101		mg/L		103	80 - 120
Silver	0.100	0.1123		mg/L		112	80 - 120
Vanadium	0.100	0.1015		mg/L		102	80 - 120
Zinc	0.200	0.2088		mg/L		104	80 - 120

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

Lab Sample ID: LCS 310-398374/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 400895
Prep Batch: 398374

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Thallium			0.200	0.1760		mg/L		88	80 - 120		

Lab Sample ID: 310-263688-1 MS
Client Sample ID: AW-1_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 400043
Prep Batch: 398374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	<0.00100	F1	0.200	0.2533	F1	mg/L		127	75 - 125		
Arsenic	0.0678		0.200	0.2804		mg/L		106	75 - 125		
Barium	0.153		0.100	0.2659		mg/L		113	75 - 125		
Beryllium	<0.000330		0.100	0.1060		mg/L		106	75 - 125		
Cadmium	0.000191	J	0.100	0.1024		mg/L		102	75 - 125		
Chromium	<0.00110		0.100	0.1060		mg/L		106	75 - 125		
Cobalt	0.00202		0.100	0.09960		mg/L		98	75 - 125		
Copper	<0.00180		0.200	0.1997		mg/L		100	75 - 125		
Lead	0.000974		0.200	0.2122		mg/L		106	75 - 125		
Nickel	0.0332		0.200	0.2366		mg/L		102	75 - 125		
Selenium	0.00154	J	0.400	0.4162		mg/L		104	75 - 125		
Silver	<0.000500		0.100	0.1074		mg/L		107	75 - 125		
Vanadium	<0.00110		0.100	0.1010		mg/L		101	75 - 125		
Zinc	0.0261		0.200	0.2387		mg/L		106	75 - 125		

Lab Sample ID: 310-263688-1 MS
Client Sample ID: AW-1_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 401020
Prep Batch: 398374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Thallium	0.00120	F1	0.200	0.1165	F1	mg/L		58	75 - 125		

Lab Sample ID: 310-263688-1 MSD
Client Sample ID: AW-1_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 400043
Prep Batch: 398374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100	F1	0.200	0.2508		mg/L		125	75 - 125	1	20
Arsenic	0.0678		0.200	0.2785		mg/L		105	75 - 125	1	20
Barium	0.153		0.100	0.2638		mg/L		111	75 - 125	1	20
Beryllium	<0.000330		0.100	0.1058		mg/L		106	75 - 125	0	20
Cadmium	0.000191	J	0.100	0.1014		mg/L		101	75 - 125	1	20
Chromium	<0.00110		0.100	0.1059		mg/L		106	75 - 125	0	20
Cobalt	0.00202		0.100	0.09893		mg/L		97	75 - 125	1	20
Copper	<0.00180		0.200	0.1972		mg/L		99	75 - 125	1	20
Lead	0.000974		0.200	0.2132		mg/L		106	75 - 125	0	20
Nickel	0.0332		0.200	0.2346		mg/L		101	75 - 125	1	20
Selenium	0.00154	J	0.400	0.4161		mg/L		104	75 - 125	0	20
Silver	<0.000500		0.100	0.1066		mg/L		107	75 - 125	1	20
Vanadium	<0.00110		0.100	0.1015		mg/L		101	75 - 125	0	20
Zinc	0.0261		0.200	0.2385		mg/L		106	75 - 125	0	20

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

Lab Sample ID: 310-263688-1 MSD — **Client Sample ID: AW-1_23_08**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 401020 — **Prep Batch: 398374**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	0.00120	F1	0.200	0.1339	F1	mg/L		66	75 - 125	14	20

Lab Sample ID: 310-263688-11 DU — **Client Sample ID: MW-30_23_08**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 400043 — **Prep Batch: 398374**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	<0.00100			<0.00100		mg/L				NC	20
Arsenic	0.00927			0.009492		mg/L				2	20
Barium	0.203			0.2082		mg/L				3	20
Beryllium	<0.000330			<0.000330		mg/L				NC	20
Cadmium	<0.000100			<0.000100		mg/L				NC	20
Chromium	<0.00110			<0.00110		mg/L				NC	20
Cobalt	0.000740			0.0007670		mg/L				4	20
Copper	<0.00180			<0.00180		mg/L				NC	20
Lead	<0.000240			<0.000240		mg/L				NC	20
Nickel	0.0118			0.01203		mg/L				2	20
Selenium	<0.00140			<0.00140		mg/L				NC	20
Silver	<0.000500			<0.000500		mg/L				NC	20
Thallium	0.000636	J		0.0006640	J	mg/L				4	20
Vanadium	<0.00110			<0.00110		mg/L				NC	20
Zinc	0.0833			0.08755		mg/L				5	20
Tin	<0.00230			<0.00230		mg/L				NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-399007/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 399188 — **Prep Batch: 399007**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		09/08/23 10:25	09/11/23 10:25	1

Lab Sample ID: LCS 310-399007/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 399188 — **Prep Batch: 399007**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.001614		mg/L		97	80 - 120		

Lab Sample ID: 500-238774-A-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 399188 — **Prep Batch: 399007**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000140		0.00167	0.001607		mg/L		96	80 - 120		

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 500-238774-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 399188 — **Prep Batch: 399007**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000140		0.00167	0.001606		mg/L		96	80 - 120	0	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-398280/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.70		5.00	1.70	mg/L			08/31/23 09:44	1

Lab Sample ID: LCS 310-398280/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	75 - 116

Lab Sample ID: 310-263637-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398280

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	174		162.0		mg/L		7	35

Lab Sample ID: 310-263663-A-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398280

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	92.0		98.00		mg/L		6	35

Lab Sample ID: MB 310-398290/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.70		5.00	1.70	mg/L			08/31/23 10:32	1

Lab Sample ID: LCS 310-398290/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 398290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	93.00		mg/L		93	75 - 116

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: 310-263688-13 DU
Client Sample ID: MW-32_23_08
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 398290

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	76.0			76.00		mg/L				0	35

GC/MS VOA

Analysis Batch: 398344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	8260D	
310-263688-2	AW-5_23_08	Total/NA	Water	8260D	
310-263688-3	AW-6_23_08	Total/NA	Water	8260D	
310-263688-4	CRL-9_23_08	Total/NA	Water	8260D	
310-263688-5	MW-17_23_08	Total/NA	Water	8260D	
310-263688-6	MW-18_23_08	Total/NA	Water	8260D	
310-263688-7	MW-19_23_08	Total/NA	Water	8260D	
310-263688-8	MW-20_23_08	Total/NA	Water	8260D	
310-263688-9	MW-21_23_08	Total/NA	Water	8260D	
310-263688-10	MW-23_23_08	Total/NA	Water	8260D	
310-263688-11	MW-30_23_08	Total/NA	Water	8260D	
310-263688-12	MW-31_23_08	Total/NA	Water	8260D	
310-263688-13	MW-32_23_08	Total/NA	Water	8260D	
310-263688-14	MW-33_23_08	Total/NA	Water	8260D	
310-263688-15	MW-35_23_08	Total/NA	Water	8260D	
310-263688-16	MW-36_23_08	Total/NA	Water	8260D	
310-263688-17	FD-3_23_08	Total/NA	Water	8260D	
310-263688-18	FD-4_23_08	Total/NA	Water	8260D	
310-263688-19	FB-3_23_08	Total/NA	Water	8260D	
310-263688-20	TB-3_23_08	Total/NA	Water	8260D	
MB 310-398344/5	Method Blank	Total/NA	Water	8260D	
LCS 310-398344/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-398344/7	Lab Control Sample	Total/NA	Water	8260D	
310-263688-1 MS	AW-1_23_08	Total/NA	Water	8260D	
310-263688-1 MSD	AW-1_23_08	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 398231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	3510C	
310-263688-3	AW-6_23_08	Total/NA	Water	3510C	
310-263688-4	CRL-9_23_08	Total/NA	Water	3510C	
310-263688-5	MW-17_23_08	Total/NA	Water	3510C	
310-263688-6	MW-18_23_08	Total/NA	Water	3510C	
310-263688-7	MW-19_23_08	Total/NA	Water	3510C	
310-263688-11	MW-30_23_08	Total/NA	Water	3510C	
310-263688-13	MW-32_23_08	Total/NA	Water	3510C	
310-263688-14	MW-33_23_08	Total/NA	Water	3510C	
310-263688-16	MW-36_23_08	Total/NA	Water	3510C	
310-263688-19	FB-3_23_08	Total/NA	Water	3510C	
MB 310-398231/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-398231/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-398231/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 399079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	8270E	398231
310-263688-3	AW-6_23_08	Total/NA	Water	8270E	398231
310-263688-4	CRL-9_23_08	Total/NA	Water	8270E	398231
310-263688-5	MW-17_23_08	Total/NA	Water	8270E	398231

GC/MS Semi VOA (Continued)

Analysis Batch: 399079 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-6	MW-18_23_08	Total/NA	Water	8270E	398231
310-263688-7	MW-19_23_08	Total/NA	Water	8270E	398231
310-263688-11	MW-30_23_08	Total/NA	Water	8270E	398231
310-263688-13	MW-32_23_08	Total/NA	Water	8270E	398231
310-263688-14	MW-33_23_08	Total/NA	Water	8270E	398231
310-263688-16	MW-36_23_08	Total/NA	Water	8270E	398231
310-263688-19	FB-3_23_08	Total/NA	Water	8270E	398231
MB 310-398231/1-A	Method Blank	Total/NA	Water	8270E	398231
LCS 310-398231/2-A	Lab Control Sample	Total/NA	Water	8270E	398231
LCSD 310-398231/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	398231

GC Semi VOA

Prep Batch: 398230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-9	MW-21_23_08	Total/NA	Water	3510C	
310-263688-19	FB-3_23_08	Total/NA	Water	3510C	
MB 310-398230/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-398230/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-398230/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 399217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-9	MW-21_23_08	Total/NA	Water	8081B	398230
MB 310-398230/1-A	Method Blank	Total/NA	Water	8081B	398230
LCS 310-398230/4-A	Lab Control Sample	Total/NA	Water	8081B	398230
LCSD 310-398230/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	398230

Analysis Batch: 399386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-19	FB-3_23_08	Total/NA	Water	8081B	398230

Prep Batch: 730641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-2	AW-5_23_08	Total/NA	Water	8151A	
310-263688-3	AW-6_23_08	Total/NA	Water	8151A	
310-263688-5	MW-17_23_08	Total/NA	Water	8151A	
310-263688-9	MW-21_23_08	Total/NA	Water	8151A	
310-263688-13	MW-32_23_08	Total/NA	Water	8151A	
310-263688-19	FB-3_23_08	Total/NA	Water	8151A	
LB 500-730789/1-B	Method Blank	Total/NA	Water	8151A	730789
MB 500-730641/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-730641/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-730641/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
310-263073-B-1-J MS	Matrix Spike	TCLP	Water	8151A	730789

Leach Batch: 730789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-730789/1-B	Method Blank	Total/NA	Water	1311	
310-263073-B-1-J MS	Matrix Spike	TCLP	Water	1311	

GC Semi VOA

Analysis Batch: 731117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-2	AW-5_23_08	Total/NA	Water	8151A	730641
310-263688-3	AW-6_23_08	Total/NA	Water	8151A	730641
310-263688-5	MW-17_23_08	Total/NA	Water	8151A	730641
310-263688-9	MW-21_23_08	Total/NA	Water	8151A	730641
310-263688-13	MW-32_23_08	Total/NA	Water	8151A	730641
310-263688-19	FB-3_23_08	Total/NA	Water	8151A	730641
LB 500-730789/1-B	Method Blank	Total/NA	Water	8151A	730641
MB 500-730641/1-A	Method Blank	Total/NA	Water	8151A	730641
LCS 500-730641/2-A	Lab Control Sample	Total/NA	Water	8151A	730641
LCSD 500-730641/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	730641
310-263073-B-1-J MS	Matrix Spike	TCLP	Water	8151A	730641

Metals

Prep Batch: 398374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	3005A	
310-263688-2	AW-5_23_08	Total/NA	Water	3005A	
310-263688-3	AW-6_23_08	Total/NA	Water	3005A	
310-263688-4	CRL-9_23_08	Total/NA	Water	3005A	
310-263688-5	MW-17_23_08	Total/NA	Water	3005A	
310-263688-6	MW-18_23_08	Total/NA	Water	3005A	
310-263688-7	MW-19_23_08	Total/NA	Water	3005A	
310-263688-8	MW-20_23_08	Total/NA	Water	3005A	
310-263688-9	MW-21_23_08	Total/NA	Water	3005A	
310-263688-10	MW-23_23_08	Total/NA	Water	3005A	
310-263688-11	MW-30_23_08	Total/NA	Water	3005A	
310-263688-12	MW-31_23_08	Total/NA	Water	3005A	
310-263688-13	MW-32_23_08	Total/NA	Water	3005A	
310-263688-14	MW-33_23_08	Total/NA	Water	3005A	
310-263688-15	MW-35_23_08	Total/NA	Water	3005A	
310-263688-16	MW-36_23_08	Total/NA	Water	3005A	
310-263688-17	FD-3_23_08	Total/NA	Water	3005A	
310-263688-18	FD-4_23_08	Total/NA	Water	3005A	
310-263688-19	FB-3_23_08	Total/NA	Water	3005A	
MB 310-398374/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-398374/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-263688-1 MS	AW-1_23_08	Total/NA	Water	3005A	
310-263688-1 MSD	AW-1_23_08	Total/NA	Water	3005A	
310-263688-11 DU	MW-30_23_08	Total/NA	Water	3005A	

Prep Batch: 399007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-6	MW-18_23_08	Total/NA	Water	7470A	
310-263688-19	FB-3_23_08	Total/NA	Water	7470A	
MB 310-399007/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-399007/2-A	Lab Control Sample	Total/NA	Water	7470A	
500-238774-A-2-C MS	Matrix Spike	Total/NA	Water	7470A	
500-238774-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Metals

Analysis Batch: 399188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-6	MW-18_23_08	Total/NA	Water	7470A	399007
310-263688-19	FB-3_23_08	Total/NA	Water	7470A	399007
MB 310-399007/1-A	Method Blank	Total/NA	Water	7470A	399007
LCS 310-399007/2-A	Lab Control Sample	Total/NA	Water	7470A	399007
500-238774-A-2-C MS	Matrix Spike	Total/NA	Water	7470A	399007
500-238774-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	399007

Analysis Batch: 400043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	6020B	398374
310-263688-2	AW-5_23_08	Total/NA	Water	6020B	398374
310-263688-3	AW-6_23_08	Total/NA	Water	6020B	398374
310-263688-4	CRL-9_23_08	Total/NA	Water	6020B	398374
310-263688-5	MW-17_23_08	Total/NA	Water	6020B	398374
310-263688-6	MW-18_23_08	Total/NA	Water	6020B	398374
310-263688-7	MW-19_23_08	Total/NA	Water	6020B	398374
310-263688-8	MW-20_23_08	Total/NA	Water	6020B	398374
310-263688-9	MW-21_23_08	Total/NA	Water	6020B	398374
310-263688-10	MW-23_23_08	Total/NA	Water	6020B	398374
310-263688-11	MW-30_23_08	Total/NA	Water	6020B	398374
310-263688-12	MW-31_23_08	Total/NA	Water	6020B	398374
310-263688-13	MW-32_23_08	Total/NA	Water	6020B	398374
310-263688-14	MW-33_23_08	Total/NA	Water	6020B	398374
310-263688-15	MW-35_23_08	Total/NA	Water	6020B	398374
310-263688-16	MW-36_23_08	Total/NA	Water	6020B	398374
310-263688-17	FD-3_23_08	Total/NA	Water	6020B	398374
310-263688-18	FD-4_23_08	Total/NA	Water	6020B	398374
310-263688-19	FB-3_23_08	Total/NA	Water	6020B	398374
MB 310-398374/1-A	Method Blank	Total/NA	Water	6020B	398374
LCS 310-398374/2-A	Lab Control Sample	Total/NA	Water	6020B	398374
310-263688-1 MS	AW-1_23_08	Total/NA	Water	6020B	398374
310-263688-1 MSD	AW-1_23_08	Total/NA	Water	6020B	398374
310-263688-11 DU	MW-30_23_08	Total/NA	Water	6020B	398374

Analysis Batch: 400895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-398374/1-A	Method Blank	Total/NA	Water	6020B	398374
LCS 310-398374/2-A	Lab Control Sample	Total/NA	Water	6020B	398374

Analysis Batch: 401020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	6020B	398374
310-263688-1 MS	AW-1_23_08	Total/NA	Water	6020B	398374
310-263688-1 MSD	AW-1_23_08	Total/NA	Water	6020B	398374

General Chemistry

Analysis Batch: 398280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-1	AW-1_23_08	Total/NA	Water	I-3765-85	
310-263688-2	AW-5_23_08	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 398280 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-3	AW-6_23_08	Total/NA	Water	I-3765-85	
310-263688-4	CRL-9_23_08	Total/NA	Water	I-3765-85	
310-263688-5	MW-17_23_08	Total/NA	Water	I-3765-85	
310-263688-6	MW-18_23_08	Total/NA	Water	I-3765-85	
310-263688-7	MW-19_23_08	Total/NA	Water	I-3765-85	
310-263688-8	MW-20_23_08	Total/NA	Water	I-3765-85	
310-263688-9	MW-21_23_08	Total/NA	Water	I-3765-85	
310-263688-10	MW-23_23_08	Total/NA	Water	I-3765-85	
310-263688-11	MW-30_23_08	Total/NA	Water	I-3765-85	
310-263688-12	MW-31_23_08	Total/NA	Water	I-3765-85	
310-263688-14	MW-33_23_08	Total/NA	Water	I-3765-85	
310-263688-15	MW-35_23_08	Total/NA	Water	I-3765-85	
310-263688-16	MW-36_23_08	Total/NA	Water	I-3765-85	
310-263688-17	FD-3_23_08	Total/NA	Water	I-3765-85	
310-263688-18	FD-4_23_08	Total/NA	Water	I-3765-85	
310-263688-19	FB-3_23_08	Total/NA	Water	I-3765-85	
MB 310-398280/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-398280/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-263637-A-1 DU	Duplicate	Total/NA	Water	I-3765-85	
310-263663-A-3 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 398290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263688-13	MW-32_23_08	Total/NA	Water	I-3765-85	
MB 310-398290/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-398290/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-263688-13 DU	MW-32_23_08	Total/NA	Water	I-3765-85	

Client Sample ID: AW-1_23_08
Lab Sample ID: 310-263688-1

Date Collected: 08/28/23 11:35
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 03:00
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 16:09
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	401020	A6US	EET CF	09/28/23 18:11
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:07
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: AW-5_23_08
Lab Sample ID: 310-263688-2

Date Collected: 08/28/23 14:30
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 03:23
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/01/23 16:59
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 11:29
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:32
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: AW-6_23_08
Lab Sample ID: 310-263688-3

Date Collected: 08/29/23 09:10
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 03:46
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 16:34
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/05/23 09:51
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 12:04
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:34
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: CRL-9_23_08
Lab Sample ID: 310-263688-4

Date Collected: 08/28/23 13:55
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 04:08
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 17:00
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:36

Client Sample ID: CRL-9_23_08
Lab Sample ID: 310-263688-4

Date Collected: 08/28/23 13:55
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-17_23_08
Lab Sample ID: 310-263688-5

Date Collected: 08/29/23 09:35
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 04:31
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 17:26
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/05/23 09:51
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 12:21
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:38
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-18_23_08
Lab Sample ID: 310-263688-6

Date Collected: 08/29/23 10:20
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 04:53
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 17:52
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:40
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 11:01
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-19_23_08
Lab Sample ID: 310-263688-7

Date Collected: 08/28/23 13:50
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 05:16
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 18:17
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:43
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-20_23_08
Lab Sample ID: 310-263688-8
Date Collected: 08/28/23 09:35
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 05:38
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:45
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-21_23_08
Lab Sample ID: 310-263688-9
Date Collected: 08/28/23 15:00
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 06:01
Total/NA	Prep	3510C			398230	Y6AF	EET CF	08/31/23 06:12
Total/NA	Analysis	8081B		1	399217	BW2O	EET CF	09/12/23 13:05
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/01/23 16:59
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 11:46
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 19:47
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-23_23_08
Lab Sample ID: 310-263688-10
Date Collected: 08/28/23 13:10
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 06:23
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:03
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-30_23_08
Lab Sample ID: 310-263688-11
Date Collected: 08/29/23 12:45
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 06:46
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 18:43
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:05
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-31_23_08
Lab Sample ID: 310-263688-12
Date Collected: 08/29/23 11:45
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 07:08
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:09
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-32_23_08
Lab Sample ID: 310-263688-13
Date Collected: 08/29/23 14:55
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 07:31
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 19:09
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/05/23 09:51
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 12:39
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:12
Total/NA	Analysis	I-3765-85		1	398290	DGU1	EET CF	08/31/23 10:32

Client Sample ID: MW-33_23_08
Lab Sample ID: 310-263688-14
Date Collected: 08/29/23 14:20
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 07:53
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 20:00
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:14
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-35_23_08
Lab Sample ID: 310-263688-15
Date Collected: 08/28/23 10:40
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 08:16
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:16
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: MW-36_23_08
Lab Sample ID: 310-263688-16

Date Collected: 08/28/23 10:00
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 08:38
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 19:35
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:18
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: FD-3_23_08
Lab Sample ID: 310-263688-17

Date Collected: 08/28/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 09:01
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:20
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: FD-4_23_08
Lab Sample ID: 310-263688-18

Date Collected: 08/29/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 09:24
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:23
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Client Sample ID: FB-3_23_08
Lab Sample ID: 310-263688-19

Date Collected: 08/29/23 11:10
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 02:15
Total/NA	Prep	3510C			398231	Y6AF	EET CF	08/31/23 06:15
Total/NA	Analysis	8270E		1	399079	L0FS	EET CF	09/11/23 15:43
Total/NA	Prep	3510C			398230	Y6AF	EET CF	08/31/23 06:12
Total/NA	Analysis	8081B		2	399386	BW2O	EET CF	09/13/23 15:04
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/05/23 09:51
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 12:56
Total/NA	Prep	3005A			398374	KCK5	EET CF	09/01/23 09:00
Total/NA	Analysis	6020B		1	400043	A6US	EET CF	09/19/23 20:38
Total/NA	Prep	7470A			399007	NFT2	EET CF	09/08/23 10:26
Total/NA	Analysis	7470A		1	399188	NFT2	EET CF	09/11/23 11:03
Total/NA	Analysis	I-3765-85		1	398280	DGU1	EET CF	08/31/23 09:44

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-3_23_08
Lab Sample ID: 310-263688-20
Date Collected: 08/29/23 00:00
Matrix: Water
Date Received: 08/30/23 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398344	FE5V	EET CF	09/01/23 02:38

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

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	09-28-23

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

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263688-1
Project/Site: CRLCSWA_1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
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	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

eurofins | Environment Testing America

310-263688 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 8-30 23 | TIME 1625 | Received By: MC

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 6

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? ↓

FB-3_23-08

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: T | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.8 | Corrected Temp (°C): 2.8

• **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 | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 8-30-23 | TIME 1625 | Received By: ML

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 6

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

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.5 | Corrected Temp (°C): 1.5

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 8-30-23 | TIME 1625 | Received By: ML

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 6

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

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE: IA | Project:

Receipt Information

Date/Time Received: DATE: 8-30-23 | TIME: 1625 | Received By: MC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 4 of 6

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

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.1 | Corrected Temp (°C): 2.1

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 8-30-23 | TIME 1625 | Received By: MC

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 6

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

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.9 | Corrected Temp (°C): 0.9

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 8-30-23 | TIME 1625 | Received By: MC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 6 of 6

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

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.3 | Corrected Temp (°C): 2.3

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Chain of Custody Record

385305 eurofins | Environment Testing TestAmerica

10/2/2023

TAL-8210

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: G. Wilming / H. Dubbs	Site Contact: —	Date: 8/30/23	COC No —
Company Name Foth I + E	Tel/Email gwilming@foth.com	Lab Contact: Connor	Carrier: Eurofins	1 of 2 COCs
Address 411 6th Ave SE, Ste 400	Analysis Turnaround Time			Sampler
City/State/Zip Cedar Rapids, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone 319-365-9565	TAT if different from Below _____			Walk-in Client:
Fax. 319-365 9681	☐ 2 weeks			Lab Sampling
Project Name CRLCSWA 1	☐ 1 week			
Site CRLCSWA-1	☐ 2 days			Job / SDG No
P O # —	☐ 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)		Sample Specific Notes
AW-1_23_08	8/28/23	11:35	G	H_2O	7			See attached	
AW-5_23_08	8/28/23	14:30			7			Parameter	
AW-6_23_08	8/29	09:10			9			Sheets	
CRL-9_23_08	8/28	13:55			7				
MW-17_23_08	8/29	09:35			9				
MW-18_23_08	8/29	10:20			7				
MW-19_23_08	8/28	13:50			7				
MW-20_23_08	8/28	09:35			5				
MW-21_23_08	8/28	15:00			9				
MW-23_23_08	8/28	13:10			5				
MW-30_23_08	8/29	12:45			7				
MW-31_23_08	8/29/23	11:45			5				

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]	O.A. Tech	8/30/23 12:00			
Relinquished by:	Company:	Date/Time	Received by:	Company	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by: SL	Company: Eurofins	Date/Time 8/30/23 1625

Chain of Custody Record

385303

eurofins | Environment Testing TestAmerica

10/2/2023

TAL-8210

Address. _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: G.Wiming / H.Dubbs	Site Contact: —	Date: 8/30/23	COC No —
Company Name Fehr I+E	Tel/Email gwiming@fehr.com	Lab Contact. CONNOR	Carrier: EUROFINS	2 of 2 COCs
Address 411 6th Ave SE, STE 400	Analysis Turnaround Time			Sampler
City/State/Zip CEDAR RAPIDS, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only
Phone 319-365-9565	TAT if different from Below _____			Walk-in Client:
Fax. 319-365-9681	☐ 2 weeks			Lab Sampling
Project Name CROSWA 1	☐ 1 week			
Site CROSWA 1	☐ 2 days			Job / SDG No
P O # —	☐ 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)	Sample Specific Notes
MW-32_23_08	8/29/23	14:55	G	H_2O	9			SEE ATTACHED
MW-33_23_08	8/29	14:20			7			PARAMETER
MW-35_23_08	8/28	10:40			5			SHEETS
MW-36_23_08	8/28	10:00			7			
FD-3_23_08 8/29/23	8/29 RTC	RTC 14:10			5			
FD-4_23_08	8/29	—			5			
FB-3_23_08	8/29	11:10			11			
TB-3_23_08	—	—			3			

Page 89 of 97

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	Date/Time	Received by	Company	Date/Time
	O.A.TECH	8/30/23 12:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
				Eurofins	8/30/23 1625

10/2/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	TSS	1,3-Dichlorobenzene	2,2"-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
1	AW-1_23_08	AW-1	WG	G											X	X			X															
2	AW-2_23_08	AW-2	WG	G											X	X			X															
3	AW-3_23_08	AW-3	WG	G											X	X			X									X				X		
4	AW-4_23_08	AW-4	WG	G											X	X			X															
5	AW-5_23_08	AW-5	WG	G											X	X							X											
6	AW-6_23_08	AW-6	WG	G											X	X			X				X									X		
7	CRL-9_23_08	CRL-9	~~WG~~	G											X	X	X		X													X		
8	MW-11_23_08	MW-11	WG	G											X	X			X													X		
9	MW-12_23_08	MW-12	WG	G											X	X	X										X					X		
10	MW-13_23_08	MW-13	WG	G											X	X	X						X											
11	MW-14_23_08	MW-14	WG	G											X	X																		
12	MW-15_23_08	MW-15	WG	G											X	X			X															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS

ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER

DATE Signed

10/2/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 2 **of** 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List (N)	TSS (N)	1,3-Dichlorobenzene (N)	2,2'-oxybis(1-Chloropropane) (N)	Bis(2-ethylhexyl)phthalate (N)	Di-n-butylphthalate (N)	m/p-Cresol (N)	Phenol (N)	2,4,5-TP (N)	2,4-D (N)	4,4'-DDT (N)	alpha-BHC (N)	beta-BHC (N)	delta-BHC (N)	Dieldrin (N)	Heptachlor (N)	Mercury (N)	Tin (N)		REMARKS / Lab ID (Filtered (Y/N))
13	MW-16_23_08	MW-16	WG	G											X	X	X						X											
14	MW-17_23_08	MW-17	WG	G											X	X			X				X											
15	MW-18_23_08	MW-18	WG	G											X	X			X												X			
16	MW-19_23_08	MW-19	WG	G											X	X			X															
17	MW-20_23_08	MW-20	WG	G											X	X																X		
18	MW-21_23_08	MW-21	WG	G											X	X							X		X				X			X		
19	MW-22_23_08	MW-22	WG	G											X	X		X	X				X									X		
20	MW-23_23_08	MW-23	WG	G											X	X																X		
21	MW-24_23_08	MW-24	WG	G											X	X	X		X					X								X		
22	MW-25_23_08	MW-25	WG	G											X	X			X													X		
23	MW-26_23_08	MW-26	WG	G											X	X			X							X				X		X		
24	MW-28_23_08	MW-28	WG	G											X	X					X													

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER

DATE Signed:

10/2/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 3 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	←	
25	MW-30_23_08	MW-30	WG	G											X	X			X												X		
26	MW-31_23_08	MW-31	WG	G											X	X																	
27	MW-32_23_08	MW-32	WG	G											X	X			X				X								X		
28	MW-33_23_08	MW-33	WG	G											X	X			X												X		
29	MW-34_23_08	MW-34	WG	G											X	X	X		X												X		
30	MW-35_23_08	MW-35	WG	G											X	X	X														X		
31	MW-36_23_08	MW-36	WG	G											X	X			X												X		
32	MW-37_23_08	MW-37	WG	G											X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		
33	MW-38_23_08	MW-38	WG	G											X	X	X	X	X				X								X	X	
34	VP-3_23_08	VP-3	WG	G											X	X			X	X													
35	VP-4_23_08	VP-4	WG	G											X	X			X											X			
36	MW-101A_23_08	MW-101A	WG	G											X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS

ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed:

10/2/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 4 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4' DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Total Arsenic	Filtered (Y/N)	REMARKS / Lab ID
															N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
37	MW-101B_23_08	MW-101B	WG	G											X	X	X	X	X				X								X	X			
38	MW-102B_23_08	MW-102B	WG	G											X	X																			
39	MW-104B_23_08	MW-104B	WG	G												X																		X	
40	MW-105A_23_08	MW-105A	WG	G											X	X																			
41	MW-105B_23_08	MW-105B	WG	G											X	X																			
42	MW-106A_23_08	MW-106A	WG	G											X	X																			
43	MW-107A_23_08	MW-107A	WG	G											X	X																			
44	MW-107B_23_08	MW-107B	WG	G											X	X																			
45	MW-108B_23_08	MW-108B	WG	G											X	X																			Do Not Analyze Cobalt
46	MW-109A_23_08	MW-109A	WG	G											X	X																			
47	MW-109B_23_08	MW-109B	WG	G											X	X																			
48	FD-1_23_08		WG	G											X	X																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION: **SAMPLE NOTES:**

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed

10/2/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 5 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	App. I VOCs Only	
49	FD-2_23_08		WG	G											X	X																	
50	FD-3_23_08		WG	G											X	X																	
51	FD-4_23_08		WG	G											X	X																	
52	FD-5_23_08		WG	G											X	X																	
53	FB-1_23_08	FB-1	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
54	FB-2_23_08	FB-2	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
55	FB-3_23_08	FB-3	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
56	TB-1_23_08	Trip Blank	WQ	G													X															X	
57	TB-2_23_08	Trip Blank	WQ	G													X															X	
58	TB-3_23_08	Trip Blank	WQ	G													X															X	
59	TB-4_23_08	Trip Blank	WQ	G													X															X	
60	TB-5_23_08	Trip Blank	WQ	G													X															X	

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION: **SAMPLE NOTES:**

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER | DATE Signed

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone 319-277-2401 Fax. 319-277-2425

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Calhoun Conner M	Carrier Tracking No(s):	COC No: 310-64865 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 Program - Iowa		Job #: 310-263688-1
Address: 2417 Bond Street	Due Date Requested: 9/13/2023			
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_1	Project #: 31009776			
Site:	SSOW#:			

310-263688 COC

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

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) TCLP	Total Number of containers	Special Instructions/Note
			Preservation Code:						
AW-5_23_08 (310-263688-2)	8/28/23	14 30 Central		Water			X	2	
AW-6_23_08 (310-263688-3)	8/29/23	09 10 Central		Water			X	2	
MW-17_23_08 (310-263688-5)	8/29/23	09 35 Central		Water			X	2	
MW-21_23_08 (310-263688-9)	8/28/23	15 00 Central		Water			X	2	
MW-32_23_08 (310-263688-13)	8/29/23	14 55 Central		Water			X	2	
FB-3_23_08 (310-263688-19)	8/29/23	11 10 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
[signature]	8/31/23 1200		[signature]	9/1/23 1005	EETA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	9/1/23 1400	EETA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
Δ Yes Δ No		1.6 → 3.3, 3.8 → 2.7

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-263688-1

Login Number: 263688

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Mathews, Emily A

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: Foth Infrastructure & Environment, LLC

Job Number: 310-263688-1

Login Number: 263688
List Number: 2
Creator: Scott, Sherri L

List Source: Eurofins Chicago
List Creation: 09/01/23 03:04 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	1.3,2.7
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.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

Generated 9/25/2023 11:56:09 AM

JOB DESCRIPTION

CRLCSWA_1

JOB NUMBER

310-263793-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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9/25/2023 11:56:09 AM

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

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Job ID: 310-263793-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-263793-1

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 8/31/2023 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8°C and 3.7°C

GC/MS VOA
Method 8260D: The following samples were collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: (310-263774-E-1).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-398436 recovered outside control limits for Chloroethane (-21.5%D). The LCS associated with this CCV passes CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-398436/4).

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

GC/MS Semi VOA
Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-398448.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

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

Pesticides
Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-398396.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

Metals
Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-22_23_08 (310-263793-1). The sample(s) was preserved to the appropriate pH in the laboratory.

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

General Chemistry

Job ID: 310-263793-1 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

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

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-263793-1	MW-22_23_08	Water	08/30/23 15:10	08/31/23 15:30
310-263793-2	MW-24_23_08	Water	08/30/23 13:00	08/31/23 15:30
310-263793-3	MW-25_23_08	Water	08/30/23 14:00	08/31/23 15:30
310-263793-4	MW-26_23_08	Water	08/30/23 10:50	08/31/23 15:30
310-263793-5	MW-28_23_08	Water	08/30/23 09:55	08/31/23 15:30
310-263793-6	MW-102B_23_08	Water	08/30/23 13:15	08/31/23 15:30
310-263793-7	MW-104B_23_08	Water	08/30/23 16:10	08/31/23 15:30
310-263793-8	MW-108B_23_08	Water	08/30/23 10:55	08/31/23 15:30
310-263793-9	FD-5_23_08	Water	08/30/23 00:00	08/31/23 15:30
310-263793-10	TB-4_23_08	Water	08/30/23 00:00	08/31/23 15:30

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-22_23_08 — Lab Sample ID: 310-263793-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.09		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.648	J	1.00	0.370	ug/L	1		8260D	Total/NA
Benzene	0.267	J	0.500	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.0566		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.653		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000149	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.00200	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.00338		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000427	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0314		0.00500	0.00190	mg/L	1		6020B	Total/NA
Silver	0.000860	J	0.00100	0.000500	mg/L	1		6020B	Total/NA
Thallium	0.00241		0.00100	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00164	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.00661	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	41.8		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-24_23_08 — Lab Sample ID: 310-263793-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	5.07		1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	11.9		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	7.69		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	68.0		1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.0240		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.758		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000395	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000580		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.00782		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.00150	F1	0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0138	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.75		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-25_23_08 — Lab Sample ID: 310-263793-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	0.727	J	1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.353	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.00141	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.221		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000162	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000175	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000600		0.000500	0.000240	mg/L	1		6020B	Total/NA
Silver	0.000911	J	0.00100	0.000500	mg/L	1		6020B	Total/NA
Thallium	0.00307		0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.13		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-26_23_08 — Lab Sample ID: 310-263793-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.373	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	0.555	J	1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.00112	J	0.00200	0.000530	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-26_23_08 (Continued) — Lab Sample ID: 310-263793-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.139		0.00200	0.000640	mg/L	1		6020B	Total/NA
Thallium	0.000461	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	9.67		2.50	0.850	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-28_23_08 — Lab Sample ID: 310-263793-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.155		0.00200	0.000640	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.50		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-102B_23_08 — Lab Sample ID: 310-263793-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.108		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00105		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00240	J	0.00500	0.00190	mg/L	1		6020B	Total/NA

Client Sample ID: MW-104B_23_08 — Lab Sample ID: 310-263793-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000610	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.25		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-108B_23_08 — Lab Sample ID: 310-263793-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.183		0.00200	0.000640	mg/L	1		6020B	Total/NA
Nickel	0.00619		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.38	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: FD-5_23_08 — Lab Sample ID: 310-263793-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00100	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.223		0.00200	0.000640	mg/L	1		6020B	Total/NA
Lead	0.000244	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.00		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: TB-4_23_08 — Lab Sample ID: 310-263793-10

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-22_23_08

Date Collected: 08/30/23 15:10
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 16:44	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 16:44	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 16:44	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 16:44	1
1,1-Dichloroethane	**1.09**		1.00	0.220	ug/L			09/01/23 16:44	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 16:44	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 16:44	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 16:44	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 16:44	1
1,2-Dichlorobenzene	**0.648**	**J**	1.00	0.370	ug/L			09/01/23 16:44	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 16:44	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 16:44	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 16:44	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 16:44	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 16:44	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 16:44	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 16:44	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 16:44	1
Benzene	**0.267**	**J**	0.500	0.220	ug/L			09/01/23 16:44	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 16:44	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 16:44	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 16:44	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 16:44	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 16:44	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 16:44	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 16:44	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 16:44	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 16:44	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 16:44	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 16:44	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 16:44	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 16:44	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 16:44	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 16:44	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 16:44	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 16:44	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 16:44	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 16:44	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 16:44	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 16:44	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 16:44	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 16:44	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 16:44	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 16:44	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 16:44	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 16:44	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 16:44*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-22_23_08
Lab Sample ID: 310-263793-1
Date Collected: 08/30/23 15:10
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 16:44*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/01/23 16:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.600		11.1	0.600	ug/L		09/01/23 11:05	09/12/23 17:17	1
Bis(2-ethylhexyl) phthalate	<6.11		11.1	6.11	ug/L		09/01/23 11:05	09/12/23 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*79*		*45 - 129*	*09/01/23 11:05*	*09/12/23 17:17*	*1*
2-Fluorobiphenyl (Surr)	*71*		*39 - 118*	*09/01/23 11:05*	*09/12/23 17:17*	*1*
Terphenyl-d14 (Surr)	*49*		*12 - 144*	*09/01/23 11:05*	*09/12/23 17:17*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-TP	<0.0829		0.994	0.0829	ug/L		09/05/23 09:51	09/07/23 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	*88*		*25 - 130*	*09/05/23 09:51*	*09/07/23 13:13*	*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		09/05/23 08:00	09/20/23 18:53	1
Arsenic	**0.0566**		0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 18:53	1
Barium	**0.653**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 18:53	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 18:53	1
Cadmium	**0.000149**	**J**	0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 18:53	1
Chromium	**0.00200**	**J**	0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 18:53	1
Cobalt	**0.00338**		0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 18:53	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 18:53	1
Lead	**0.000427**	**J**	0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 18:53	1
Nickel	**0.0314**		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 18:53	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 18:53	1
Silver	**0.000860**	**J**	0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 18:53	1
Thallium	**0.00241**		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 19:34	1
Vanadium	**0.00164**	**J**	0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 18:53	1
Zinc	**0.00661**	**J**	0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 18:53	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/05/23 08:00	09/20/23 18:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**41.8**		3.75	1.28	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-24_23_08

Date Collected: 08/30/23 13:00
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 17:07	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 17:07	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 17:07	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 17:07	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 17:07	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 17:07	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 17:07	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 17:07	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 17:07	1
1,2-Dichlorobenzene	**5.07**		1.00	0.370	ug/L			09/01/23 17:07	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 17:07	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 17:07	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 17:07	1
1,4-Dichlorobenzene	**11.9**		1.00	0.230	ug/L			09/01/23 17:07	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 17:07	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 17:07	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 17:07	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 17:07	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 17:07	1
Benzene	**7.69**		0.500	0.220	ug/L			09/01/23 17:07	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 17:07	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 17:07	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 17:07	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 17:07	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 17:07	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 17:07	1
Chlorobenzene	**68.0**		1.00	0.400	ug/L			09/01/23 17:07	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 17:07	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 17:07	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 17:07	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 17:07	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 17:07	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 17:07	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 17:07	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 17:07	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 17:07	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 17:07	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 17:07	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 17:07	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 17:07	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 17:07	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 17:07	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 17:07	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 17:07	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 17:07	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 17:07	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 17:07	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 17:07	1

Client Sample ID: MW-24_23_08
Date Collected: 08/30/23 13:00
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*09/01/23 17:07*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/01/23 17:07*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/01/23 17:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.39		9.80	5.39	ug/L		09/01/23 11:05	09/12/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*45 - 129*	*09/01/23 11:05*	*09/12/23 17:44*	*1*
2-Fluorobiphenyl (Surr)	*87*		*39 - 118*	*09/01/23 11:05*	*09/12/23 17:44*	*1*
Terphenyl-d14 (Surr)	*59*		*12 - 144*	*09/01/23 11:05*	*09/12/23 17:44*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.327		1.06	0.327	ug/L		09/05/23 09:51	09/07/23 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*79*		*25 - 130*	*09/05/23 09:51*	*09/07/23 13:31*	*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		09/05/23 08:00	09/20/23 18:57	1
Arsenic	**0.0240**		0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 18:57	1
Barium	**0.758**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 18:57	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 18:57	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 18:57	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 18:57	1
Cobalt	**0.000395**	**J**	0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 18:57	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 18:57	1
Lead	**0.000580**		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 18:57	1
Nickel	**0.00782**		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 18:57	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 18:57	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 18:57	1
Thallium	**0.00150**	**F1**	0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 19:37	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 18:57	1
Zinc	**0.0138**	**J**	0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 18:57	1
Tin	<0.00230	F2	0.00500	0.00230	mg/L		09/05/23 08:00	09/20/23 18:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**8.75**		1.88	0.638	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-25_23_08

Date Collected: 08/30/23 14:00
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 17:29	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 17:29	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 17:29	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 17:29	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 17:29	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 17:29	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 17:29	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 17:29	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 17:29	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 17:29	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 17:29	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 17:29	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 17:29	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 17:29	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 17:29	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 17:29	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 17:29	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 17:29	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 17:29	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 17:29	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 17:29	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 17:29	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 17:29	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 17:29	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 17:29	1
Chlorobenzene	**0.727**	**J**	1.00	0.400	ug/L			09/01/23 17:29	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 17:29	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 17:29	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 17:29	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 17:29	1
cis-1,2-Dichloroethene	**0.353**	**J**	1.00	0.210	ug/L			09/01/23 17:29	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 17:29	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 17:29	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 17:29	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 17:29	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 17:29	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 17:29	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 17:29	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 17:29	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 17:29	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 17:29	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 17:29	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 17:29	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 17:29	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 17:29	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 17:29	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 17:29*	*1*

Client Sample ID: MW-25_23_08
Lab Sample ID: 310-263793-3
Date Collected: 08/30/23 14:00
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 17:29*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/01/23 17:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<6.40		11.6	6.40	ug/L		09/01/23 11:05	09/12/23 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*71*		*45 - 129*	*09/01/23 11:05*	*09/12/23 18:12*	*1*
2-Fluorobiphenyl (Surr)	*73*		*39 - 118*	*09/01/23 11:05*	*09/12/23 18:12*	*1*
Terphenyl-d14 (Surr)	*42*		*12 - 144*	*09/01/23 11:05*	*09/12/23 18:12*	*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		09/05/23 08:00	09/20/23 19:14	1
Arsenic	**0.00141**	**J**	0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:14	1
Barium	**0.221**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 19:14	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 19:14	1
Cadmium	**0.000162**	**J**	0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 19:14	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:14	1
Cobalt	**0.000175**	**J**	0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 19:14	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 19:14	1
Lead	**0.000600**		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 19:14	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 19:14	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 19:14	1
Silver	**0.000911**	**J**	0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 19:14	1
Thallium	**0.00307**		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 19:43	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:14	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 19:14	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/05/23 08:00	09/20/23 19:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.13**		1.88	0.638	mg/L			09/01/23 10:23	1

Client Sample ID: MW-26_23_08
Lab Sample ID: 310-263793-4

Date Collected: 08/30/23 10:50
Matrix: Water
Date Received: 08/31/23 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 17:52	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 17:52	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 17:52	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 17:52	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 17:52	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 17:52	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 17:52	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 17:52	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 17:52	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 17:52	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 17:52	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 17:52	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 17:52	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 17:52	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 17:52	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 17:52	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 17:52	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 17:52	1
Benzene	**0.373**	**J**	0.500	0.220	ug/L			09/01/23 17:52	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 17:52	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 17:52	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 17:52	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 17:52	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 17:52	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 17:52	1
Chlorobenzene	**0.555**	**J**	1.00	0.400	ug/L			09/01/23 17:52	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 17:52	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 17:52	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 17:52	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 17:52	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 17:52	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 17:52	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 17:52	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 17:52	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 17:52	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 17:52	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 17:52	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 17:52	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 17:52	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 17:52	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 17:52	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 17:52	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 17:52	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 17:52	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 17:52	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 17:52	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 17:52*	*1*

Client Sample ID: MW-26_23_08
Lab Sample ID: 310-263793-4
Date Collected: 08/30/23 10:50
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 17:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*09/01/23 17:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<5.19		9.43	5.19	ug/L		09/01/23 11:05	09/12/23 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*70*		*45 - 129*	*09/01/23 11:05*	*09/12/23 18:39*	*1*
2-Fluorobiphenyl (Surr)	*77*		*39 - 118*	*09/01/23 11:05*	*09/12/23 18:39*	*1*
Terphenyl-d14 (Surr)	*45*		*12 - 144*	*09/01/23 11:05*	*09/12/23 18:39*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0274		0.0604	0.0274	ug/L		09/01/23 08:00	09/13/23 12:30	1
Heptachlor	<0.0311		0.0604	0.0311	ug/L		09/01/23 08:00	09/13/23 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*50*		*10 - 136*	*09/01/23 08:00*	*09/13/23 12:30*	*1*
Tetrachloro-m-xylene	*58*		*10 - 130*	*09/01/23 08:00*	*09/13/23 12:30*	*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		09/05/23 08:00	09/20/23 19:18	1
Arsenic	**0.00112**	**J**	0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:18	1
Barium	**0.139**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 19:18	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 19:18	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 19:18	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:18	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 19:18	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 19:18	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 19:18	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 19:18	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 19:18	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 19:18	1
Thallium	**0.000461**	**J**	0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 19:45	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:18	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 19:18	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/05/23 08:00	09/20/23 19:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**9.67**		2.50	0.850	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-28_23_08

Date Collected: 08/30/23 09:55
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 18:15	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 18:15	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 18:15	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 18:15	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 18:15	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 18:15	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 18:15	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 18:15	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 18:15	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 18:15	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 18:15	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 18:15	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 18:15	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 18:15	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 18:15	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 18:15	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 18:15	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 18:15	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 18:15	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 18:15	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 18:15	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 18:15	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 18:15	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 18:15	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 18:15	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 18:15	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 18:15	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 18:15	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 18:15	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 18:15	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 18:15	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 18:15	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 18:15	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 18:15	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 18:15	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 18:15	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 18:15	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 18:15	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 18:15	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 18:15	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 18:15	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 18:15	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 18:15	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 18:15	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 18:15	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 18:15	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 18:15*	*1*

Client Sample ID: MW-28_23_08
Lab Sample ID: 310-263793-5

Date Collected: 08/30/23 09:55
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 18:15*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*09/01/23 18:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylphenol, 3 & 4	<0.795		11.4	0.795	ug/L		09/01/23 11:05	09/12/23 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*67*		*25 - 110*	*09/01/23 11:05*	*09/12/23 19:06*	*1*
Phenol-d5 (Surr)	*57*		*21 - 110*	*09/01/23 11:05*	*09/12/23 19:06*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*27 - 136*	*09/01/23 11:05*	*09/12/23 19:06*	*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		09/05/23 08:00	09/20/23 19:35	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:35	1
Barium	**0.155**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 19:35	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 19:35	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 19:35	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:35	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 19:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 19:35	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 19:35	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 19:35	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 19:35	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 19:35	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 19:47	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:35	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 19:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.50**		1.88	0.638	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-102B_23_08

Date Collected: 08/30/23 13:15
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/02/23 01:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/02/23 01:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/02/23 01:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/02/23 01:43	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/02/23 01:43	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/02/23 01:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/02/23 01:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/02/23 01:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/02/23 01:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/02/23 01:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/02/23 01:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/02/23 01:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/02/23 01:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/02/23 01:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/02/23 01:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/02/23 01:43	1
Acetone	<3.10		10.0	3.10	ug/L			09/02/23 01:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/02/23 01:43	1
Benzene	<0.220		0.500	0.220	ug/L			09/02/23 01:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/02/23 01:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/02/23 01:43	1
Bromoform	<0.780		5.00	0.780	ug/L			09/02/23 01:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/02/23 01:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/02/23 01:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/02/23 01:43	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/02/23 01:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/02/23 01:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/02/23 01:43	1
Chloroform	<1.30		3.00	1.30	ug/L			09/02/23 01:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/02/23 01:43	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/02/23 01:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/02/23 01:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/02/23 01:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/02/23 01:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/02/23 01:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/02/23 01:43	1
Styrene	<0.370		1.00	0.370	ug/L			09/02/23 01:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/02/23 01:43	1
Toluene	<0.430		1.00	0.430	ug/L			09/02/23 01:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/02/23 01:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/02/23 01:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/02/23 01:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/02/23 01:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/02/23 01:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/02/23 01:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/02/23 01:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/02/23 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*09/02/23 01:43*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-102B_23_08
Lab Sample ID: 310-263793-6
Date Collected: 08/30/23 13:15
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/02/23 01:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/02/23 01:43*	*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		09/05/23 08:00	09/20/23 19:39	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:39	1
Barium	**0.108**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 19:39	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 19:39	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 19:39	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:39	1
Cobalt	**0.00105**		0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 19:39	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 19:39	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 19:39	1
Nickel	**0.00240**	**J**	0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 19:39	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 19:39	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 19:39	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 20:03	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:39	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 19:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<0.638		1.88	0.638	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-104B_23_08
Lab Sample ID: 310-263793-7
Date Collected: 08/30/23 16:10
Matrix: Water
Date Received: 08/31/23 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000610	J	0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	2.25		1.88	0.638	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-108B_23_08

Date Collected: 08/30/23 10:55
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/02/23 02:06	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/02/23 02:06	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/02/23 02:06	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/02/23 02:06	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/02/23 02:06	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/02/23 02:06	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/02/23 02:06	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/02/23 02:06	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/02/23 02:06	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/02/23 02:06	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/02/23 02:06	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/02/23 02:06	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/02/23 02:06	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/02/23 02:06	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/02/23 02:06	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/02/23 02:06	1
Acetone	<3.10		10.0	3.10	ug/L			09/02/23 02:06	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/02/23 02:06	1
Benzene	<0.220		0.500	0.220	ug/L			09/02/23 02:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/02/23 02:06	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/02/23 02:06	1
Bromoform	<0.780		5.00	0.780	ug/L			09/02/23 02:06	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/02/23 02:06	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/02/23 02:06	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/02/23 02:06	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/02/23 02:06	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/02/23 02:06	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/02/23 02:06	1
Chloroform	<1.30		3.00	1.30	ug/L			09/02/23 02:06	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/02/23 02:06	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/02/23 02:06	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/02/23 02:06	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/02/23 02:06	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/02/23 02:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/02/23 02:06	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/02/23 02:06	1
Styrene	<0.370		1.00	0.370	ug/L			09/02/23 02:06	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/02/23 02:06	1
Toluene	<0.430		1.00	0.430	ug/L			09/02/23 02:06	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/02/23 02:06	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/02/23 02:06	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/02/23 02:06	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/02/23 02:06	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/02/23 02:06	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/02/23 02:06	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/02/23 02:06	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/02/23 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*95*		*80 - 128*		*09/02/23 02:06*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: MW-108B_23_08
Lab Sample ID: 310-263793-8
Date Collected: 08/30/23 10:55
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/02/23 02:06*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*09/02/23 02:06*	*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		09/05/23 08:00	09/20/23 19:46	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:46	1
Barium	**0.183**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 19:46	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 19:46	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 19:46	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:46	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 19:46	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 19:46	1
Nickel	**0.00619**		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 19:46	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 19:46	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 19:46	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 20:08	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:46	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 19:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.38**	**J**	1.88	0.638	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: FD-5_23_08

Date Collected: 08/30/23 00:00
Date Received: 08/31/23 15:30

Lab Sample ID: 310-263793-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/02/23 02:28	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/02/23 02:28	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/02/23 02:28	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/02/23 02:28	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/02/23 02:28	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/02/23 02:28	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/02/23 02:28	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/02/23 02:28	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/02/23 02:28	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/02/23 02:28	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/02/23 02:28	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/02/23 02:28	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/02/23 02:28	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/02/23 02:28	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/02/23 02:28	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/02/23 02:28	1
Acetone	<3.10		10.0	3.10	ug/L			09/02/23 02:28	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/02/23 02:28	1
Benzene	<0.220		0.500	0.220	ug/L			09/02/23 02:28	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/02/23 02:28	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/02/23 02:28	1
Bromoform	<0.780		5.00	0.780	ug/L			09/02/23 02:28	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/02/23 02:28	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/02/23 02:28	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/02/23 02:28	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/02/23 02:28	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/02/23 02:28	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/02/23 02:28	1
Chloroform	<1.30		3.00	1.30	ug/L			09/02/23 02:28	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/02/23 02:28	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/02/23 02:28	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/02/23 02:28	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/02/23 02:28	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/02/23 02:28	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/02/23 02:28	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/02/23 02:28	1
Styrene	<0.370		1.00	0.370	ug/L			09/02/23 02:28	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/02/23 02:28	1
Toluene	<0.430		1.00	0.430	ug/L			09/02/23 02:28	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/02/23 02:28	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/02/23 02:28	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/02/23 02:28	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/02/23 02:28	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/02/23 02:28	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/02/23 02:28	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/02/23 02:28	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/02/23 02:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/02/23 02:28*	*1*

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: FD-5_23_08
Lab Sample ID: 310-263793-9
Date Collected: 08/30/23 00:00
Matrix: Water
Date Received: 08/31/23 15:30

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/02/23 02:28*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*09/02/23 02:28*	*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		09/05/23 08:00	09/20/23 19:50	1
Arsenic	**0.00100**	**J**	0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 19:50	1
Barium	**0.223**		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 19:50	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 19:50	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 19:50	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:50	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 19:50	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 19:50	1
Lead	**0.000244**	**J**	0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 19:50	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 19:50	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 19:50	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 19:50	1
Thallium	<0.000260		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 20:10	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 19:50	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 19:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.00**		1.88	0.638	mg/L			09/01/23 10:23	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-4_23_08
Lab Sample ID: 310-263793-10
Date Collected: 08/30/23 00:00
Matrix: Water
Date Received: 08/31/23 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/02/23 00:36	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/02/23 00:36	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/02/23 00:36	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/02/23 00:36	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/02/23 00:36	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/02/23 00:36	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/02/23 00:36	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/02/23 00:36	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/02/23 00:36	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/02/23 00:36	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/02/23 00:36	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/02/23 00:36	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/02/23 00:36	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/02/23 00:36	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/02/23 00:36	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/02/23 00:36	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/02/23 00:36	1
Acetone	<3.10		10.0	3.10	ug/L			09/02/23 00:36	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/02/23 00:36	1
Benzene	<0.220		0.500	0.220	ug/L			09/02/23 00:36	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/02/23 00:36	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/02/23 00:36	1
Bromoform	<0.780		5.00	0.780	ug/L			09/02/23 00:36	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/02/23 00:36	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/02/23 00:36	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/02/23 00:36	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/02/23 00:36	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/02/23 00:36	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/02/23 00:36	1
Chloroform	<1.30		3.00	1.30	ug/L			09/02/23 00:36	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/02/23 00:36	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/02/23 00:36	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/02/23 00:36	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/02/23 00:36	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/02/23 00:36	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/02/23 00:36	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/02/23 00:36	1
Styrene	<0.370		1.00	0.370	ug/L			09/02/23 00:36	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/02/23 00:36	1
Toluene	<0.430		1.00	0.430	ug/L			09/02/23 00:36	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/02/23 00:36	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/02/23 00:36	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/02/23 00:36	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/02/23 00:36	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/02/23 00:36	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/02/23 00:36	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/02/23 00:36	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/02/23 00:36	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Client Sample ID: TB-4_23_08
Lab Sample ID: 310-263793-10
Date Collected: 08/30/23 00:00
Matrix: Water
Date Received: 08/31/23 15:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	94		80 - 128		09/02/23 00:36	1
Toluene-d8 (Surr)	99		80 - 120		09/02/23 00:36	1
4-Bromofluorobenzene (Surr)	104		80 - 120		09/02/23 00:36	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
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.
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.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)
310-263774-D-1 MS	Matrix Spike	97	102	99
310-263774-D-1 MSD	Matrix Spike Duplicate	98	102	98
310-263793-1	MW-22_23_08	96	100	96
310-263793-2	MW-24_23_08	94	101	92
310-263793-3	MW-25_23_08	96	100	105
310-263793-4	MW-26_23_08	96	100	97
310-263793-5	MW-28_23_08	96	100	106
310-263793-6	MW-102B_23_08	94	100	103
310-263793-8	MW-108B_23_08	95	101	104
310-263793-9	FD-5_23_08	96	100	104
310-263793-10	TB-4_23_08	94	99	104
310-263837-E-1 MS	Matrix Spike	97	102	97
310-263837-E-1 MSD	Matrix Spike Duplicate	98	103	99
LCS 310-398436/6	Lab Control Sample	99	103	99
LCS 310-398436/7	Lab Control Sample	94	100	104
LCS 310-398449/6	Lab Control Sample	97	102	97
LCS 310-398449/7	Lab Control Sample	96	100	102
MB 310-398436/5	Method Blank	95	100	107
MB 310-398449/5	Method Blank	96	100	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		2FP	PHL	TBP	NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(25-110)	(21-110)	(27-136)	(45-129)	(39-118)	(12-144)
310-263793-1	MW-22_23_08				79	71	49
310-263793-2	MW-24_23_08				91	87	59
310-263793-3	MW-25_23_08				71	73	42
310-263793-4	MW-26_23_08				70	77	45
310-263793-5	MW-28_23_08	67	57	65			
LCS 310-398448/2-A	Lab Control Sample	67	58	80	90	79	84
LCSD 310-398448/3-A	Lab Control Sample Dup	74	63	93	100	85	95
MB 310-398448/1-A	Method Blank	69	61	80	94	79	98

Surrogate Legend

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-263793-4	MW-26_23_08	50	58
LCS 310-398396/4-A	Lab Control Sample	37	46
LCSD 310-398396/5-A	Lab Control Sample Dup	40	57
MB 310-398396/1-A	Method Blank	59	70

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1
Lab Sample ID	Client Sample ID	(25-130)
310-263793-1	MW-22_23_08	88
310-263793-2	MW-24_23_08	79
LB 500-730789/1-B	Method Blank	74
LCS 500-730641/2-A	Lab Control Sample	82
LCSD 500-730641/3-A	Lab Control Sample Dup	86
MB 500-730641/1-A	Method Blank	73

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1
Lab Sample ID	Client Sample ID	(25-130)
310-263073-B-1-J MS	Matrix Spike	84

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-398436/5
Matrix: Water
Analysis Batch: 398436

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 12:14	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 12:14	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 12:14	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 12:14	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 12:14	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 12:14	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 12:14	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 12:14	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 12:14	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 12:14	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 12:14	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 12:14	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 12:14	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 12:14	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 12:14	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 12:14	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 12:14	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 12:14	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 12:14	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 12:14	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 12:14	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 12:14	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 12:14	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 12:14	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 12:14	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 12:14	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 12:14	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 12:14	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 12:14	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 12:14	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 12:14	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 12:14	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 12:14	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 12:14	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 12:14	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 12:14	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 12:14	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 12:14	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 12:14	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 12:14	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 12:14	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 12:14	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 12:14	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 12:14	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 12:14	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 12:14	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 12:14	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 12:14	1

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

Lab Sample ID: MB 310-398436/5
Matrix: Water
Analysis Batch: 398436

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		80 - 128		09/01/23 12:14	1
Toluene-d8 (Surr)	100		80 - 120		09/01/23 12:14	1
4-Bromofluorobenzene (Surr)	107		80 - 120		09/01/23 12:14	1

Lab Sample ID: LCS 310-398436/6
Matrix: Water
Analysis Batch: 398436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	20.10		ug/L		101	68 - 123
1,1,1-Trichloroethane	20.0	20.45		ug/L		102	71 - 128
1,1,2,2-Tetrachloroethane	20.0	23.53		ug/L		118	64 - 124
1,1,2-Trichloroethane	20.0	21.33		ug/L		107	70 - 124
1,1-Dichloroethane	20.0	19.80		ug/L		99	71 - 123
1,1-Dichloroethene	20.0	22.07		ug/L		110	61 - 129
1,2,3-Trichloropropane	20.0	21.62		ug/L		108	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	21.71		ug/L		109	50 - 150
1,2-Dibromoethane (EDB)	20.0	21.29		ug/L		106	73 - 125
1,2-Dichlorobenzene	20.0	20.91		ug/L		105	68 - 120
1,2-Dichloroethane	20.0	18.36		ug/L		92	70 - 124
1,2-Dichloropropane	20.0	19.77		ug/L		99	73 - 121
1,3-Dichlorobenzene	20.0	20.89		ug/L		104	67 - 123
1,4-Dichlorobenzene	20.0	21.46		ug/L		107	67 - 120
2-Butanone (MEK)	40.0	41.05		ug/L		103	50 - 150
2-Hexanone	40.0	46.63		ug/L		117	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	47.09		ug/L		118	62 - 130
Acetone	40.0	39.85		ug/L		100	50 - 150
Acrylonitrile	200	195.1		ug/L		98	50 - 150
Benzene	20.0	19.46		ug/L		97	73 - 122
Bromochloromethane	20.0	18.87		ug/L		94	68 - 132
Bromodichloromethane	20.0	20.18		ug/L		101	72 - 121
Bromoform	20.0	21.12		ug/L		106	55 - 129
Carbon disulfide	20.0	20.28		ug/L		101	58 - 131
Carbon tetrachloride	20.0	20.30		ug/L		102	67 - 132
Chlorobenzene	20.0	21.32		ug/L		107	69 - 121
Chlorodibromomethane	20.0	20.16		ug/L		101	69 - 122
Chloroform	20.0	19.91		ug/L		100	72 - 120
cis-1,2-Dichloroethene	20.0	20.63		ug/L		103	74 - 120
cis-1,3-Dichloropropene	20.0	20.64		ug/L		103	71 - 126
Dibromomethane	20.0	18.39		ug/L		92	72 - 123
Ethylbenzene	20.0	21.23		ug/L		106	69 - 122
Iodomethane	20.0	14.81		ug/L		74	10 - 150
Methylene Chloride	20.0	19.51		ug/L		98	50 - 150
Styrene	20.0	21.12		ug/L		106	67 - 125
Tetrachloroethene	20.0	21.62		ug/L		108	69 - 131
Toluene	20.0	21.01		ug/L		105	72 - 121
trans-1,2-Dichloroethene	20.0	20.61		ug/L		103	68 - 125
trans-1,3-Dichloropropene	20.0	19.44		ug/L		97	68 - 124

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

Lab Sample ID: LCS 310-398436/6
Matrix: Water
Analysis Batch: 398436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,4-Dichloro-2-butene	20.0	19.46		ug/L		97	48 - 150
Trichloroethene	20.0	20.30		ug/L		102	73 - 126
Vinyl acetate	40.0	43.81		ug/L		110	50 - 150
Xylenes, Total	40.0	42.08		ug/L		105	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: LCS 310-398436/7
Matrix: Water
Analysis Batch: 398436

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	12.60		ug/L		63	24 - 150
Chloroethane	20.0	17.92		ug/L		90	51 - 137
Chloromethane	20.0	19.35		ug/L		97	37 - 150
Trichlorofluoromethane	20.0	17.75		ug/L		89	56 - 144
Vinyl chloride	20.0	19.51		ug/L		98	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*

Lab Sample ID: 310-263774-D-1 MS
Matrix: Water
Analysis Batch: 398436

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.47		ug/L		72	52 - 130
1,1,1-Trichloroethane	<0.190		20.0	13.92		ug/L		70	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	16.33		ug/L		82	51 - 130
1,1,2-Trichloroethane	<0.450		20.0	16.00		ug/L		80	56 - 130
1,1-Dichloroethane	<0.220		20.0	14.90		ug/L		74	53 - 130
1,1-Dichloroethene	<0.560		20.0	12.57		ug/L		63	39 - 130
1,2,3-Trichloropropane	<0.590		20.0	17.26		ug/L		86	50 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	15.77		ug/L		79	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	15.67		ug/L		78	59 - 130
1,2-Dichlorobenzene	<0.370		20.0	15.05		ug/L		75	53 - 130
1,2-Dichloroethane	<0.390		20.0	14.77		ug/L		74	57 - 130
1,2-Dichloropropane	<0.270		20.0	14.79		ug/L		74	60 - 130
1,3-Dichlorobenzene	<0.300		20.0	15.18		ug/L		76	54 - 130
1,4-Dichlorobenzene	<0.230		20.0	15.52		ug/L		78	53 - 130
2-Butanone (MEK)	<2.10		40.0	32.53		ug/L		81	47 - 150
2-Hexanone	<2.00		40.0	32.26		ug/L		81	45 - 132
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	33.37		ug/L		83	46 - 132

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

Lab Sample ID: 310-263774-D-1 MS
Matrix: Water
Analysis Batch: 398436

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
Acetone	4.27	J	40.0	35.41		ug/L		78	35 - 150
Acrylonitrile	<2.20		200	144.1		ug/L		72	50 - 150
Benzene	8.40		20.0	22.14		ug/L		69	47 - 130
Bromochloromethane	<0.540		20.0	13.90		ug/L		70	54 - 132
Bromodichloromethane	<0.390		20.0	15.37		ug/L		77	58 - 130
Bromoform	<0.780		20.0	14.83		ug/L		74	42 - 130
Carbon disulfide	<0.450		20.0	16.02		ug/L		80	39 - 131
Carbon tetrachloride	<0.650		20.0	13.71		ug/L		69	45 - 132
Chlorobenzene	<0.400		20.0	15.54		ug/L		78	54 - 130
Chlorodibromomethane	<0.750		20.0	13.71		ug/L		69	53 - 130
Chloroform	<1.30		20.0	15.01		ug/L		75	55 - 130
cis-1,2-Dichloroethene	<0.210		20.0	15.47		ug/L		77	52 - 130
cis-1,3-Dichloropropene	<0.250		20.0	14.72		ug/L		74	55 - 130
Dibromomethane	<0.330		20.0	14.35		ug/L		72	61 - 130
Ethylbenzene	<0.310		20.0	14.58		ug/L		73	48 - 130
Iodomethane	<7.00		20.0	15.09		ug/L		75	10 - 150
Methylene Chloride	<1.70		20.0	15.65		ug/L		78	50 - 150
Styrene	<0.370		20.0	13.77		ug/L		69	46 - 130
Tetrachloroethene	<0.480		20.0	14.23		ug/L		71	42 - 131
Toluene	<0.430		20.0	15.15		ug/L		76	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	15.12		ug/L		76	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	14.03		ug/L		70	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.14		ug/L		76	33 - 150
Trichloroethene	<0.430		20.0	15.00		ug/L		75	55 - 130
Vinyl acetate	<2.50		40.0	33.99		ug/L		85	34 - 150
Xylenes, Total	<0.400		40.0	29.45		ug/L		74	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-263774-D-1 MSD
Matrix: Water
Analysis Batch: 398436

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	15.59		ug/L		78	52 - 130	7	20
1,1,1-Trichloroethane	<0.190		20.0	14.73		ug/L		74	49 - 130	6	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	17.94		ug/L		90	51 - 130	9	20
1,1,2-Trichloroethane	<0.450		20.0	17.01		ug/L		85	56 - 130	6	20
1,1-Dichloroethane	<0.220		20.0	15.30		ug/L		76	53 - 130	3	20
1,1-Dichloroethene	<0.560		20.0	16.42		ug/L		82	39 - 130	27	28
1,2,3-Trichloropropane	<0.590		20.0	16.77		ug/L		84	50 - 130	3	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	13.61		ug/L		68	45 - 150	15	20
1,2-Dibromoethane (EDB)	<0.340		20.0	16.96		ug/L		85	59 - 130	8	20
1,2-Dichlorobenzene	<0.370		20.0	16.65		ug/L		83	53 - 130	10	20
1,2-Dichloroethane	<0.390		20.0	15.67		ug/L		78	57 - 130	6	21

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

Lab Sample ID: 310-263774-D-1 MSD
Matrix: Water
Analysis Batch: 398436

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
1,2-Dichloropropane	<0.270		20.0	16.18		ug/L		81	60 - 130	9	31
1,3-Dichlorobenzene	<0.300		20.0	16.72		ug/L		84	54 - 130	10	20
1,4-Dichlorobenzene	<0.230		20.0	16.91		ug/L		85	53 - 130	9	20
2-Butanone (MEK)	<2.10		40.0	34.85		ug/L		87	47 - 150	7	20
2-Hexanone	<2.00		40.0	35.18		ug/L		88	45 - 132	9	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	36.50		ug/L		91	46 - 132	9	20
Acetone	4.27	J	40.0	40.08		ug/L		90	35 - 150	12	26
Acrylonitrile	<2.20		200	157.2		ug/L		79	50 - 150	9	21
Benzene	8.40		20.0	23.53		ug/L		76	47 - 130	6	20
Bromochloromethane	<0.540		20.0	15.53		ug/L		78	54 - 132	11	20
Bromodichloromethane	<0.390		20.0	16.30		ug/L		82	58 - 130	6	20
Bromoform	<0.780		20.0	15.91		ug/L		80	42 - 130	7	20
Carbon disulfide	<0.450		20.0	15.39		ug/L		77	39 - 131	4	32
Carbon tetrachloride	<0.650		20.0	14.41		ug/L		72	45 - 132	5	20
Chlorobenzene	<0.400		20.0	16.18		ug/L		81	54 - 130	4	20
Chlorodibromomethane	<0.750		20.0	15.19		ug/L		76	53 - 130	10	20
Chloroform	<1.30		20.0	15.80		ug/L		79	55 - 130	5	20
cis-1,2-Dichloroethene	<0.210		20.0	15.99		ug/L		80	52 - 130	3	20
cis-1,3-Dichloropropene	<0.250		20.0	16.00		ug/L		80	55 - 130	8	20
Dibromomethane	<0.330		20.0	15.20		ug/L		76	61 - 130	6	20
Ethylbenzene	<0.310		20.0	15.65		ug/L		78	48 - 130	7	20
Iodomethane	<7.00		20.0	14.92		ug/L		75	10 - 150	1	35
Methylene Chloride	<1.70		20.0	16.71		ug/L		84	50 - 150	7	24
Styrene	<0.370		20.0	14.96		ug/L		75	46 - 130	8	20
Tetrachloroethene	<0.480		20.0	15.08		ug/L		75	42 - 131	6	20
Toluene	<0.430		20.0	15.87		ug/L		79	48 - 130	5	20
trans-1,2-Dichloroethene	<0.270		20.0	15.67		ug/L		78	54 - 130	4	24
trans-1,3-Dichloropropene	<0.560		20.0	15.28		ug/L		76	51 - 130	9	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	13.85		ug/L		69	33 - 150	9	20
Trichloroethene	<0.430		20.0	15.81		ug/L		79	55 - 130	5	20
Vinyl acetate	<2.50		40.0	35.79		ug/L		89	34 - 150	5	27
Xylenes, Total	<0.400		40.0	31.87		ug/L		80	44 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 310-398449/5
Matrix: Water
Analysis Batch: 398449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			09/01/23 23:06	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			09/01/23 23:06	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			09/01/23 23:06	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			09/01/23 23:06	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			09/01/23 23:06	1

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

Lab Sample ID: MB 310-398449/5
Matrix: Water
Analysis Batch: 398449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			09/01/23 23:06	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			09/01/23 23:06	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			09/01/23 23:06	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			09/01/23 23:06	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			09/01/23 23:06	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			09/01/23 23:06	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			09/01/23 23:06	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			09/01/23 23:06	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			09/01/23 23:06	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			09/01/23 23:06	1
2-Hexanone	<2.00		10.0	2.00	ug/L			09/01/23 23:06	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			09/01/23 23:06	1
Acetone	<3.10		10.0	3.10	ug/L			09/01/23 23:06	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			09/01/23 23:06	1
Benzene	<0.220		0.500	0.220	ug/L			09/01/23 23:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			09/01/23 23:06	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			09/01/23 23:06	1
Bromoform	<0.780		5.00	0.780	ug/L			09/01/23 23:06	1
Bromomethane	<1.10		4.00	1.10	ug/L			09/01/23 23:06	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			09/01/23 23:06	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			09/01/23 23:06	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			09/01/23 23:06	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			09/01/23 23:06	1
Chloroethane	<0.790		4.00	0.790	ug/L			09/01/23 23:06	1
Chloroform	<1.30		3.00	1.30	ug/L			09/01/23 23:06	1
Chloromethane	<0.610		3.00	0.610	ug/L			09/01/23 23:06	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			09/01/23 23:06	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			09/01/23 23:06	1
Dibromomethane	<0.330		1.00	0.330	ug/L			09/01/23 23:06	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			09/01/23 23:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			09/01/23 23:06	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			09/01/23 23:06	1
Styrene	<0.370		1.00	0.370	ug/L			09/01/23 23:06	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			09/01/23 23:06	1
Toluene	<0.430		1.00	0.430	ug/L			09/01/23 23:06	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			09/01/23 23:06	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			09/01/23 23:06	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			09/01/23 23:06	1
Trichloroethene	<0.430		1.00	0.430	ug/L			09/01/23 23:06	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			09/01/23 23:06	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			09/01/23 23:06	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			09/01/23 23:06	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			09/01/23 23:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 128*		*09/01/23 23:06*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/01/23 23:06*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/01/23 23:06*	*1*

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

Lab Sample ID: LCS 310-398449/6
Matrix: Water
Analysis Batch: 398449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.78		ug/L		99	68 - 123
1,1,1-Trichloroethane	20.0	19.78		ug/L		99	71 - 128
1,1,2,2-Tetrachloroethane	20.0	22.57		ug/L		113	64 - 124
1,1,2-Trichloroethane	20.0	21.18		ug/L		106	70 - 124
1,1-Dichloroethane	20.0	19.23		ug/L		96	71 - 123
1,1-Dichloroethene	20.0	20.80		ug/L		104	61 - 129
1,2,3-Trichloropropane	20.0	23.46		ug/L		117	64 - 125
1,2-Dibromo-3-Chloropropane	20.0	20.65		ug/L		103	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.68		ug/L		103	73 - 125
1,2-Dichlorobenzene	20.0	20.86		ug/L		104	68 - 120
1,2-Dichloroethane	20.0	17.58		ug/L		88	70 - 124
1,2-Dichloropropane	20.0	18.90		ug/L		94	73 - 121
1,3-Dichlorobenzene	20.0	20.66		ug/L		103	67 - 123
1,4-Dichlorobenzene	20.0	20.82		ug/L		104	67 - 120
2-Butanone (MEK)	40.0	37.61		ug/L		94	50 - 150
2-Hexanone	40.0	43.12		ug/L		108	60 - 132
4-Methyl-2-pentanone (MIBK)	40.0	43.68		ug/L		109	62 - 130
Acetone	40.0	37.54		ug/L		94	50 - 150
Acrylonitrile	200	185.2		ug/L		93	50 - 150
Benzene	20.0	18.58		ug/L		93	73 - 122
Bromochloromethane	20.0	19.27		ug/L		96	68 - 132
Bromodichloromethane	20.0	20.35		ug/L		102	72 - 121
Bromoform	20.0	20.70		ug/L		104	55 - 129
Carbon disulfide	20.0	19.55		ug/L		98	58 - 131
Carbon tetrachloride	20.0	19.42		ug/L		97	67 - 132
Chlorobenzene	20.0	20.84		ug/L		104	69 - 121
Chlorodibromomethane	20.0	19.43		ug/L		97	69 - 122
Chloroform	20.0	19.53		ug/L		98	72 - 120
cis-1,2-Dichloroethene	20.0	19.79		ug/L		99	74 - 120
cis-1,3-Dichloropropene	20.0	19.64		ug/L		98	71 - 126
Dibromomethane	20.0	17.90		ug/L		89	72 - 123
Ethylbenzene	20.0	20.48		ug/L		102	69 - 122
Iodomethane	20.0	15.55		ug/L		78	10 - 150
Methylene Chloride	20.0	19.48		ug/L		97	50 - 150
Styrene	20.0	20.52		ug/L		103	67 - 125
Tetrachloroethene	20.0	21.11		ug/L		106	69 - 131
Toluene	20.0	20.32		ug/L		102	72 - 121
trans-1,2-Dichloroethene	20.0	19.90		ug/L		100	68 - 125
trans-1,3-Dichloropropene	20.0	18.85		ug/L		94	68 - 124
trans-1,4-Dichloro-2-butene	20.0	20.15		ug/L		101	48 - 150
Trichloroethene	20.0	20.54		ug/L		103	73 - 126
Vinyl acetate	40.0	40.69		ug/L		102	50 - 150
Xylenes, Total	40.0	41.02		ug/L		103	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

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

Lab Sample ID: LCS 310-398449/7
Matrix: Water
Analysis Batch: 398449

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	11.71		ug/L		59	24 - 150
Chloroethane	20.0	16.08		ug/L		80	51 - 137
Chloromethane	20.0	17.99		ug/L		90	37 - 150
Trichlorofluoromethane	20.0	15.81		ug/L		79	56 - 144
Vinyl chloride	20.0	18.35		ug/L		92	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 310-263837-E-1 MS
Matrix: Water
Analysis Batch: 398449

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.08		ug/L		85	52 - 130
1,1,1-Trichloroethane	<0.190		20.0	17.75		ug/L		89	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	16.10		ug/L		80	51 - 130
1,1,2-Trichloroethane	<0.450		20.0	18.01		ug/L		90	56 - 130
1,1-Dichloroethane	<0.220		20.0	17.87		ug/L		89	53 - 130
1,1-Dichloroethene	<0.560		20.0	18.67		ug/L		93	39 - 130
1,2,3-Trichloropropane	<0.590		20.0	16.64		ug/L		83	50 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	17.88		ug/L		89	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	18.31		ug/L		92	59 - 130
1,2-Dichlorobenzene	<0.370		20.0	18.60		ug/L		93	53 - 130
1,2-Dichloroethane	<0.390		20.0	16.52		ug/L		83	57 - 130
1,2-Dichloropropane	<0.270		20.0	17.53		ug/L		88	60 - 130
1,3-Dichlorobenzene	<0.300		20.0	18.32		ug/L		92	54 - 130
1,4-Dichlorobenzene	<0.230		20.0	18.63		ug/L		93	53 - 130
2-Butanone (MEK)	<2.10		40.0	34.84		ug/L		87	47 - 150
2-Hexanone	<2.00		40.0	37.98		ug/L		95	45 - 132
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	37.92		ug/L		95	46 - 132
Acetone	<3.10		40.0	39.08		ug/L		98	35 - 150
Acrylonitrile	<2.20		200	174.0		ug/L		87	50 - 150
Benzene	<0.220		20.0	17.06		ug/L		85	47 - 130
Bromochloromethane	<0.540		20.0	17.05		ug/L		85	54 - 132
Bromodichloromethane	<0.390		20.0	17.75		ug/L		89	58 - 130
Bromoform	<0.780		20.0	15.61		ug/L		78	42 - 130
Carbon disulfide	<0.450		20.0	19.19		ug/L		96	39 - 131
Carbon tetrachloride	<0.650		20.0	17.56		ug/L		88	45 - 132
Chlorobenzene	<0.400		20.0	18.45		ug/L		92	54 - 130
Chlorodibromomethane	<0.750		20.0	16.80		ug/L		84	53 - 130
Chloroform	<1.30		20.0	17.50		ug/L		88	55 - 130
cis-1,2-Dichloroethene	<0.210		20.0	17.97		ug/L		90	52 - 130
cis-1,3-Dichloropropene	<0.250		20.0	16.93		ug/L		85	55 - 130
Dibromomethane	<0.330		20.0	16.13		ug/L		81	61 - 130
Ethylbenzene	<0.310		20.0	18.08		ug/L		90	48 - 130

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

Lab Sample ID: 310-263837-E-1 MS
Matrix: Water
Analysis Batch: 398449

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
Iodomethane	<7.00		20.0	16.08		ug/L		80	10 - 150
Methylene Chloride	<1.70		20.0	17.83		ug/L		89	50 - 150
Styrene	<0.370		20.0	16.72		ug/L		84	46 - 130
Tetrachloroethene	<0.480		20.0	18.55		ug/L		93	42 - 131
Toluene	<0.430		20.0	18.37		ug/L		92	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	18.12		ug/L		91	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	16.46		ug/L		82	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	14.23		ug/L		71	33 - 150
Trichloroethene	<0.430		20.0	18.01		ug/L		90	55 - 130
Vinyl acetate	<2.50		40.0	35.77		ug/L		89	34 - 150
Xylenes, Total	<0.400		40.0	35.64		ug/L		89	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: 310-263837-E-1 MSD
Matrix: Water
Analysis Batch: 398449

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.33		ug/L		87	52 - 130	1	20
1,1,1-Trichloroethane	<0.190		20.0	17.41		ug/L		87	49 - 130	2	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	19.17		ug/L		96	51 - 130	17	20
1,1,2-Trichloroethane	<0.450		20.0	18.33		ug/L		92	56 - 130	2	20
1,1-Dichloroethane	<0.220		20.0	16.46		ug/L		82	53 - 130	8	20
1,1-Dichloroethene	<0.560		20.0	18.79		ug/L		94	39 - 130	1	28
1,2,3-Trichloropropane	<0.590		20.0	16.78		ug/L		84	50 - 130	1	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	18.62		ug/L		93	45 - 150	4	20
1,2-Dibromoethane (EDB)	<0.340		20.0	18.55		ug/L		93	59 - 130	1	20
1,2-Dichlorobenzene	<0.370		20.0	18.68		ug/L		93	53 - 130	0	20
1,2-Dichloroethane	<0.390		20.0	16.01		ug/L		80	57 - 130	3	21
1,2-Dichloropropane	<0.270		20.0	19.50		ug/L		97	60 - 130	11	31
1,3-Dichlorobenzene	<0.300		20.0	18.92		ug/L		95	54 - 130	3	20
1,4-Dichlorobenzene	<0.230		20.0	19.09		ug/L		95	53 - 130	2	20
2-Butanone (MEK)	<2.10		40.0	33.01		ug/L		83	47 - 150	5	20
2-Hexanone	<2.00		40.0	37.08		ug/L		93	45 - 132	2	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	38.38		ug/L		96	46 - 132	1	20
Acetone	<3.10		40.0	35.74		ug/L		89	35 - 150	9	26
Acrylonitrile	<2.20		200	162.8		ug/L		81	50 - 150	7	21
Benzene	<0.220		20.0	16.64		ug/L		83	47 - 130	3	20
Bromochloromethane	<0.540		20.0	17.30		ug/L		87	54 - 132	1	20
Bromodichloromethane	<0.390		20.0	17.81		ug/L		89	58 - 130	0	20
Bromoform	<0.780		20.0	17.50		ug/L		87	42 - 130	11	20
Carbon disulfide	<0.450		20.0	17.83		ug/L		89	39 - 131	7	32
Carbon tetrachloride	<0.650		20.0	17.48		ug/L		87	45 - 132	0	20
Chlorobenzene	<0.400		20.0	18.38		ug/L		92	54 - 130	0	20

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

Lab Sample ID: 310-263837-E-1 MSD
Matrix: Water
Analysis Batch: 398449

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
Chlorodibromomethane	<0.750		20.0	16.69		ug/L		83	53 - 130	1	20
Chloroform	<1.30		20.0	17.13		ug/L		86	55 - 130	2	20
cis-1,2-Dichloroethene	<0.210		20.0	17.47		ug/L		87	52 - 130	3	20
cis-1,3-Dichloropropene	<0.250		20.0	17.18		ug/L		86	55 - 130	1	20
Dibromomethane	<0.330		20.0	18.77		ug/L		94	61 - 130	15	20
Ethylbenzene	<0.310		20.0	18.21		ug/L		91	48 - 130	1	20
Iodomethane	<7.00		20.0	17.05		ug/L		85	10 - 150	6	35
Methylene Chloride	<1.70		20.0	17.30		ug/L		86	50 - 150	3	24
Styrene	<0.370		20.0	18.19		ug/L		91	46 - 130	8	20
Tetrachloroethene	<0.480		20.0	18.67		ug/L		93	42 - 131	1	20
Toluene	<0.430		20.0	18.27		ug/L		91	48 - 130	1	20
trans-1,2-Dichloroethene	<0.270		20.0	17.61		ug/L		88	54 - 130	3	24
trans-1,3-Dichloropropene	<0.560		20.0	18.65		ug/L		93	51 - 130	12	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	16.93		ug/L		85	33 - 150	17	20
Trichloroethene	<0.430		20.0	17.99		ug/L		90	55 - 130	0	20
Vinyl acetate	<2.50		40.0	34.50		ug/L		86	34 - 150	4	27
Xylenes, Total	<0.400		40.0	36.71		ug/L		92	44 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

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

Lab Sample ID: MB 310-398448/1-A
Matrix: Water
Analysis Batch: 399275

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis(1-chloropropane)	<0.540		10.0	0.540	ug/L		09/01/23 11:05	09/12/23 15:55	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		09/01/23 11:05	09/12/23 15:55	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		09/01/23 11:05	09/12/23 15:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*69*		*25 - 110*	*09/01/23 11:05*	*09/12/23 15:55*	*1*
Phenol-d5 (Surr)	*61*		*21 - 110*	*09/01/23 11:05*	*09/12/23 15:55*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*27 - 136*	*09/01/23 11:05*	*09/12/23 15:55*	*1*
Nitrobenzene-d5 (Surr)	*94*		*45 - 129*	*09/01/23 11:05*	*09/12/23 15:55*	*1*
2-Fluorobiphenyl (Surr)	*79*		*39 - 118*	*09/01/23 11:05*	*09/12/23 15:55*	*1*
Terphenyl-d14 (Surr)	*98*		*12 - 144*	*09/01/23 11:05*	*09/12/23 15:55*	*1*

Lab Sample ID: LCS 310-398448/2-A
Matrix: Water
Analysis Batch: 399275

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylphenol, 3 & 4	100	81.18		ug/L		81	46 - 117

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

Lab Sample ID: LCS 310-398448/2-A
Matrix: Water
Analysis Batch: 399275

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398448

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bis(2-ethylhexyl) phthalate			100	64.45		ug/L		64	43 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*67*		*25 - 110*
Phenol-d5 (Surr)	*58*		*21 - 110*
2,4,6-Tribromophenol (Surr)	*80*		*27 - 136*
Nitrobenzene-d5 (Surr)	*90*		*45 - 129*
2-Fluorobiphenyl (Surr)	*79*		*39 - 118*
Terphenyl-d14 (Surr)	*84*		*12 - 144*

Lab Sample ID: LCSD 310-398448/3-A
Matrix: Water
Analysis Batch: 399275

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 398448

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methylphenol, 3 & 4			100	86.02		ug/L		86	46 - 117	6	35
Bis(2-ethylhexyl) phthalate			100	67.87		ug/L		68	43 - 143	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*74*		*25 - 110*
Phenol-d5 (Surr)	*63*		*21 - 110*
2,4,6-Tribromophenol (Surr)	*93*		*27 - 136*
Nitrobenzene-d5 (Surr)	*100*		*45 - 129*
2-Fluorobiphenyl (Surr)	*85*		*39 - 118*
Terphenyl-d14 (Surr)	*95*		*12 - 144*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-398396/1-A
Matrix: Water
Analysis Batch: 399386

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398396

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		09/01/23 08:00	09/13/23 11:24	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		09/01/23 08:00	09/13/23 11:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*		*10 - 136*	*09/01/23 08:00*	*09/13/23 11:24*	*1*
Tetrachloro-m-xylene	*70*		*10 - 130*	*09/01/23 08:00*	*09/13/23 11:24*	*1*

Lab Sample ID: LCS 310-398396/4-A
Matrix: Water
Analysis Batch: 399386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398396

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
alpha-BHC			1.00	0.6082		ug/L		61	36 - 127		
Heptachlor			1.00	0.4476		ug/L		45	27 - 120		

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

Lab Sample ID: LCS 310-398396/4-A
Matrix: Water
Analysis Batch: 399386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398396

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	37		10 - 136
Tetrachloro-m-xylene	46		10 - 130

Lab Sample ID: LCSD 310-398396/5-A
Matrix: Water
Analysis Batch: 399386

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 398396

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC			1.00	0.6026		ug/L		60	36 - 127	1	35
Heptachlor			1.00	0.4524		ug/L		45	27 - 120	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	40		10 - 136
Tetrachloro-m-xylene	57		10 - 130

Method: 8151A - Herbicides (GC)

Lab Sample ID: LB 500-730789/1-B
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730641

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<30.7		100	30.7	ug/L		09/05/23 09:52	09/07/23 09:27	1
2,4,5-TP	<8.34		100	8.34	ug/L		09/05/23 09:52	09/07/23 09:27	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	74		25 - 130	09/05/23 09:52	09/07/23 09:27	1

Lab Sample ID: MB 500-730641/1-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 730641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.307		1.00	0.307	ug/L		09/01/23 16:59	09/07/23 08:35	1
2,4,5-TP	<0.0834		1.00	0.0834	ug/L		09/01/23 16:59	09/07/23 08:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	73		25 - 130	09/01/23 16:59	09/07/23 08:35	1

Lab Sample ID: LCS 500-730641/2-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 730641

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			10.1	7.623		ug/L		76	30 - 115		
2,4,5-TP			2.50	1.963		ug/L		79	32 - 115		

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 500-730641/2-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 730641

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCAA	82		25 - 130

Lab Sample ID: LCSD 500-730641/3-A
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 730641

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			10.1	7.924		ug/L		79	30 - 115	4	20
2,4,5-TP			2.50	2.008		ug/L		80	32 - 115	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCAA	86		25 - 130

Lab Sample ID: 310-263073-B-1-J MS
Matrix: Water
Analysis Batch: 731117

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 730641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	<30.7		1010	756.9		ug/L		75	30 - 115
2,4,5-TP	<8.34		250	197.1		ug/L		79	32 - 115

Surrogate	MS %Recovery	MS Qualifier	Limits
DCAA	84		25 - 130

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-398504/1-A
Matrix: Water
Analysis Batch: 400176

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		09/05/23 08:00	09/20/23 18:47	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		09/05/23 08:00	09/20/23 18:47	1
Barium	<0.000640		0.00200	0.000640	mg/L		09/05/23 08:00	09/20/23 18:47	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		09/05/23 08:00	09/20/23 18:47	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		09/05/23 08:00	09/20/23 18:47	1
Chromium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 18:47	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		09/05/23 08:00	09/20/23 18:47	1
Copper	<0.00180		0.00500	0.00180	mg/L		09/05/23 08:00	09/20/23 18:47	1
Lead	<0.000240		0.000500	0.000240	mg/L		09/05/23 08:00	09/20/23 18:47	1
Nickel	<0.00190		0.00500	0.00190	mg/L		09/05/23 08:00	09/20/23 18:47	1
Selenium	<0.00140		0.00500	0.00140	mg/L		09/05/23 08:00	09/20/23 18:47	1
Silver	<0.000500		0.00100	0.000500	mg/L		09/05/23 08:00	09/20/23 18:47	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		09/05/23 08:00	09/20/23 18:47	1
Zinc	<0.00640		0.0200	0.00640	mg/L		09/05/23 08:00	09/20/23 18:47	1
Tin	<0.00230		0.00500	0.00230	mg/L		09/05/23 08:00	09/20/23 18:47	1

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

Lab Sample ID: MB 310-398504/1-A
Matrix: Water
Analysis Batch: 400337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.000260		0.00100	0.000260	mg/L		09/05/23 08:00	09/21/23 19:30	1

Lab Sample ID: LCS 310-398504/2-A
Matrix: Water
Analysis Batch: 400176

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2308		mg/L		115	80 - 120
Arsenic	0.200	0.1993		mg/L		100	80 - 120
Barium	0.100	0.09034		mg/L		90	80 - 120
Beryllium	0.100	0.09896		mg/L		99	80 - 120
Cadmium	0.100	0.08590		mg/L		86	80 - 120
Chromium	0.100	0.09682		mg/L		97	80 - 120
Cobalt	0.100	0.1038		mg/L		104	80 - 120
Copper	0.200	0.1978		mg/L		99	80 - 120
Lead	0.200	0.2025		mg/L		101	80 - 120
Nickel	0.200	0.1983		mg/L		99	80 - 120
Selenium	0.400	0.3735		mg/L		93	80 - 120
Silver	0.100	0.1198		mg/L		120	80 - 120
Vanadium	0.100	0.09203		mg/L		92	80 - 120
Zinc	0.200	0.1971		mg/L		99	80 - 120
Tin	0.200	0.1943		mg/L		97	80 - 120

Lab Sample ID: LCS 310-398504/2-A
Matrix: Water
Analysis Batch: 400466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.200	0.1590		mg/L		80	80 - 120

Lab Sample ID: 310-263793-2 MS
Matrix: Water
Analysis Batch: 400176

Client Sample ID: MW-24_23_08
Prep Type: Total/NA
Prep Batch: 398504

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	0.0240		0.200	0.2136		mg/L		95	75 - 125
Barium	0.758		0.100	0.8282	4	mg/L		70	75 - 125
Beryllium	<0.000330		0.100	0.09199		mg/L		92	75 - 125
Cadmium	<0.000100		0.100	0.08535		mg/L		85	75 - 125
Chromium	<0.00110		0.100	0.08996		mg/L		90	75 - 125
Cobalt	0.000395	J	0.100	0.09242		mg/L		92	75 - 125
Copper	<0.00180		0.200	0.1778		mg/L		89	75 - 125
Lead	0.000580		0.200	0.1837		mg/L		92	75 - 125
Nickel	0.00782		0.200	0.1845		mg/L		88	75 - 125
Selenium	<0.00140		0.400	0.3600		mg/L		90	75 - 125
Silver	<0.000500		0.100	0.09858		mg/L		99	75 - 125
Vanadium	<0.00110		0.100	0.08776		mg/L		88	75 - 125
Zinc	0.0138	J	0.200	0.1904		mg/L		88	75 - 125

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

Lab Sample ID: 310-263793-2 MS
Matrix: Water
Analysis Batch: 400176

Client Sample ID: MW-24_23_08
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Tin	<0.00230	F2	0.200	0.1790		mg/L		90	75 - 125

Lab Sample ID: 310-263793-2 MS
Matrix: Water
Analysis Batch: 400337

Client Sample ID: MW-24_23_08
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.00150	F1	0.200	0.1359	F1	mg/L		67	75 - 125

Lab Sample ID: 310-263793-2 MSD
Matrix: Water
Analysis Batch: 400176

Client Sample ID: MW-24_23_08
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2093		mg/L		105	75 - 125	1	20
Arsenic	0.0240		0.200	0.2113		mg/L		94	75 - 125	1	20
Barium	0.758		0.100	0.8288	4	mg/L		71	75 - 125	0	20
Beryllium	<0.000330		0.100	0.08892		mg/L		89	75 - 125	3	20
Cadmium	<0.000100		0.100	0.08383		mg/L		84	75 - 125	2	20
Chromium	<0.00110		0.100	0.08805		mg/L		88	75 - 125	2	20
Cobalt	0.000395	J	0.100	0.08861		mg/L		88	75 - 125	4	20
Copper	<0.00180		0.200	0.1769		mg/L		88	75 - 125	1	20
Lead	0.000580		0.200	0.1824		mg/L		91	75 - 125	1	20
Nickel	0.00782		0.200	0.1845		mg/L		88	75 - 125	0	20
Selenium	<0.00140		0.400	0.3529		mg/L		88	75 - 125	2	20
Silver	<0.000500		0.100	0.09745		mg/L		97	75 - 125	1	20
Vanadium	<0.00110		0.100	0.08646		mg/L		86	75 - 125	1	20
Zinc	0.0138	J	0.200	0.1879		mg/L		87	75 - 125	1	20
Tin	<0.00230	F2	0.200	0.2292	F2	mg/L		115	75 - 125	25	20

Lab Sample ID: 310-263793-2 MSD
Matrix: Water
Analysis Batch: 400337

Client Sample ID: MW-24_23_08
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	0.00150	F1	0.200	0.1395	F1	mg/L		69	75 - 125	3	20

Lab Sample ID: 310-263826-A-2-B DU
Matrix: Water
Analysis Batch: 400176

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00100		<0.00100		mg/L		NC	20
Arsenic	0.00145	J	0.001385	J	mg/L		5	20
Barium	0.826		0.8281		mg/L		0.3	20
Beryllium	<0.000330		<0.000330		mg/L		NC	20
Cadmium	<0.000100		<0.000100		mg/L		NC	20
Chromium	<0.00110		0.001156	J	mg/L		NC	20
Cobalt	0.00153		0.001526		mg/L		0.07	20
Copper	<0.00180		<0.00180		mg/L		NC	20

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

Lab Sample ID: 310-263826-A-2-B DU
Matrix: Water
Analysis Batch: 400176

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	<0.000240			<0.000240		mg/L				NC	20
Nickel	0.0171			0.01721		mg/L				0.7	20
Selenium	<0.00140			<0.00140		mg/L				NC	20
Silver	<0.000500			<0.000500		mg/L				NC	20
Vanadium	<0.00110			<0.00110		mg/L				NC	20
Zinc	<0.00640			<0.00640		mg/L				NC	20
Tin	<0.00230			<0.00230		mg/L				NC	20

Lab Sample ID: 310-263826-A-2-B DU
Matrix: Water
Analysis Batch: 400337

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 398504

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Thallium	<0.000260			<0.000260		mg/L				NC	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-398435/1
Matrix: Water
Analysis Batch: 398435

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	<1.70		5.00	1.70	mg/L			09/01/23 10:23	1

Lab Sample ID: LCS 310-398435/2
Matrix: Water
Analysis Batch: 398435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	99.00		mg/L		99	75 - 116		

Lab Sample ID: 310-263793-1 DU
Matrix: Water
Analysis Batch: 398435

Client Sample ID: MW-22_23_08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	41.8			41.00		mg/L				2	35

GC/MS VOA

Analysis Batch: 398436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	8260D	
310-263793-2	MW-24_23_08	Total/NA	Water	8260D	
310-263793-3	MW-25_23_08	Total/NA	Water	8260D	
310-263793-4	MW-26_23_08	Total/NA	Water	8260D	
310-263793-5	MW-28_23_08	Total/NA	Water	8260D	
MB 310-398436/5	Method Blank	Total/NA	Water	8260D	
LCS 310-398436/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-398436/7	Lab Control Sample	Total/NA	Water	8260D	
310-263774-D-1 MS	Matrix Spike	Total/NA	Water	8260D	
310-263774-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 398449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-6	MW-102B_23_08	Total/NA	Water	8260D	
310-263793-8	MW-108B_23_08	Total/NA	Water	8260D	
310-263793-9	FD-5_23_08	Total/NA	Water	8260D	
310-263793-10	TB-4_23_08	Total/NA	Water	8260D	
MB 310-398449/5	Method Blank	Total/NA	Water	8260D	
LCS 310-398449/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-398449/7	Lab Control Sample	Total/NA	Water	8260D	
310-263837-E-1 MS	Matrix Spike	Total/NA	Water	8260D	
310-263837-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 398448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	3510C	
310-263793-2	MW-24_23_08	Total/NA	Water	3510C	
310-263793-3	MW-25_23_08	Total/NA	Water	3510C	
310-263793-4	MW-26_23_08	Total/NA	Water	3510C	
310-263793-5	MW-28_23_08	Total/NA	Water	3510C	
MB 310-398448/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-398448/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-398448/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 399275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	8270E	398448
310-263793-2	MW-24_23_08	Total/NA	Water	8270E	398448
310-263793-3	MW-25_23_08	Total/NA	Water	8270E	398448
310-263793-4	MW-26_23_08	Total/NA	Water	8270E	398448
310-263793-5	MW-28_23_08	Total/NA	Water	8270E	398448
MB 310-398448/1-A	Method Blank	Total/NA	Water	8270E	398448
LCS 310-398448/2-A	Lab Control Sample	Total/NA	Water	8270E	398448
LCSD 310-398448/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	398448

GC Semi VOA

Prep Batch: 398396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-4	MW-26_23_08	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 398396 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-398396/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-398396/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-398396/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 399386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-4	MW-26_23_08	Total/NA	Water	8081B	398396
MB 310-398396/1-A	Method Blank	Total/NA	Water	8081B	398396
LCS 310-398396/4-A	Lab Control Sample	Total/NA	Water	8081B	398396
LCSD 310-398396/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	398396

Prep Batch: 730641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	8151A	
310-263793-2	MW-24_23_08	Total/NA	Water	8151A	
LB 500-730789/1-B	Method Blank	Total/NA	Water	8151A	730789
MB 500-730641/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-730641/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-730641/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
310-263073-B-1-J MS	Matrix Spike	TCLP	Water	8151A	730789

Leach Batch: 730789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 500-730789/1-B	Method Blank	Total/NA	Water	1311	
310-263073-B-1-J MS	Matrix Spike	TCLP	Water	1311	

Analysis Batch: 731117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	8151A	730641
310-263793-2	MW-24_23_08	Total/NA	Water	8151A	730641
LB 500-730789/1-B	Method Blank	Total/NA	Water	8151A	730641
MB 500-730641/1-A	Method Blank	Total/NA	Water	8151A	730641
LCS 500-730641/2-A	Lab Control Sample	Total/NA	Water	8151A	730641
LCSD 500-730641/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	730641
310-263073-B-1-J MS	Matrix Spike	TCLP	Water	8151A	730641

Metals

Prep Batch: 398504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	3005A	
310-263793-2	MW-24_23_08	Total/NA	Water	3005A	
310-263793-3	MW-25_23_08	Total/NA	Water	3005A	
310-263793-4	MW-26_23_08	Total/NA	Water	3005A	
310-263793-5	MW-28_23_08	Total/NA	Water	3005A	
310-263793-6	MW-102B_23_08	Total/NA	Water	3005A	
310-263793-7	MW-104B_23_08	Total/NA	Water	3005A	
310-263793-8	MW-108B_23_08	Total/NA	Water	3005A	
310-263793-9	FD-5_23_08	Total/NA	Water	3005A	
MB 310-398504/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-398504/2-A	Lab Control Sample	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 398504 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-2 MS	MW-24_23_08	Total/NA	Water	3005A	
310-263793-2 MSD	MW-24_23_08	Total/NA	Water	3005A	
310-263826-A-2-B DU	Duplicate	Total/NA	Water	3005A	

Analysis Batch: 400176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	6020B	398504
310-263793-2	MW-24_23_08	Total/NA	Water	6020B	398504
310-263793-3	MW-25_23_08	Total/NA	Water	6020B	398504
310-263793-4	MW-26_23_08	Total/NA	Water	6020B	398504
310-263793-5	MW-28_23_08	Total/NA	Water	6020B	398504
310-263793-6	MW-102B_23_08	Total/NA	Water	6020B	398504
310-263793-7	MW-104B_23_08	Total/NA	Water	6020B	398504
310-263793-8	MW-108B_23_08	Total/NA	Water	6020B	398504
310-263793-9	FD-5_23_08	Total/NA	Water	6020B	398504
MB 310-398504/1-A	Method Blank	Total/NA	Water	6020B	398504
LCS 310-398504/2-A	Lab Control Sample	Total/NA	Water	6020B	398504
310-263793-2 MS	MW-24_23_08	Total/NA	Water	6020B	398504
310-263793-2 MSD	MW-24_23_08	Total/NA	Water	6020B	398504
310-263826-A-2-B DU	Duplicate	Total/NA	Water	6020B	398504

Analysis Batch: 400337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	6020B	398504
310-263793-2	MW-24_23_08	Total/NA	Water	6020B	398504
310-263793-3	MW-25_23_08	Total/NA	Water	6020B	398504
310-263793-4	MW-26_23_08	Total/NA	Water	6020B	398504
310-263793-5	MW-28_23_08	Total/NA	Water	6020B	398504
310-263793-6	MW-102B_23_08	Total/NA	Water	6020B	398504
310-263793-8	MW-108B_23_08	Total/NA	Water	6020B	398504
310-263793-9	FD-5_23_08	Total/NA	Water	6020B	398504
MB 310-398504/1-A	Method Blank	Total/NA	Water	6020B	398504
310-263793-2 MS	MW-24_23_08	Total/NA	Water	6020B	398504
310-263793-2 MSD	MW-24_23_08	Total/NA	Water	6020B	398504
310-263826-A-2-B DU	Duplicate	Total/NA	Water	6020B	398504

Analysis Batch: 400466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-398504/2-A	Lab Control Sample	Total/NA	Water	6020B	398504

General Chemistry

Analysis Batch: 398435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-1	MW-22_23_08	Total/NA	Water	I-3765-85	
310-263793-2	MW-24_23_08	Total/NA	Water	I-3765-85	
310-263793-3	MW-25_23_08	Total/NA	Water	I-3765-85	
310-263793-4	MW-26_23_08	Total/NA	Water	I-3765-85	
310-263793-5	MW-28_23_08	Total/NA	Water	I-3765-85	
310-263793-6	MW-102B_23_08	Total/NA	Water	I-3765-85	
310-263793-7	MW-104B_23_08	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 398435 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-263793-8	MW-108B_23_08	Total/NA	Water	I-3765-85	
310-263793-9	FD-5_23_08	Total/NA	Water	I-3765-85	
MB 310-398435/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-398435/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-263793-1 DU	MW-22_23_08	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-22_23_08

Lab Sample ID: 310-263793-1

Date Collected: 08/30/23 15:10

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398436	FE5V	EET CF	09/01/23 16:44
Total/NA	Prep	3510C			398448	Y6AF	EET CF	09/01/23 11:05
Total/NA	Analysis	8270E		1	399275	L0FS	EET CF	09/12/23 17:17
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/05/23 09:51
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 13:13
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 18:53
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 19:34
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: MW-24_23_08

Lab Sample ID: 310-263793-2

Date Collected: 08/30/23 13:00

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398436	FE5V	EET CF	09/01/23 17:07
Total/NA	Prep	3510C			398448	Y6AF	EET CF	09/01/23 11:05
Total/NA	Analysis	8270E		1	399275	L0FS	EET CF	09/12/23 17:44
Total/NA	Prep	8151A			730641	DAK	EET CHI	09/05/23 09:51
Total/NA	Analysis	8151A		1	731117	SB	EET CHI	09/07/23 13:31
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 18:57
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 19:37
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: MW-25_23_08

Lab Sample ID: 310-263793-3

Date Collected: 08/30/23 14:00

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398436	FE5V	EET CF	09/01/23 17:29
Total/NA	Prep	3510C			398448	Y6AF	EET CF	09/01/23 11:05
Total/NA	Analysis	8270E		1	399275	L0FS	EET CF	09/12/23 18:12
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:14
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 19:43
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: MW-26_23_08

Lab Sample ID: 310-263793-4

Date Collected: 08/30/23 10:50

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398436	FE5V	EET CF	09/01/23 17:52
Total/NA	Prep	3510C			398448	Y6AF	EET CF	09/01/23 11:05
Total/NA	Analysis	8270E		1	399275	L0FS	EET CF	09/12/23 18:39
Total/NA	Prep	3510C			398396	Y6AF	EET CF	09/01/23 08:00
Total/NA	Analysis	8081B		1	399386	BW2O	EET CF	09/13/23 12:30
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:18
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 19:45
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: MW-28_23_08

Lab Sample ID: 310-263793-5

Date Collected: 08/30/23 09:55

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398436	FE5V	EET CF	09/01/23 18:15
Total/NA	Prep	3510C			398448	Y6AF	EET CF	09/01/23 11:05
Total/NA	Analysis	8270E		1	399275	L0FS	EET CF	09/12/23 19:06
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:35
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 19:47
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: MW-102B_23_08

Lab Sample ID: 310-263793-6

Date Collected: 08/30/23 13:15

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398449	FE5V	EET CF	09/02/23 01:43
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:39
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 20:03
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: MW-104B_23_08

Lab Sample ID: 310-263793-7

Date Collected: 08/30/23 16:10

Matrix: Water

Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:43
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Project/Site: CRLCSWA_1

Job ID: 310-263793-1

Client Sample ID: MW-108B_23_08

Lab Sample ID: 310-263793-8

Date Collected: 08/30/23 10:55
Matrix: Water
Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398449	FE5V	EET CF	09/02/23 02:06
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:46
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 20:08
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: FD-5_23_08

Lab Sample ID: 310-263793-9

Date Collected: 08/30/23 00:00
Matrix: Water
Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398449	FE5V	EET CF	09/02/23 02:28
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400176	DHM5	EET CF	09/20/23 19:50
Total/NA	Prep	3005A			398504	QTZ5	EET CF	09/05/23 08:00
Total/NA	Analysis	6020B		1	400337	DHM5	EET CF	09/21/23 20:10
Total/NA	Analysis	I-3765-85		1	398435	DGU1	EET CF	09/01/23 10:23

Client Sample ID: TB-4_23_08

Lab Sample ID: 310-263793-10

Date Collected: 08/30/23 00:00
Matrix: Water
Date Received: 08/31/23 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	398449	FE5V	EET CF	09/02/23 00:36

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

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

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

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-263793-1
Project/Site: CRLCSWA_1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CF
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
8151A	Extraction (Herbicides)	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

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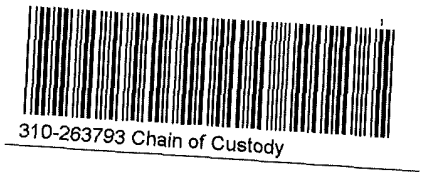

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE: IA | Project:

Receipt Information

Date/Time Received: DATE: 8/31/23 | TIME: 1530 | Received By: SL

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 1 of 2

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☑ Yes ☑ No *If yes:* Which VOA samples are in cooler? ↓

MW-24, 25, 102-B, 108B
FD-5

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: P | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 3.7 | Corrected Temp (°C): 3.7

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY DA STATE | Project:

Receipt Information

Date/Time Received: DATE 8/31/23 TIME 1530 | Received By: SL

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 2 of 2

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☑ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 8 | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.8 | Corrected Temp (°C): 2.8

• **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

Chain of Custody Record

385304 eurofins Environment Testing TestAmerica

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: G.Wilming / H.Dubbs	Site Contact: —	Date 8/31/23	COC No
Company Name Foth I+E	Tel/Email. gwilming@foth.com	Lab Contact. Conner	Carrier Sue RTG	1 of ____ COCs
Address 411 6th Ave SE, Ste 400	Analysis Turnaround Time			Sampler R.Gavin / T Merritt
City/State/Zip Cedar Rapids, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone 319-365-9565	TAT if different from Below _____			Walk-in Client:
Fax. 319-365-9681	☐ 2 weeks			Lab Sampling
Project Name. CRLCSWA 1	☐ 1 week			
Site CRLCSWA 1	☐ 2 days			Job / SDG No
P O # —	☐ 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)	Sample Specific Notes
MW-22_23_08	8/30/23	15:10	G	H_2O	9			
MW-24_23_08	8/30	13:00			9			
MW-25_23_08	8/30	14:00			7			
MW-26_23_08	8/30	10:50			9			
MW-28_23_08	8/30	9:55			7			
MW-102B_23_08	8/30	13:15			5 ~~4~~ RTG			
MW-104B_23_08	8/30	16:10			2			
MW-108B_23_08	8/30	10:55			5			
FD-5_23_08	8/30/23	—			5			
TB-4_23_08	—	—			3			

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: DO NOT ANALYZE TB-5

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]	O.A. Tech	8/31/23 15:30			
Relinquished by:	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company:	Date/Time	Received in Laboratory by: [signature]	Company: 8-31-23 1530	Date/Time

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	←	
1	AW-1_23_08	AW-1	WG	G											X	X			X															
2	AW-2_23_08	AW-2	WG	G											X	X			X															
3	AW-3_23_08	AW-3	WG	G											X	X			X									X				X		
4	AW-4_23_08	AW-4	WG	G											X	X			X															
5	AW-5_23_08	AW-5	WG	G											X	X							X											
6	AW-6_23_08	AW-6	WG	G											X	X			X				X									X		
7	CRL-9_23_08	CRL-9	WG	G											X	X	X		X													X		
8	MW-11_23_08	MW-11	WG	G											X	X			X													X		
9	MW-12_23_08	MW-12	WG	G											X	X	X											X				X		
10	MW-13_23_08	MW-13	WG	G											X	X	X						X											
11	MW-14_23_08	MW-14	WG	G											X	X																		
12	MW-15_23_08	MW-15	WG	G											X	X			X															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed:

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9/25/2023

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina.wilming@foth.com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah.dubbs@foth.com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	←	
13	MW-16_23_08	MW-16	WG	G											X	X	X						X									X		
14	MW-17_23_08	MW-17	WG	G											X	X			X				X											
15	MW-18_23_08	MW-18	WG	G											X	X			X												X			
16	MW-19_23_08	MW-19	WG	G											X	X			X															
17	MW-20_23_08	MW-20	WG	G											X	X																X		
18	MW-21_23_08	MW-21	WG	G											X	X							X		X				X			X		
19	MW-22_23_08	MW-22	WG	G											X	X		X	X				X									X		
20	MW-23_23_08	MW-23	WG	G											X	X																X		
21	MW-24_23_08	MW-24	WG	G											X	X	X		X					X								X		
22	MW-25_23_08	MW-25	WG	G											X	X			X													X		
23	MW-26_23_08	MW-26	WG	G											X	X			X							X					X	X		
24	MW-28_23_08	MW-28	WG	G											X	X					X													

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION: **SAMPLE NOTES:**

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed.

9/25/2023

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 of 5

COC Number: 1-3865545471-071823-903257

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Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4' DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
25	MW-30_23_08	MW-30	WG	G											X	X			X												X			
26	MW-31_23_08	MW-31	WG	G											X	X																		
27	MW-32_23_08	MW-32	WG	G											X	X			X				X									X		
28	MW-33_23_08	MW-33	WG	G											X	X			X													X		
29	MW-34_23_08	MW-34	WG	G											X	X	X		X													X		
30	MW-35_23_08	MW-35	WG	G											X	X	X															X		
31	MW-36_23_08	MW-36	WG	G											X	X			X													X		
32	MW-37_23_08	MW-37	WG	G											X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X		
33	MW-38_23_08	MW-38	WG	G											X	X	X	X	X				X								X	X		
34	VP-3_23_08	VP-3	WG	G											X	X			X	X														
35	VP-4_23_08	VP-4	WG	G											X	X			X												X			
36	MW-101A_23_08	MW-101A	WG	G											X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION: **SAMPLE NOTES:**

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER | DATE Signed

9/25/2023

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 4 of 5

COC Number: 1-3865545471-071823-903257

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Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	Total Arsenic	Filtered (Y/N)	REMARKS / Lab ID
															N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
37	MW-101B_23_08	MW-101B	WG	G											X	X	X	X	X				X								X	X			
38	MW-102B_23_08	MW-102B	WG	G											X	X																			
39	MW-104B_23_08	MW-104B	WG	G												X																		X	
40	MW-105A_23_08	MW-105A	WG	G											X	X																			
41	MW-105B_23_08	MW-105B	WG	G											X	X																			
42	MW-106A_23_08	MW-106A	WG	G											X	X																			
43	MW-107A_23_08	MW-107A	WG	G											X	X																			
44	MW-107B_23_08	MW-107B	WG	G											X	X																			
45	MW-108B_23_08	MW-108B	WG	G											X	X																			Do Not Analyze Cobalt
46	MW-109A_23_08	MW-109A	WG	G											X	X																			
47	MW-109B_23_08	MW-109B	WG	G											X	X																			
48	FD-1_23_08		WG	G											X	X																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed

9/25/2023

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 5 of 5

COC Number: 1-3865545471-071823-903257

Company: Foth Infrastructure & Environment, LLC	Report To: Gina Wilming/Hannah Dubbs (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: Karmin McShane (CRLCSWA)		Project #: 23C071 00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: gina wilming@foth com	Project Name: CRLCSWA Site 1	Regulatory Agency: Iowa DNR	Sampling Team Members:
hannah dubbs@foth com	Task #: 23C071_23_08	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	1,3-Dichlorobenzene	2,2'-oxybis(1-Chloropropane)	Bis(2-ethylhexyl)phthalate	Di-n-butylphthalate	m/p-Cresol	Phenol	2,4,5-TP	2,4-D	4,4'-DDT	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Heptachlor	Mercury	Tin	App. I VOCs Only	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	←	
49	FD-2_23_08		WG	G											X	X																			
50	FD-3_23_08		WG	G											X	X																			
51	FD-4_23_08		WG	G											X	X																			
52	FD-5_23_08		WG	G											X	X																			
53	FB-1_23_08	FB-1	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
54	FB-2_23_08	FB-2	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
55	FB-3_23_08	FB-3	WQ	G											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
56	TB-1_23_08	Trip Blank	WQ	G													X																X		
57	TB-2_23_08	Trip Blank	WQ	G													X																X		
58	TB-3_23_08	Trip Blank	WQ	G													X																X		
59	TB-4_23_08	Trip Blank	WQ	G													X																X		
60	TB-5_23_08	Trip Blank	WQ	G													X																X		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER.

SIGNATURE of SAMPLER | DATE Signed.

9/25/2023

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone 319-277-2401 Fax 319-277-2425

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Calhoun Conner M	310-263793 COC	COC No: 310-64932 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 Program - Iowa		Job #: 310-263793-1
Address: 2417 Bond Street,	Due Date Requested: 9/14/2023			
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_1	Project #: 31009776			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

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) TCLP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-22_23_08 (310-263793-1)	8/30/23	15 10 Central		Water			X	2	
MW-24_23_08 (310-263793-2)	8/30/23	13 00 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 *Unconfirmed*	***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) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by		Date		Time		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 9123 1450	Company	Received by: Stephanie Herrera	Date/Time: 9/24/23 0915	Company: EETA		
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: 5.6+5.2

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-263793-1

Login Number: 263793
List Number: 1
Creator: Lage, Sydney

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-263793-1

Login Number: 263793
List Number: 2
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago
List Creation: 09/02/23 02:07 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	5.2
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	

Data Validation Report

Project Name:	CRLCSWA Site 1 – Cedar Rapids, IA (23C071.00)
Task Name:	23C071_23_08
Data Set Description:	Fall 2023 Groundwater Event
Laboratory(s):	Eurofins – Cedar Falls, IA and Chicago, IL
Laboratory Sample Delivery Group (SDG) ID(s):	310-263235-1; 310-263470-1; 310-263688-1; 310-263793-1
Sample Collection Dates:	8/21/2023 – 8/30/2023
Sample Analysis Dates:	8/24/2023 – 9/21/2023
Sample Matrices:	Groundwater
Sample IDs Reviewed:	See Table 1
Verification and Validation Stage, 100% data:	☐ 1 ☒ 2A ☐ 2B ☐ 3 ☐ 4
Verified and Validated By:	Hannah Dubbs, Project Environmental Scientist 11/8/2023

The analytical data were validated to verify that laboratory quality assurance and quality control (QA/QC) procedures were documented and to evaluate the overall quality of the data reported. Analytical reports include 47 investigative groundwater samples collected via low-flow or no-purge sampling techniques at the Cedar Rapids Linn County Solid Waste Agency (CRLCSWA) Site 1 from August 21 to 30, 2023; samples are listed in Table 1. The data were collected in accordance with the *Hydrologic Monitoring System Plan* (HRG, 2006), Iowa Department of Natural Resources (IDNR) Sanitary Disposal Closure Permit Number 57-SDP-03-75C (including Amendments), and 567 Iowa Administrative Code (IAC) 113.10.

Validation Summary

Stage 2A data validation was performed on 100% of the data from these SDGs, with review tasks and items of note documented in the summary table below.

Validation Task and Description	Review Notes	Action
Chain of Custody (COC) and Sample Receipt Form Confirm relinquish & receipt signatures. Confirm parameters and analytical methods match COC and Hydrologic Monitoring System Plan (HMSP).	All appropriate relinquish and receipt signatures were present. Eurofins inadvertently labeled sample MW-11_23_08 with a space (MW- 11_23_08) in laboratory report 310-263470-1. Foth did not request a revised report. The sample name will be corrected in the laboratory electronic data deliverable (EDD) prior to data upload. Parameters and analytical methods analyzed match the COC and current sampling program with the following exception. Eurofins inadvertently omitted the acid Semivolatile Organic Compounds (SVOCs) for FB-2_23_08 during the extraction process. Eurofins contacted Foth, and Foth instructed Eurofins not to re-prep FB-2_23_08 since it would be outside of hold time. Base/neutral SVOCs were prepped and analyzed within hold times and reported. Resampling is not recommended because FB-2_23_08 is a quality control sample.	Mislabeled sample ID will be updated in the lab EDD prior to data upload. Not applicable

Validation Task and Description	Review Notes	Action
Case Narrative Review for items noted by the laboratory that may impact the validation process.	The quality control issues noted in the case narratives were reviewed and found acceptable. Issues either were addressed in the comments below, had no impact on investigative samples, or were corrected/qualified by the laboratory. No additional actions are required. Note: continuing calibration verification (CCV) evaluation is not part of Stage 2A validation.	Not applicable
Sample Condition Upon Receipt Confirm samples in acceptable condition and no discrepancies noted. Confirm preservation meets method requirements.	With the exception identified below, samples were received by Eurofins – Cedar Falls, IA in acceptable conditions. In addition, the sulfide sample shipment from Eurofins – Cedar Falls, IA to Eurofins – Chicago, IL were received in acceptable conditions. The total metals containers for AW-4_23_08 and MW-13_23_08 (310-263235-1), CRL-9_23_08 and MW-32_23_08 (310-263688-1), and MW-22_23_08 (310-263793-1) were received with a pH greater than (>) 2, and Eurofins adjusted the pH to less than (<) 2 upon receipt. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b), Inductively Coupled Plasma Mass Spectrometry (ICP-MS) metals samples adjusted to a pH <2 by the laboratory do not require qualification.	No qualifiers assigned
Methods Requested Confirm methods match project requirements and lab provided all methods ordered.	The methods ordered and analyzed were performed in accordance with the project requirements. Methods include United States Environmental Protection Agency (USEPA) 8260D Volatile Organic Compounds (VOCs), USEPA 8270E SVOCs, USEPA 8151A Herbicides, USEPA 8081B Organochlorine Pesticides, USEPA 6020B Total Metals, USEPA 7470A Total Mercury, and United States Geological Survey (USGS) I-3765-85 Total Suspended Solids.	Not applicable
Analytes Requested Confirm analytes ordered match project requirements and lab provided all analytes ordered.	The analytes requested were analyzed in accordance with the project requirements. The laboratory provided analytes ordered with the exception of acid SVOCs in FB-2_23_08.	Not applicable
Holding Times Confirm laboratory performed extractions and analyses within method-required holding times.	Eurofins performed analysis within the method-required holding times.	Not applicable
Blanks Confirm no detections in laboratory method blanks, field blanks, and trip blanks.	Table 3 presents analytes detected in the method, field, and trip blanks. No detections were found in the trip blanks. Qualifiers are assigned in Table 9. Zinc was detected in the method blank (MB 310-397966/1-A) at a concentration of 0.008738 J milligrams per liter (mg/L). In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the blank contamination concentration is J-flagged, associated non-detect sample results are not qualified, associated J-flagged sample results are assigned a U qualifier and reported at the practical quantitation limit (PQL), and detections (> PQL) are	Qualifiers assigned

Validation Task and Description	Review Notes	Action
Blanks Continued	qualified J+ or no qualification. Professional judgment was used to not assign qualifiers to the zinc data for MW-16_23_08 and FD-2_23_08 since the potential high bias contributed by the blank contamination was minor compared to the concentration identified in the sample results. Toluene was detected in the field blank (FB-3_23_08) at a concentration of 0.489 J ug/L. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for VOCs, when the blank contamination concentration is J-flagged, associated non-detect sample results are not qualified and associated J-flagged sample results are assigned a U qualifier and reported at the PQL.	Qualifiers assigned
Surrogates or Deuterated Monitoring Compounds For *organic analyses only*, confirm surrogates analyzed and surrogate recovery within QC limits.	Table 4 presents surrogate recoveries that were outside the control limits. <u>310-263235-1</u> The nitrobenzene-d5 base/neutral surrogate recovery for MW-37_23_08 was above the upper acceptance limit, indicating potential high bias for the base/neutral SVOC compounds in MW-37_22_08. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for SVOCs, when base/neutral SVOC surrogate recovery is above the upper acceptance limit, non-detect base/neutral SVOC results in the parent sample are not qualified. <u>310-263470-1</u> Surrogate recoveries were within control limits for this SDG. <u>310-263688-1</u> The 4-bromofluorobenzene surrogate recovery for MW-20_23_08 was above the upper acceptance limit, indicating potential high bias for the VOC results in MW-20_23_08. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a), when VOC recovery is above the upper acceptance limit, non-detect VOC results in the parent sample are not qualified. The DCAA surrogate recovery for AW-6_23_08 was above the upper acceptance limit, indicating potential high bias for the herbicide results in AW-6_23_08. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a), when herbicide surrogate recovery is above the expanded upper acceptance limit, professional judgment shall be utilized. Professional judgment was utilized not to qualify the non-detect herbicide in AW-6_23_08 since the potential bias was high and the result was non-detect. <u>310-263793-1</u> Surrogate recoveries were within control limits for this SDG.	No qualifiers assigned Not applicable No qualifiers assigned No qualifiers assigned Not applicable

Validation Task and Description	Review Notes	Action
Matrix Spike/Matrix Spike Duplicates (MS/MSD) Confirm MS/MSDs analyzed at frequency specified by project requirements and MS/MSD percent recovery within lab specified limits. Confirm, for Organic analytes, MSD relative percent difference (RPD) within limits. For inorganic analytes, lab replicate RPD within limits.	MS/MSD quality control samples are not required for this project. As a result, no MS/MSD samples were collected or submitted for analysis. Where analyzed and reported by the laboratory, MS/MSD results associated with the samples in 310-263235-1, 310-263470-1, 310-263688-1, and 310-263793-1 are reviewed under Stage 2A validation guidelines. Table 5 presents MS/MSD recoveries and RPDs that were outside the control limits. Qualifiers are assigned in Table 9. <u>310-263235-1</u> MS/MSD recoveries and RPDs were within control limits for this SDG.	Not applicable
	<u>310-263470-1</u> The MS recovery for thallium associated with AW-3_23_08 was below the recovery limit (75%-125%), indicating potential low bias. However, MSD recovery for thallium associated with AW-3_23_08 was within the recovery limit. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the MS recovery is 30 – 74% and MSD recovery is greater than or equal to (≥) 75%, associated non-detects are qualified UJ.	Not applicable
	<u>310-263688-1</u> The MS recovery for antimony associated with AW-1_23_08 was above the recovery limit (75%-125%), indicating potential high bias. However, MSD recovery for antimony associated with AW-1_23_08 was within the recovery limit. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the MS recovery is >75% and MSD recovery is less than or equal to (≤) 125%, associated non-detects are not qualified.	No qualifier assigned
	The MS/MSD recoveries for thallium associated with AW-1_23_08 were below the recovery limit (75%-125%), indicating potential low bias. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the MS recovery is 30 – 74% and MSD recovery is <75%, associated detects are qualified J-.	Qualifier assigned
	<u>310-263793-1</u> The MS/MSD recoveries for barium associated with MW-24_23_08 were below the recovery limit (75%-125%); however, the sample concentration was ≥ 4x the spike added. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, spike recovery limits do not apply when the sample concentration is ≥ 4x the spike added and data are reported unqualified even if the %R does not meet the acceptance criteria.	No qualifier assigned

Validation Task and Description	Review Notes	Action
MS/MSD Continued	The MS/MSD RPD for tin associated with MW-24_23_08 was above the control limit, indicating a potential estimated value. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the RPD is above the control limit (>20) associated non-detects are not qualified. The MS/MSD recoveries for thallium associated with MW-24_23_08 were below the recovery limit (75%-125%), indicating potential low bias. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the MS recovery is 30 – 74% and MSD recovery is <75%, associated detects are qualified J-.	No qualifier assigned Qualifiers assigned
Laboratory Control Sample/Laboratory Control Sample Duplicates (LCS/LCSDs) Confirm LCS analyzed and LCS/LCSD recovery and RPD within lab specified limits.	LCS/LCSD quality control samples are not required for this project. Where analyzed and reported by the laboratory, LCS/LCSD results associated with method batches in 310-263235-1, 310-263470-1, 310-263688-1, and 310-263793-1 are reviewed under Stage 2A validation guidelines. Table 6 is intended to present the LCS/LCSD recoveries and RPDs that were outside the control limits. LCS/LCSD recoveries were within control limits and LCS/LCSD RPDs were below control limits for this SDG.	Not applicable
Laboratory Duplicates Confirm lab duplicates analyzed and RPD within lab specified limits.	Laboratory duplicate quality control samples are not required for this project. Where analyzed and reported by the laboratory, laboratory duplicate results associated with the samples in 310-263235-1, 310-263470-1, 310-263688-1, and 310-263793-1 are reviewed under Stage 2A validation guidelines. Table 7 presents the lab duplicate sample RPDs that were outside the RPD limits. Qualifiers are assigned in Table 9. The laboratory duplicate RPD for zinc associated with FD-2_23_08 was above the upper acceptance limit. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for ICP-MS metals, when the laboratory duplicate RPD is above the upper acceptance limit, detects are qualified J.	Qualifier assigned
Field Duplicates Confirm field duplicates collected at required frequency and field duplicate RPD within acceptable limits.	Field duplicate samples were collected at a 1 per 10 frequency in accordance with the project requirements. Table 8 contains the precision evaluation of the parent/field duplicate samples. The RPDs between the investigative and field duplicate samples were within the duplicate sample validation criteria.	Not applicable

Abbreviations:
> = greater than
≥ = greater than or equal to
< = less than
CCV = continuing calibration verification
COC = chain of custody
EDD = electronic data deliverable

Abbreviations:
HMSP = Hydrologic Monitoring System Plan
ICP-MS = inductively coupled plasma mass spectrometry
mg/L = milligram per liter
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MS = matrix spike
MSD = matrix spike duplicate
PQL = Practical Quantification Limit
QA = quality assurance
QC = quality control
RPD = relative percent difference
SCUR = sample condition upon receipt
SDG = sample delivery group
SVOC = semivolatile organic compound
ug/L = microgram per liter
USEPA = United States Environmental Protection Agency
USGS = United States Geological Survey
VOC = volatile organic compound

Overall Assessment of Data

Item	Acceptable		Comments
	Yes	No	
1. Method Criteria	X		Samples were collected, preserved, shipped/delivered, and analyzed within the method protocols, except for SVOCs at FB-2_23_08. Eurofins inadvertently omitted the acid SVOCs for FB-2_23_08 during the extraction process. Eurofins contacted Foth, and Foth instructed Eurofins not to re-prep FB-2_23_08 since it would be outside of hold time. Base/neutral SVOCs were prepped and analyzed within hold times and reported. Resampling is not recommended because FB-2_23_08 is a quality control sample.
2. Precision	X		Field precision was evaluated through investigative and field duplicate RPDs. The RPDs between the investigative and field duplicate samples were within the duplicate sample validation criteria. Laboratory precision was evaluated through MS/MSD, LCS/LCSD, and laboratory duplicate RPDs. Where analyzed and reported by the laboratory, LCS/LCSD RPDS were within control limits. With the exceptions identified below, MS/MSD and laboratory duplicate RPDs were within control limits. As listed in Table 5, an MS/MSD RPD exceedance was identified for tin associated with MW-24_22_08. A qualifier was not assigned since the associated result was non-detect. As listed in Table 7, a laboratory duplicate RPD exceedance was identified for zinc associated with FD-2_23_08. A J qualifier was assigned since the associated result was >PQL.
3. Accuracy	X		Accuracy was evaluated through surrogate, MS/MSD, and LCS/LCD recovery. Where analyzed and reported by the laboratory, LCS/LCSD recoveries were within control limits. The % recoveries for surrogates or MS/MSD samples were within control limits with the exceptions listed in Tables 4 and 5. The accuracy impacts on individual results were relatively low compared to the total number of results analyzed, and, in many cases,

Item	Acceptable		Comments
	Yes	No	
			qualifiers were not assigned since the associated results were non-detect. The qualifiers assigned due to surrogate and MS/MSD recovery exceedances are summarized in Table 9.
4. Representativeness	X		Sampling was conducted in accordance with the sample collection procedures described in the approved HMSP, approved HMSP revisions, and SOPs.
5. Comparability	X		Collection techniques, measurement procedures, methods, and reporting were equivalent to currently approved procedures and are comparable to historical data.
6. Completeness	X		Valid analytical results exceeded 90%.
7. Suitability for Intended Use	X		No evidence of gross contamination or significant issues with the method criteria, precision, accuracy, representativeness, comparability, or completeness were identified.

Overall, the data reported are of good quality and the results for the QA/QC measurements that were used by the laboratories during the analysis of the samples were generally acceptable. Some sample results required qualification during data validation because method-specific QA/QC criteria were not met; results may be qualified for more than one reason. Qualified data are usable (unless qualified as rejected [R]), represent data of good quality and reasonable confidence, and have an acceptable degree of uncertainty (i.e., may be less precise or less accurate than unqualified data). Table 2 provides a definition of the qualifiers that may be assigned by the validator and/or retained from the laboratory. A summary of the validation qualifiers is provided below.

- No results were qualified as biased high (assigned as J+ qualifiers), non-detect with the reporting limit an estimated value (assigned UJ+, or UJ- qualifiers), presumptive evidence of presence of an analyte (assigned as N or NJ qualifiers), or not usable and rejected (assigned as R qualifier).
- One result (0.03%) was qualified as estimated (assigned as J).
- Two results (0.05%) were qualified as biased low (assigned as J-).
- Five results (0.13%) were qualified as non-detect at a concentration less than the reporting limit or less than the sample result (assigned as U).
- One result (0.03%) was qualified as non-detect with the reporting limit an estimated value (assigned as UJ).
- 100% of the reported data is usable for project data quality objectives.

Attachment 1

Tables

Table 1
Sample IDs Reviewed

Project Sample ID	Analyzed Lab Sample ID	Project Sample ID Matches Lab Client Sample ID	Lab Sample Date/Time Match COC/Logbook	Parameters and Analytical Methods Match COC	Sample Type
AW-1_23_08	310-263688-1	Yes	Yes	Yes	Normal
AW-2_23_08	310-263235-1	Yes	Yes	Yes	Normal
AW-3_23_08	310-263470-1	Yes	Yes	Yes	Normal
AW-4_23_08	310-263235-2	Yes	Yes	Yes	Normal
AW-5_23_08	310-263688-2	Yes	Yes	Yes	Normal
AW-6_23_08	310-263688-3	Yes	Yes	Yes	Normal
CRL-9_23_08	310-263688-4	Yes	Yes	Yes	Normal
MW-11_23_08	310-263470-2	**No**	Yes	Yes	Normal
MW-12_23_08	310-263470-3	Yes	Yes	Yes	Normal
MW-13_23_08	310-263235-3	Yes	Yes	Yes	Normal
MW-14_23_08	310-263235-4	Yes	Yes	Yes	Normal
MW-15_23_08	310-263470-4	Yes	Yes	Yes	Normal
MW-16_23_08	310-263470-5	Yes	Yes	Yes	Normal
MW-17_23_08	310-263688-5	Yes	Yes	Yes	Normal
MW-34_23_08	310-263470-6	Yes	Yes	Yes	Normal
MW-37_23_08	310-263235-5	Yes	Yes	Yes	Normal
MW-38_23_08	310-263235-6	Yes	Yes	Yes	Normal
MW-101A_23_08	310-263235-9	Yes	Yes	Yes	Normal
MW-101B_23_08	310-263235-10	Yes	Yes	Yes	Normal
MW-105A_23_08	310-263470-7	Yes	Yes	Yes	Normal
MW-105B_23_08	310-263470-8	Yes	Yes	Yes	Normal
MW-106A_23_08	310-263235-11	Yes	Yes	Yes	Normal
MW-107A_23_08	310-263235-12	Yes	Yes	Yes	Normal
MW-107B_23_08	310-263235-13	Yes	Yes	Yes	Normal
MW-109A_23_08	310-263470-9	Yes	Yes	Yes	Normal
MW-109B_23_08	310-263470-10	Yes	Yes	Yes	Normal
VP-3_23_08	310-263235-7	Yes	Yes	Yes	Normal
VP-4_23_08	310-263235-8	Yes	Yes	Yes	Normal
FB-1_23_08	310-263235-15	Yes	Yes	Yes	FB
FB-2_23_08	310-263470-12	Yes	Yes	**No**	FB
FD-1_23_08	310-263235-14	Yes	Yes	Yes	FD
FD-2_23_08	310-263470-11	Yes	Yes	Yes	FD
TB-1_23_08	310-263235-16	Yes	Yes	Yes	TB
TB-2_23_08	310-263470-13	Yes	Yes	Yes	TB

Table 1
Sample IDs Reviewed

Project Sample ID	Analyzed Lab Sample ID	Project Sample ID Matches Lab Client Sample ID	Lab Sample Date/Time Match COC/Logbook	Parameters and Analytical Methods Match COC	Sample Type
MW-18_23_08	310-263688-6	Yes	Yes	Yes	Normal
MW-19_23_08	310-263688-7	Yes	Yes	Yes	Normal
MW-20_23_08	310-263688-8	Yes	Yes	Yes	Normal
MW-21_23_08	310-263688-9	Yes	Yes	Yes	Normal
MW-22_23_08	310-263793-1	Yes	Yes	Yes	Normal
MW-23_23_08	310-263688-10	Yes	Yes	Yes	Normal
MW-24_23_08	310-263793-2	Yes	Yes	Yes	Normal
MW-25_23_08	310-263793-3	Yes	Yes	Yes	Normal
MW-26_23_08	310-263793-4	Yes	Yes	Yes	Normal
MW-28_23_08	310-263793-5	Yes	Yes	Yes	Normal
MW-30_23_08	310-263688-11	Yes	Yes	Yes	Normal
MW-31_23_08	310-263688-12	Yes	Yes	Yes	Normal
MW-32_23_08	310-263688-13	Yes	Yes	Yes	Normal
MW-33_23_08	310-263688-14	Yes	Yes	Yes	Normal
MW-35_23_08	310-263688-15	Yes	Yes	Yes	Normal
MW-36_23_08	310-263688-16	Yes	Yes	Yes	Normal
MW-102B_23_08	310-263793-6	Yes	Yes	Yes	Normal
MW-104B_23_08	310-263793-7	Yes	Yes	Yes	Normal
MW-108B_23_08	310-263793-8	Yes	Yes	Yes	Normal
FB-3_23_08	310-263688-19	Yes	Yes	Yes	FB
FD-3_23_08	310-263688-17	Yes	Yes	Yes	FD
FD-4_23_08	310-263688-18	Yes	Yes	Yes	FD
FD-5_23_08	310-263793-9	Yes	Yes	Yes	FD
TB-3_23_08	310-263688-20	Yes	Yes	Yes	TB
TB-4_23_08	310-263793-10	Yes	Yes	Yes	TB

Notes:
FB = field blank
FD = field duplicate
TB = trip blank

Table 2
Explanation of Qualifiers

Qualifier	Explanation
U	The analyte was analyzed for and was not detected above the numerical quantitation limit.
J	The analyte was analyzed for and was positively identified, but the analytical result (i.e., quantitation) is an estimated value. In some cases it is recognized that the estimated value is biased high (J+) suggesting the actual value is lower than estimated; or biased low (J-) suggesting the actual value is higher than estimated.
UJ	The analyte was analyzed for and was not detected above the reporting limit, but the reporting limit is an estimated value.
R	The analyte was analyzed for but may or may not be present and/or quantifiable due to quality control issues. The analytical result is not usable and should be rejected.
N	The analysis indicates presumptive evidence of the presence of the analyte.
NJ	The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Notes:
Results qualified as "J" or "UJ" are of acceptable data quality and may be used quantitatively per United States Environmental Protection Agency guidelines.

Table 3
Method, Field, and Trip Blank Exceedances

Lab Report	Blank Type	Lab Sample ID	Analysis Batch	Prep Batch	Parameter	Result	Units	Lab Qualifier	MDL	PQL	Associated Samples
310-263470-1	Method	MB 310-397966/1-A	399708	397966	Zinc	0.008738	mg/L	J	0.00640	0.02	AW-3_23_08, MW-11_23_08, MW-12_23_08, MW-15_23_08, MW-16_23_08, MW-34_23_08, MW-105A_23_08, MW-105B_23_08, MW-109A_23_08, MW-109B_23_08, FB-2_23_08, FD-2_23_08
310-263688-1	Field	FB-3_23_08	398344	N/A	Toluene	0.489	ug/L	J	0.430	1.00	Investigative and FD samples in 310-263688-1 and 310-263793-1

Notes:
FD = field duplicate
mg/L = milligrams per liter
MDL = minimum detection limit
N/A = not applicable
PQL = practical quantitation limit
ug/L = micrograms per liter

Table 4
Surrogate Recovery Exceedances

Lab Sample ID	Parent Sample	Parameter	Surrogate % Recovery	% Recovery Limits	
310-263235-5	MW-37_23_08	Nitrobenzene-d5	135	45	129
310-263688-8	MW-20_23_08	4-Bromofluorobenzene	125	80	120
310-263688-3	AW-6_23_08	DCPAA	756	25	130

Notes:
% = percent

Table 5
Matrix Spike - Matrix Spike Duplicate Exceedances

Lab Sample ID	Parent Sample	Parameter	MS % Recovery	MSD % Recovery	% Recovery Limits	RPD	RPD Limit
310-263470-1 MS	AW-3_23_08	Thallium	74	76	75 - 125	3	20
310-263470-1 MSD							
310-263688-1 MS	AW-1_23_08	Antimony	127	125	75 - 125	1	20
310-263688-1 MSD							
310-263688-1 MS	AW-1_23_08	Thallium	58	66	75 - 125	14	20
310-263688-1 MSD							
310-263793-2 MS	MW-24_23_08	Barium	70	71	75 - 125	0	20
310-263793-2 MSD							
310-263793-2 MS	MW-24_23_08	Tin	90	115	75 - 125	25	20
310-263793-2 MSD							
310-263793-2 MS	MW-24_23_08	Thallium	67	69	75 - 125	3	20
310-263793-2 MSD							

Notes:
% = percent
MS = matrix spike
MSD = matrix spike duplicate
RPD = relative percent difference

Table 6
Laboratory Control Sample and Laboratory Control Sample Duplicate Exceedances

Lab Sample ID	Associated SDG Batch	Parameter	LCS % Recovery	LCSD % Recovery	% Recovery Limits	RPD	RPD Limit
LCS/LCSD recoveries were within control limits for this SDG.							

Notes:
% = percent
LCS = laboratory control sample
LSCD = laboratory control sample duplicate
RPD = relative percent difference
SDG = sample delivery group

Table 7
Laboratory Duplicate Sample Exceedances

Lab Sample ID	Client Sample ID	Parameter	RPD	RPD Limit
310-263470-11 DU	FD-2_23_08	Zinc	36	20

Notes:
RPD = relative percent difference

Table 8
Relative Percent Difference (RPD) Analysis for Field Duplicate Samples
Appendix I Constituents & TSS

RPD = $\dfrac{\text{absolute value (a - b)}}{\text{(a + b)/2}} \times 100\%$

Acceptance Criteria*: 35%

* Unless otherwise noted in project planning documents, the acceptance criteria for field duplicates RPD is as follows:
- For analytes with concentrations greater than 5x (2x for soil matrices) the reporting limit, the RPD should be within 35% for water matrices (50% for soil matrices).
- For analytes with either or both concentrations less than 5x (2x for soil matrices) the reporting limit (indicated below by "low-level"), the absolute difference between the sample and field duplicate should not exceed 5x the reporting limit.

Duplicate Result Analysis:

Parameter	Unit	Parent	Duplicate Sample	RPD	Acceptable?
		MW-107A_23_08	**FD-1_23_08**		
Barium	mg/L	0.131	0.134	2.3%	Yes
Cadmium	mg/L	J 0.000178	J 0.000166	low-level	Yes
Cobalt	mg/L	0.000630	0.000626	low-level	Yes
Nickel	mg/L	0.0109	0.0110	low-level	Yes
Selenium	mg/L	J 0.00216	J 0.00246	low-level	Yes
Total Suspended Solids	mg/L	J 1.00	< 0.638	low-level	Yes
		MW-105A_23_08	**FD-2_23_08**		
Arsenic	mg/L	J 0.00142	J 0.00149	low-level	Yes
Barium	mg/L	0.0734	0.0752	2.4%	Yes
Cadmium	mg/L	J 0.000168	J 0.000170	low-level	Yes
Cobalt	mg/L	0.00445	0.00452	1.6%	Yes
Copper	mg/L	0.00876	0.00908	low-level	Yes
Nickel	mg/L	0.0134	0.0129	low-level	Yes
Selenium	mg/L	J 0.00285	J 0.00313	low-level	Yes
Vanadium	mg/L	< 0.00110	J 0.00112	low-level	Yes
Zinc	mg/L	< 0.00640	J 0.0204	low-level	Yes
Total Suspended Solids	mg/L	2.00	< 0.638	low-level	Yes
		MW-36_23_08	**FD-3_23_08**		
1,4-Dichlorobenzene	ug/L	1.69	1.65	low-level	Yes
Chlorobenzene	ug/L	6.29	6.27	0.3%	Yes
Arsenic	mg/L	0.0720	0.0706	2.0%	Yes
Barium	mg/L	0.735	0.713	3.0%	Yes
Cobalt	mg/L	0.00126	0.00126	low-level	Yes
Nickel	mg/L	0.00711	0.00688	low-level	Yes
Total Suspended Solids	mg/L	17.3	26.3	low-level	Yes
		MW-31_23_08	**FD-4_23_08**		
Barium	mg/L	0.0999	0.100	0.1%	Yes
Total Suspended Solids	mg/L	3.0	2.75	low-level	Yes
		MW-25_23_08	**FD-5_23_08**		
Chlorobenzene	ug/L	J 0.727	< 0.400	low-level	Yes
cis-1,2-Dichloroethene	ug/L	J 0.353	< 0.210	low-level	Yes
Arsenic	mg/L	J 0.00141	J 0.00100	low-level	Yes
Barium	mg/L	0.221	0.223	0.9%	Yes
Cadmium	mg/L	J 0.000162	< 0.000100	low-level	Yes
Cobalt	mg/L	J 0.000175	< 0.000170	low-level	Yes
Lead	mg/L	0.000600	J 0.000244	low-level	Yes
Silver	mg/L	J 0.000911	< 0.000500	low-level	Yes

Table 8
Relative Percent Difference (RPD) Analysis for Field Duplicate Samples
Appendix I Constituents & TSS

RPD = $\frac{\text{absolute value (a - b)}}{\text{(a + b)/2}}$ **x 100%**

Acceptance Criteria*: 35%

* Unless otherwise noted in project planning documents, the acceptance criteria for field duplicates RPD is as follows:
- For analytes with concentrations greater than 5x (2x for soil matrices) the reporting limit, the RPD should be within 35% for water matrices (50% for soil matrices).
- For analytes with either or both concentrations less than 5x (2x for soil matrices) the reporting limit (indicated below by "low-level"), the absolute difference between the sample and field duplicate should not exceed 5x the reporting limit.

Duplicate Result Analysis:

Parameter	Unit	Parent	Duplicate Sample	RPD	Acceptable?
		MW-25_23_08	FD-5_23_08		
Thallium	mg/L	0.00307	< 0.000260	low-level	Yes
Total Suspended Solids	mg/L	3.13	2.00	low-level	Yes

Table 9
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
AW-3_23_08	310-263470-1	USEPA 6020B	Zinc	0.00861	J	mg/L	<0.02	U	MB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
MW-34_23_08	310-263470-6	USEPA 6020B	Zinc	0.00676	J	mg/L	<0.02	U	MB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
MW-109A_23_08	310-263470-9	USEPA 6020B	Zinc	0.0107	J	mg/L	<0.02	U	MB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
MW-109B_23_08	310-263470-10	USEPA 6020B	Zinc	0.0152	J	mg/L	<0.02	U	MB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
MW-32_23_08	310-263688-13	USEPA 8260D	Toluene	0.815	J	ug/L	<1.00	U	FB detection >MDL and <PQL; qualified U and reported at PQL since result is >MDL and <PQL.
AW-3_23_08	310-263470-1	USEPA 6020B	Thallium	<0.00026	U	mg/L	<0.00026	UJ	Associated MS %R = 30 - 74% and MSD ≥75%; qualified UJ since result is ND.
AW-1_23_08	310-263688-1	USEPA 6020B	Thallium	0.00120		mg/L	0.00120	J-	Associated MS %R = 30 - 74 % and MSD <75%; qualified J- since result is > PQL.
MW-24_23_08	310-263793-2	USEPA 6020B	Thallium	0.00150		mg/L	0.00150	J-	Associated MS %R = 30 - 74 % and MSD <75%; qualified J- since result is > PQL.
FD-2_23_08	310-263470-11	USEPA 6020B	Zinc	0.0204		mg/L	0.0204	J	Laboratory duplicate RPD > upper acceptance limit; qualified J since result is >PQL.

Notes:
This table only lists validator qualified data. Not all laboratory qualified data are listed; only the laboratory qualified data that was validator qualified are included.
> = greater than
< = less than
% = percent
FB = field blank
MB = method blank
MDL = minimum detection limit
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
PQL = practical quantitation limit
R = recovery
ug/L = micrograms per liter
USEPA = United States Environmental Protection Agency

Attachment 2

References

References

Howard R. Green Company (HRG), 2006. *Landfill Permit Application, Cedar Rapids/Linn County Solid Waste Agency, Waste Management Site 1, Appendix 4: Hydrologic Monitoring System Plan (HMSP).* September.

United States Environmental Protection Agency (USEPA, 2020a). *National Functional Guidelines for Organic Superfund Methods Data Review.* EPA-540-R-20-005. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

USEPA, 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* EPA-542-R-20-006. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

Appendix B
Statistical Reports

Site 1 Statistical Analysis – Spring 2023 Evaluation

Site 1 Statistical Analysis – Fall 2023 Evaluation

Memorandum

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May 22, 2023

TO: Iowa Department of Natural Resources

FR: Gina Wilming; Hannah Dubbs; Stephen Lehrke, Ph.D.

RE: Site 1 Statistical Analysis - Spring 2023 Evaluation

1 Memorandum Organization

This memo addresses the statistical analysis of the groundwater monitoring data collected in January and March 2023. The statistical methods and results are summarized, with the memo organization given as follows:

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2 Background

The groundwater monitoring locations and status of the Appendix I and II sampling schedules are summarized in Tables 1 and 2. The Appendix I and II analytical results will be provided in Table 14 of the 2023 Annual Water Quality Report (AWQR).

Table 1
Upper Bedrock Monitoring Locations and Schedule [1]
Aug. 2008 – Mar. 2023 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [2] (Mar. 2023)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated	# Events to Complete Baseline Appendix II or Completion Date [113.10(6)b]	Returned to Detection Monitoring (Yes/No)
Downgradient Monitoring Locations							
MW-12	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-13	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-16	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-17	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-26	Assessment [3]	Full Appendix II [3]	N/A	N/A	Aug-08	Sep-09	Aug-22
					Jan-23	Mar-23	No
MW-32	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
Background Monitoring Locations							
MW-37	Background	Appendix II	N/A	N/A	Aug-08	Sep-09	---
MW-101A	Background	Appendix II	Sep-13 [4]	Sep-14 [4]	Sep-13 [4]	Sep-14 [4]	---

N/A = Not applicable. Monitoring points were under routine parameter sampling per IAC 113.2(5) prior to the initiation of Appendix II.

[1] In accordance with Permit Amendment #16, annual monitoring at AW-1, AW-2, AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A is scheduled for Fall 2023. Therefore, these locations were not monitored in Mar. 2023.

[2] Unless otherwise noted, Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Mar. 2023. Resampling for the full Appendix II list at the assessment, corrective action, and background monitoring wells is conducted every five years.

[3] In accordance with 567 IAC 113.10(6)a, two rounds of quarterly re-triggered baseline assessment monitoring for the full Appendix II list were conducted at MW-26 in Jan. and Mar. 2023.

[4] Six rounds of background monitoring for the Appendix II metals were conducted at MW-101A between Sep. 2013 and Mar. 2015. Background monitoring for the full Appendix II list was conducted in Sep. 2015, Mar. 2016, and Aug. 2020.

Table 2
Deeper Bedrock Monitoring Locations and Schedule [1]
Aug. 2008 – Mar. 2023 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [2] (Mar. 2023)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated	# Events to Complete Baseline Appendix II or Completion Date [113.10(6)b]	Returned to Detection Monitoring (Yes/No)
Downgradient Monitoring Locations							
MW-14	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-33	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
Background Monitoring Locations							
MW-38	Background	Appendix II	N/A	N/A	Aug-08	Sep-09	---
MW-101B	Background	Appendix II	Sep-13 [3]	Sep-14 [3]	Sep-13 [3]	Sep-14 [3]	---
Delineation Monitoring Locations							
MW-109B	Delineation	Appendix I	Nov-17	Nov-18	---	---	---

N/A = Not applicable. Monitoring points were under routine parameter sampling per IAC 113.2(5) prior to initiation of Appendix II.

[1] In accordance with Permit Amendment #16, annual monitoring at AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B is scheduled for Fall 2023. Therefore, these locations were not monitored in Mar. 2023.

[2] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Mar. 2023. Resampling for the full Appendix II list at corrective action and background monitoring wells is conducted every five years.

[3] Six rounds of background monitoring for the Appendix II metals were conducted at MW-101B between Sep. 2013 and Mar. 2015. Two rounds of background monitoring for the full Appendix II list were conducted in Sep. 2015 and Mar. 2016.

In January and March 2023, two rounds of quarterly re-triggered baseline assessment monitoring for the full Appendix II list were conducted at MW-26 in accordance with 567 Iowa

Administrative Code (IAC) 113.10(6)b. Results from these two events will be utilized to determine whether additional rounds of quarterly monitoring are necessary or if MW-26 can return to annual monitoring.

In March 2023, semiannual corrective action, background, and delineation monitoring were also conducted at the locations listed in Tables 1 and 2. Corrective action monitoring and background locations were sampled for the Appendix I and detected Appendix II constituents in March 2023. In accordance with Permit Amendment #6, resampling for the full Appendix II list at corrective action and background monitoring wells is conducted every five years.

As footnoted in Tables 1 and 2, annual monitoring at upper bedrock wells AW-1, AW-2, AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A and deeper bedrock wells AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B is scheduled for Fall 2023. Therefore, these locations were not monitored in March 2023.

Under the detection and assessment monitoring programs of 567 IAC 113.10(5) and 113.10(6), Appendix I and II monitoring results are statistically compared to background levels as given in IAC 113.10(6)e and to the groundwater protection standard (GWPS) as given in 567 IAC 113.10(6)g and h. A well may return to detection monitoring when all Appendix II constituents are "shown to be at or below background values, using the statistical procedures in paragraph 113.10(4)g for two consecutive sampling events." Consequently, to return to detection monitoring in accordance with 567 IAC 113.10(6)e, all Appendix II constituents must be below the interwell prediction limit (for constituents which are detected in the background data set) or below the laboratory reporting limit (for constituents which are not detected in the background data set) during two consecutive sampling events. As mentioned in previous memos, three consecutive sampling events may be utilized to make the determination to return to detection monitoring to limit frequent fluctuation of wells moving between the detection and assessment monitoring programs. Assessment monitoring continues when Appendix II concentrations are above background values but below the GWPS using the statistical procedures in paragraph 113.10(4)g.

If Appendix II constituents are detected at statistically significant levels (SSLs) above the GWPS, characterization [567 IAC 113.10(6)g] is initiated, and the owners or operators are required to begin an assessment of corrective measures, select a remedy, and implement a remedy in accordance with 567 IAC 113.10(7), (8), and (9). For remedy completion [567 IAC 113.10(9)e(2)], compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS for a period of three consecutive years or an alternate length of time established by the Iowa Department of Natural Resources (IDNR).

Based on the August 2008 through March 2023 results, this memo presents an evaluation of statistically significant increases (SSIs) and SSLs under the requirements of 567 IAC 113.10(4)g and h.

3 Statistical Methodology

The statistical methods utilized for locations in delineation, assessment, and corrective action monitoring were consistent with the methods used in previous statistical evaluations. Detailed

descriptions of the statistical methods are provided in Attachment 1. Sanitas® v9.6 (Sanitas Technologies) software was utilized to complete the statistical comparisons.

The combined background data sets (MW-37 and MW-101A for the upper bedrock, and MW-38 and MW-101B for the deeper bedrock) were utilized to evaluate SSIs over background.

3.1 Background Data Set Adjustments

3.1.1 Adjustments Associated with Turbidity and Total Suspended Solids

No background data set adjustments are recommended for MW-37, MW-38, and MW-101B based on review of the field turbidity and total suspended solids (TSS) data from the March 2023 sampling event. The March 2023 TSS concentrations at MW-37, MW-38, and MW-101B were below the 5 mg/L limit for acceptable sample quality. At background well MW-101A, the March 2023 TSS concentration of 12.6 mg/L slightly exceeded the 5 mg/L limit for acceptable sample quality. Barium, cadmium, cobalt, copper, nickel, selenium, and vanadium were detected above the minimum detection limit (MDL) at MW-101A in March 2023. Removal of these detected results at MW-101A is recommended since the March 2023 concentrations were above the range of historic concentrations and/or some TSS correlation was evident. The March 2023 barium, cadmium, cobalt, copper, nickel, selenium, and vanadium concentrations at MW-101A will be crossed-out in Table 14 of the 2023 AWQR.

The background data set adjustments previously recommended and incorporated based on the review of turbidity data include:

- Removal of the high-volume September 2013 through September 2014 metals data at MW-101A (initiated with Fall 2016 statistical evaluation).
- Removal of the high-volume September 2012 through September 2014 and the initial low-flow March 2015 metals data at MW-101B (initiated with Fall 2016 statistical evaluation).
- Removal of the March 2019 barium concentration in MW-38 due to elevated TSS and the potential for turbidity to contribute to the higher barium concentration identified (initiated with Spring 2019 statistical evaluation).

These data set adjustments were maintained in the current statistical evaluation. The removed background data will be listed as crossed-out concentrations in Table 14 of the 2023 AWQR.

Note that the historical high-volume data at the downgradient wells continue to be reviewed on a case-by-case basis. The downgradient data set review is discussed in Section 5.1.

3.1.2 Adjustments Associated with Practical Quantitation Limits

Due to the lowering of the practical quantitation limits (PQLs), background data set adjustments were approved to remove earlier non-detect data with elevated PQLs for barium, cobalt, copper, and lead in the upper bedrock and for barium, beryllium, cadmium, cobalt, copper, lead, and nickel in the deeper bedrock due to the increased uncertainty the elevated PQLs added. IDNR approved the background dataset adjustments due to elevated PQLs in the letters dated May 12, 2016 and November 20, 2017 (IDNR, 2016 and 2017). These data set adjustments were maintained in the current statistical evaluation.

3.1.3 Review of Single Background Detections

During the September 2015 event, m/p-cresol and phenol were detected above the laboratory reporting limit at upper bedrock background well MW-37. These two constituents have not been detected in either background well prior to or after the September 2015 event. As a result, m/p-cresol and phenol will not be evaluated using prediction limits unless additional background detections are identified. Downgradient m/p-cresol and phenol results will be evaluated using the double quantification rule (DQR).

Single volatile organic compound (VOC) detections were identified for carbon disulfide and toluene in MW-37 in August 2017. In November 2017, retest samples were collected, which did not confirm the November 2017 detections. As a result, it was determined that MW-37 remained suitable as a background well. The only other detections in MW-37 during the August 2017 event were for barium and cobalt. The August 2017 barium and cobalt concentrations were within the range of historical concentrations for these constituents at MW-37. Therefore, the barium and cobalt results were maintained in the background data set for calculating interwell prediction limits. Since VOCs are considered "never detected" constituents, carbon disulfide and toluene were not added as prediction limit constituents. Downgradient carbon disulfide and toluene results continue to be evaluated using the DQR.

Similarly, single VOC detections were identified for benzene, ethylbenzene, toluene, and total xylenes (BTEX) in MW-37 during the Fall 2018 sampling event. The August 2018 detected metals data at MW-37 was removed from the background dataset due to the potential impact indicated by the BTEX detections. A retest sample was collected for BTEX in background well MW-37 in November 2018. The retest results did not confirm the August 2018 BTEX detections; therefore, SSIs were not declared. In addition, the retest results indicated that MW-37 remained suitable for continued use as a background well for the upper bedrock system. Since VOCs are considered "never detected" constituents, the BTEX constituents were not added as prediction limit constituents. Downgradient BTEX results continue to be evaluated using the DQR.

3.2 Corrective Action Constituents

In accordance with the Unified Guidance (USEPA, 2009), corrective action statistics are conducted for analyte/well pairs with previously identified SSLs, as listed in Table 3. No new corrective action constituents were added based on the results of the previous Fall 2022 statistical evaluation.

Under corrective action statistics, comparisons to background are not conducted (except for cobalt in the upper bedrock under the corrective action hypothesis, further discussed in Section 5.2); therefore, the analyte/well pairs listed in Table 3 were not included in the Section 4 comparisons to background.

Table 3
Corrective Action Constituents (1)

Monitoring Location	Corrective Action Constituents (2)
Upper Bedrock Monitoring Locations	
AW-1	Arsenic
AW-2	Arsenic, Thallium
MW-12	Arsenic
MW-13	Arsenic
MW-16	Arsenic

Table 3 Continued
Corrective Action Constituents [1]

Monitoring Location	Corrective Action Constituents [2]
Upper Bedrock Monitoring Locations Continued	
MW-17	Arsenic
MW-20	Arsenic, Thallium
MW-24	Arsenic
MW-30	Arsenic
MW-32	Arsenic
MW-34	Arsenic, Vinyl Chloride
MW-35	Cobalt
MW-105A	Cobalt
MW-106A	Arsenic, Cobalt
Deeper Bedrock Monitoring Locations	
AW-6	Cobalt
CRL-9	Arsenic, Cobalt
MW-14	Arsenic
MW-22	Arsenic, Cobalt
MW-33	Arsenic
MW-36	Arsenic
MW-105B	Cobalt
MW-109B	Arsenic; Cobalt; Thallium

[1] Table 3 lists the analyte/well pairs identified as corrective action constituents regardless of whether the monitoring location was sampled during the current event.
[2] Corrective action constituents are analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS in accordance with IAC 113.10(9)e(2).

4 Comparison to Background Levels

Comparisons to background levels were conducted using interwell prediction limits and the DQR. As noted in Section 3.2, comparisons to background were not conducted for the corrective action constituents listed in Table 3.

4.1 Interwell Prediction Limits

Interwell prediction limits were used for formal statistical assessment of SSIs over background for analytes that have been detected above the reporting limit in the combined background data set (MW-37 and MW-101A for the upper bedrock system; MW-38 and MW-101B for the deeper bedrock system). For the upper bedrock, these analytes included antimony, arsenic, barium, cobalt, copper, lead, nickel, tin, and zinc. For the deeper bedrock, these analytes included antimony, arsenic, barium, bis(2-ethylhexyl)phthalate, cadmium, cobalt, copper, nickel, tin, and zinc. Note that interwell prediction limit comparisons were not conducted for arsenic in deeper bedrock during this statistical evaluation since arsenic is a corrective action constituent in the deeper bedrock locations that were sampled during the March 2023 event. The March 2023 downgradient arsenic concentrations in deeper bedrock will be evaluated using corrective action statistics.

4.1.1 Upper Bedrock

The upper bedrock prediction limits calculated utilizing August 2008 through March 2023 sample data are summarized in Table 4. The background data set adjustments discussed in Section 3.1 were utilized.

Table 4
Prediction Limit Summary - Upper Bedrock
Aug. 2008 – Mar. 2023 Interwell Data [1]

Chemical Name	Prediction Limit	Units	Prediction Limit Type	Retesting Plan	Prediction Limit Method
Antimony	0.00739	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Arsenic	0.00205	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Barium	0.115	mg/L	Parametric (Lognormal)	1-of-2	$\exp(\bar{y} + k \cdot s_y)$
Cobalt	0.008	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Copper	0.0225	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Lead	0.00695	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Nickel	0.0522	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Tin [2]	0.152	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Zinc	0.0805	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

[1] Interwell data consists of the Appendix I and II parameters that have been detected in the combined background data set (MW-37 and MW-101A). Note that background data set adjustments were incorporated in accordance with Section 3.1.
[2] Tin was included only for assessment and corrective action monitoring locations.

Non-parametric prediction limits were used for antimony, arsenic, cobalt, copper, lead, nickel, tin, and zinc since either normality assumptions could not be met or there were less than 50% detects in the combined background data. A parametric lognormal prediction limit was used with barium since there were greater than 50% detects in the combined background data set, the assumptions of normality were met with a lognormal transformation, and the lognormal limit was accepted as being representative of the background distribution.

4.1.2 Deeper Bedrock

Deeper bedrock prediction limits calculated from August 2008 through March 2023 sample data are summarized in Table 5. The background data set adjustments discussed in Section 3.1 were utilized.

Table 5
Prediction Limit Summary - Deeper Bedrock
Aug. 2008 – Mar. 2023 Interwell Data [1]

Chemical Name	Prediction Limit	Units	Prediction Limit Type	Retesting Plan	Prediction Limit Method
Antimony	0.0101	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Arsenic [2]	0.00225	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Barium	0.138	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Bis(2-ethylhexyl) phthalate [3]	25.4	ug/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cadmium	0.000824	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cobalt	0.0009063	mg/L	Parametric (Lognormal)	1-of-2	$\exp(\bar{y} + k \cdot s_y)$
Copper	0.0108	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Nickel	0.00735	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Tin [3]	0.109	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Zinc	0.0366	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

[1] Interwell data consists of the Appendix I and II parameters that have been detected in the combined background data set (MW-38 and MW-101B). Note that background data set adjustments were incorporated in accordance with Section 3.1.
[2] Note that interwell prediction limit comparisons were not conducted for arsenic in deeper bedrock during this statistical evaluation since arsenic is a corrective action constituent in the deeper bedrock locations that were sampled during the March 2023 event. The March 2023 downgradient arsenic concentrations in deeper bedrock will be evaluated using corrective action statistics.
[3] Bis(2-ethylhexyl)phthalate and tin were included only for assessment and corrective action monitoring locations.

Non-parametric prediction limits were used for antimony, barium, bis(2-ethylhexyl)phthalate, cadmium, copper, nickel, tin, and zinc since either normality assumptions could not be met or there were less than 50% detects in the combined background data. A parametric lognormal prediction limit was used with cobalt since there were greater than 50% detects in the combined background data set, the assumptions of normality were met with a lognormal transformation, and the lognormal limit was accepted as being representative of the background distribution.

4.1.3 Prediction Limit Exceedances

A summary of the monitoring locations exhibiting a prediction limit exceedance during the January and March 2023 events is given in Table 6 for the upper bedrock system and Table 7 for the deeper bedrock system. Detailed prediction limit output for each analyte/well pair is included in Attachment 2.

Table 6
Jan. & Mar. 2023 Prediction Limit Exceedances – Upper Bedrock

Prediction Limit	Sample Date	Barium (mg/L) 0.115	Nickel (mg/L) 0.0522
Assessment Monitoring Locations			
MW-26	Jan. 2023	0.139	
MW-26	Mar. 2023	0.131	
Corrective Action Monitoring Locations – Assessment Constituents			
MW-12	Mar. 2023	0.407	0.0828
MW-13	Mar. 2023	1.1	
MW-16	Mar. 2023	0.172	
MW-17	Mar. 2023	0.161	
MW-32	Mar. 2023	0.695	

Table 7
Mar. 2023 Prediction Limit Exceedances - Deeper Bedrock

Prediction Limit	Barium (mg/L) 0.138	Cobalt (mg/L) 0.0009063	Nickel (mg/L) 0.00735
Delineation Monitoring Locations – Assessment Constituents			
MW-109B	0.633		0.0366
Corrective Action Monitoring Locations – Assessment Constituents			
MW-14	0.283		0.0156
MW-33	0.449	0.00104	

4.2 Double Quantification Rule

The DQR was used to evaluate SSIs over background for the remaining Appendix I and II constituents (i.e., constituents which have not been detected above the reporting limit in the combined background data set). The DQR output is included in Attachment 3, with a summary of the January and March 2023 DQR detections listed in Table 8 for the upper bedrock wells and Table 9 for the deeper bedrock wells.

Table 8
Upper Bedrock Double Quantification Rule
Jan. & Mar. 2023 Detections

Well	Sample Date	Constituent(s)
Assessment Monitoring Locations		
MW-26	Mar. 2023	Acetone
Corrective Action Monitoring Locations - Assessment Constituents (Continued)		
MW-12	Mar. 2023	1,1-Dichloroethane; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; Thallium
MW-13	Mar. 2023	1,1-Dichloroethane; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Benzene; Chlorobenzene
MW-16	Mar. 2023	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Benzene; Cadmium; Chlorobenzene; Silver; Thallium
MW-32	Mar. 2023	1,4-Dichlorobenzene; Chlorobenzene

Table 9
Deeper Bedrock Double Quantification Rule
Mar. 2023 Detections

Well	Constituent(s)
Delineation Monitoring Locations - Assessment Constituents	
MW-109B	1,4-Dichlorobenzene; Chlorobenzene
Corrective Action Monitoring Locations (Assessment Constituents)	
MW-14	1,1-Dichloroethane; 1,4-Dichlorobenzene; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; Silver
MW-33	Chlorobenzene

4.3 Summary of Comparison to Background

4.3.1 Delineation Monitoring Locations – Assessment Constituents

Prediction limit exceedances and DQR detections were identified at MW-109B as listed in Tables 7 and 9, respectively. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

4.3.2 Assessment Monitoring Locations

Prediction limit exceedances and DQR detections were identified at MW-26 in January and March 2023 as listed in Tables 6 and 8, respectively. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

4.3.3 Corrective Action Monitoring Locations – Assessment Constituents

For the upper bedrock system, prediction limit exceedances and DQR detections were identified at MW-12, MW-13, MW-16, MW-17, and MW-32 as listed in Tables 6 and 8, respectively. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

For the deeper bedrock system, prediction limit exceedances and DQR detections were identified at MW-14 and MW-33 as listed in Tables 7 and 9, respectively. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

5 Comparison to Groundwater Protection Standard

The prediction limit exceedances and DQR detections listed in Tables 6 through 9 were declared SSIs and evaluated for SSLs over the GWPS per IAC 113.10(6)f and g. Comparisons to the GWPS were evaluated through statistical confidence intervals under the assessment monitoring null hypothesis. SSLs were declared to exist with statistical certainty when the lower confidence limit exceeds the GWPS. Statistical outputs for confidence intervals in assessment mode are included in Attachment 4.

In contrast, corrective action analyte/well pairs (i.e., those where SSLs have been previously declared) were evaluated to determine compliance with the GWPS per IAC 113.10(9)e. A summary of the upper and deeper bedrock corrective action constituents was provided in Table 3. Comparisons to the GWPS in this case were evaluated through statistical confidence intervals under the corrective action monitoring null hypothesis, or in the case of downward trending data, confidence bands (upper 95% confidence limits) placed around the linear trend line. For corrective action constituents, compliance with the GWPS has been achieved with statistical certainty when the UCL or the upper 95% confidence limit on the trend line is lower than the GWPS for three consecutive years or an alternate length of time established by the IDNR. Statistical outputs for regression statistics, confidence bands, and confidence intervals in corrective action mode are included in Attachment 5.

5.1 Compliance Data Set Review for Confidence Intervals

5.1.1 Adjustments Due to Changes in PQLs

Downgradient data set adjustments were approved to remove earlier non-detect data with elevated PQLs for upper bedrock cobalt data at AW-5, MW-13, MW-17, MW-23, and MW-35; to remove earlier non-detect and J-flagged data with elevated PQLs for deeper bedrock cobalt data at AW-6, CRL-9, MW-11, MW-14, MW-15, MW-22, MW-33 MW-36, MW-102B, MW-105B, and MW-107B; and to remove earlier non-detect and J-flagged data with elevated PQLs for the deeper bedrock nickel data at AW-6, CRL-9, MW-14, MW-15, MW-18, MW-19, MW-22, MW-33, and MW-36 due to the increased uncertainty the elevated PQLs added. IDNR approved the downgradient cobalt dataset adjustments due to elevated PQLs in the letters dated May 12, 2016 and November 20, 2017 (IDNR, 2016 and 2017). These data set adjustments were maintained in the current statistical evaluation.

5.1.2 Adjustments Due to Sampling Technique Changes

As noted in Section 3.1, the downgradient metals data sets continued to be reviewed on a case-by-case basis to determine whether data set adjustments are recommended based on the change in sampling technique from high-volume to low-flow sampling methods. In the letter dated November 20, 2017 (IDNR, 2017), IDNR concurred with the strategy to analyze wells on a case-by-case basis for a statistical correlation between newer and older sampling techniques.

No data set adjustments are currently recommended for the SSIs listed in Tables 6 through 9 and the corrective action constituents in Table 3. To date, downgradient data set adjustments include removal of the high-volume August 2008 through September 2014 zinc data at AW-7, MW-20, and MW-30 and removal of the high-volume August 2008 through September 2014 nickel data at MW-13. IDNR approved the zinc and nickel data set adjustments in the letter dated November 20, 2017 (IDNR, 2017). These data set adjustments were maintained in the current statistical evaluation.

5.1.3 Adjustments Due to Exiting Corrective Action

As further detailed in Attachment 1, the historical data prior to when statistical compliance with the GWPS was first achieved will be removed when analyte/well pairs exit corrective action and return to assessment constituents. Nickel in MW-12; cobalt, nickel, and vinyl chloride in MW-13; cobalt in MW-23; and arsenic in VP-3 exited corrective action and returned to assessment constituents during the Fall 2019 or Spring 2020 statistical evaluations. Cobalt in AW-5 and MW-17 exited corrected action and returned to assessment constituents during the Fall 2020 statistical evaluation. Compliance with the GWPS was first achieved in Spring 2015 for nickel in MW-12 and vinyl chloride in MW-13; in Fall 2016 for cobalt and nickel in MW-13 and cobalt in MW-23; in Spring 2017 for arsenic in VP-3; and in Fall 2017 for cobalt in AW-5 and MW-17. The historical data prior to these initial compliance dates have been removed.

The following data set adjustments due to exiting corrective action were maintained for Site 1:

- Removal of the Aug. 2008 through Sep. 2014 nickel data in MW-12.
- Removal of the Sep. 2009 through Mar. 2016 cobalt data in MW-13.
- Removal of the Mar. 2015 through Mar. 2016 nickel data in MW-13. Note that nickel data prior to Mar. 2015 had already been removed as discussed in Section 5.1.2.
- Removal of the Aug. 2008 through Sep. 2014 vinyl chloride data in MW-13.
- Removal of the Sep. 2010 through Mar. 2016 cobalt data in MW-23. Note that earlier non-detect cobalt data had already been removed as discussed in Section 5.1.1.
- Removal of the Aug. 2008 through Aug. 2016 arsenic data in VP-3.
- Removal of the Sep. 2010 through March 2017 cobalt data in AW-5. Note that earlier non-detect cobalt data had already been removed as discussed in Section 5.1.1.
- Removal of the Sep. 2009 through March 2017 cobalt data in MW-17. Note that earlier non-detect cobalt data had already been removed as discussed in Section 5.1.1.

5.2 Background as the Cobalt GWPS

Background cobalt concentrations in the upper bedrock data set exceeded the 567 IAC Chapter 137 Statewide Standard. Therefore, pursuant to 567 IAC 113.10(6)h, the GWPS for cobalt becomes background. The GWPS for cobalt in corrective action monitoring was evaluated with the statistical methods described in Attachment 1 and as recommended in the Unified Guidance (USEPA, 2009). Both the prediction limit (i.e., *two-sample*) and confidence interval (i.e., *one-sample*) methods were evaluated. Where concentration shifts were detected in the data, the *one-sample* confidence interval method was evaluated utilizing the linear trend line approach further detailed in Section 5.3 below. With background as the GWPS, the upper confidence limit is compared to the background upper tolerance limit with 95% confidence and 95% coverage (discussed in detail in Attachment 1).

Note that in March 2023, no SSIs were identified for cobalt in the upper bedrock monitoring locations, and none of the upper bedrock corrective action monitoring locations sampled had cobalt as a corrective action constituent. Therefore, comparisons to the GWPS were not conducted for cobalt in the upper bedrock during this statistical evaluation.

5.3 Data Concentration Shifts During Corrective Action

Statistically significant decreasing linear trends continued to be identified for arsenic in MW-12 (since 2008) and cobalt in MW-109B (since 2017). Consistent with previous memos, 90% confidence bands (upper 95% confidence limits) placed around the linear trend line were used since significantly decreasing linear trends were identified for these well/analyte pairs.

Regression statistics and confidence band outputs for these analyte/well pairs are provided in Attachment 5. The upper 95% confidence limits were above the GWPS for arsenic in MW-12 and cobalt in MW-109B.

5.4 SSL Summary

Confidence interval output for the upper and deeper bedrock assessment constituents is included in Attachment 4, and for the upper and deeper bedrock corrective action constituents is included in Attachment 5. The results for the upper bedrock are summarized in Table 10, and the results for the deeper bedrock are summarized in Table 11.

Table 10
Upper Bedrock SSL Summary
Aug. 2008 – Mar. 2023 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Assessment Monitoring Locations			
Acetone (ug/L)		MW-26	6300
Barium (mg/L)		MW-26	2
Corrective Action Monitoring Locations – Assessment Constituents			
1,1-Dichloroethane (ug/L)		MW-12, MW-13	140
1,2-Dichlorobenzene (ug/L)		MW-12, MW-13, MW-16	600
1,4-Dichlorobenzene (ug/L)		MW-12, MW-13, MW-16, MW-32	75
Barium (mg/L)		MW-12, MW-13, MW-16, MW-17, MW-32	2
Benzene (ug/L)		MW-12, MW-13, MW-16	5
Cadmium (mg/L)		MW-16	0.005
Chlorobenzene (ug/L)		MW-12, MW-13, MW-16, MW-32	100
cis-1,2-Dichloroethene (ug/L)		MW-12	70
Nickel (mg/L)		MW-12	0.1
Silver (mg/L)		MW-16	0.1
Thallium (mg/L)		MW-12, MW-16	0.002
Corrective Action Monitoring Locations – Corrective Action Constituents			
Arsenic (mg/L)	MW-12, MW-13, MW-16, MW-17, MW-32		0.01

[1] Under the assessment null hypothesis, an SSL is indicated when the lower confidence limit exceeds the GWPS. Under the corrective action null hypothesis, an SSL remains when the upper confidence limit exceeds the GWPS.
[2] Values are the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

Table 11
Deeper Bedrock SSL Summary
Aug. 2008 – Mar. 2023 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Delineation Monitoring Locations – Assessment Constituents			
1,4-Dichlorobenzene (ug/L)		MW-109B	75
Barium (mg/L)		MW-109B	2
Chlorobenzene (ug/L)		MW-109B	100
Nickel (mg/L)		MW-109B	0.1
Corrective Action Monitoring Locations – Assessment Constituents			
1,1-Dichloroethane (ug/L)		MW-14	140
1,4-Dichlorobenzene (ug/L)		MW-14	75

Table 11 Continued
Deeper Bedrock SSL Summary
Aug. 2008 – Mar. 2023 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Corrective Action Monitoring Locations – Assessment Constituents Continued			
Barium (mg/L)		MW-14, MW-33	2
Benzene (ug/L)		MW-14	5
Chlorobenzene (ug/L)		MW-14, MW-33	100
cis-1,2-Dichloroethene (ug/L)		MW-14	70
Cobalt (mg/L)		MW-33	0.0021
Nickel (mg/L)		MW-14	0.1
Silver (mg/L)		MW-14	0.1
Corrective & Delineation Action Monitoring Locations – Corrective Action Constituents			
Arsenic (mg/L)	MW-14, MW-33, MW-109B		0.01
Cobalt (mg/L)	MW-109B		0.0021
Thallium (mg/L)	MW-109B		0.002

[1] Under the assessment null hypothesis, an SSL is indicated when the lower confidence limit exceeds the GWPS. Under the corrective action null hypothesis, an SSL remains when the upper confidence limit exceeds the GWPS.
[2] Values are the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

5.5 Summary of Comparison to Groundwater Protection Standard

5.5.1 Delineation Monitoring Locations

No SSLs were identified for the assessment constituents in deeper bedrock delineation monitoring location MW-109B. Arsenic, cobalt, and thallium in MW-109B were evaluated as corrective action constituents. SSLs continued to be identified for these analyte/well pairs; therefore, compliance with the GWPS has not been achieved. Note that a statistically significant decreasing trend was identified for cobalt in MW-109B.

5.5.2 Assessment Monitoring Locations

No SSLs were identified in upper bedrock assessment monitoring location MW-26.

5.5.3 Corrective Action Monitoring Locations

No SSLs were identified for the assessment constituents in the upper and deeper bedrock corrective action monitoring locations.

For the upper bedrock corrective action constituents, SSLs over the GWPS remained for arsenic in MW-12, MW-13, MW-16, MW-17, and MW-32. While compliance with the GWPS was not achieved, a statistically significant decreasing trend was identified for arsenic in MW-12.

For the deeper bedrock corrective action constituents, SSLs over the GWPS remained for arsenic in MW-14 and MW-33.

6 Conclusions

The methodology described in Attachment 1 was utilized to conduct the statistical evaluations for the upper and deeper bedrock locations in the assessment, delineation, and corrective action monitoring programs.

In January and March 2023, two rounds of quarterly re-triggered baseline assessment monitoring for the full Appendix II list were conducted at MW-26 in accordance with 567 IAC 113.10(6)a.

In March 2023, semiannual corrective action, background, and delineation monitoring were also conducted at upper bedrock monitoring locations MW-12, MW-13, MW-16, MW-17, MW-32, MW-37, and MW-101A and deeper bedrock monitoring locations MW-14, MW-33, MW-38, MW-101B, and MW-109B. In accordance with Permit Amendment #16, annual monitoring at upper bedrock monitoring locations AW-1, AW-2, AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A and deeper bedrock monitoring locations AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B is scheduled for Fall 2023. Therefore, these locations were not monitored in March 2023.

6.1 Upper Bedrock Monitoring Locations

A summary of the Spring 2023 statistical evaluation results for the upper bedrock system is presented in Table 12.

Table 12
Summary of the Spring 2023 Evaluation - Upper Bedrock

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Mar. 2023)	Current SSIs	Corrective Action Constituents		Retesting Parameter	Monitoring Program Changes
				Current SSLs [3]	Achieved Compliance with GWPS		
Downgradient Monitoring Locations							
MW-12	Corrective Action	Appendix II	1,1-Dichloroethane; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; Nickel; Thallium	Arsenic			
MW-13	Corrective Action	Appendix II	1,1-Dichloroethane; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene	Arsenic			
MW-16	Corrective Action	Appendix II	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Cadmium; Chlorobenzene; Silver; Thallium	Arsenic			
MW-17	Corrective Action	Appendix II	Barium	Arsenic			
MW-26	Assessment [4]	Full Appendix II	Acetone; Barium				
MW-32	Corrective Action	Appendix II	1,4-Dichlorobenzene; Barium; Chlorobenzene	Arsenic			
Background Monitoring Locations							
MW-37	Background	Appendix II					
MW-101A	Background	Appendix II					

[1] In accordance with Permit Amendment #16, annual monitoring at AW-1, AW-2, AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-26, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A is scheduled for Fall 2023. Therefore, these locations were not monitored in Mar. 2023.

[2] Unless otherwise noted, Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Mar. 2023. Resampling for the full Appendix II list at assessment, corrective action, and background monitoring locations is conducted every five years.

[3] Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).

[4] In accordance with 567 IAC 113.10(6)a, two rounds of quarterly re-triggered baseline assessment monitoring for the full Appendix II list were conducted at MW-26 in Jan. and Mar. 2023. Note: barium was identified as an SSI for the Jan. and Mar. 2023 events.

6.1.1 Assessment Monitoring

In January and March 2023, two rounds of quarterly re-triggered baseline assessment monitoring for the full Appendix II list were conducted at MW-26 in accordance with 567 IAC 113.10(6)a. The SSIs identified at MW-26 are summarized in Table 12. No SSLs were identified.

Since no new Appendix II constituents were detected above the practical quantitation limit (PQL) during the two rounds of quarterly re-triggered baseline assessment monitoring at MW-26, no additional quarterly baseline assessment monitoring events are recommended. In addition, no new constituents will be added to the detected Appendix II constituents during the annual assessment monitoring events for the Appendix I and detected Appendix II constituents.

Annual assessment monitoring for Appendix I and detected Appendix II constituents will be conducted at AW-3, AW-4, AW-5, MW-21, MW-23, MW-26, MW-28, VP-3, and VP-4 in Fall 2023. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted in Fall 2025 at AW-3, AW-4, AW-5, MW-21, MW-23, MW-26, MW-28, VP-3, and VP-4 and in Fall 2028 at MW-26.

6.1.2 Corrective Action Monitoring

In March 2023, semiannual corrective action monitoring was conducted at MW-12, MW-13, MW-16, MW-17, and MW-32 for the Appendix I and detected Appendix II constituents. The SSIs identified for the assessment constituents in the upper bedrock corrective action monitoring locations are summarized in Table 12. No SSLs were identified for the assessment constituents in the upper bedrock corrective action monitoring locations.

Confidence intervals in corrective action mode or 90% confidence bands around linear trend lines were utilized to evaluate arsenic in MW-12, MW-13, MW-16, MW-17, and MW-32 (i.e., the corrective action constituents in these locations). As shown in Table 12, SSLs remained for arsenic in MW-12, MW-13, MW-16, MW-17, and MW-32. Note that while compliance with the GWPS was not achieved, a statistically significant decreasing trend was identified for arsenic in MW-12.

Semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-12, MW-13, MW-16, MW-17, and MW-32 in Fall 2023 and Spring 2024. Annual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at AW-1, AW-2, MW-20, MW-24, MW-30, MW-34, and MW-35 in Fall 2023. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted at the corrective action monitoring locations in Fall 2025.

6.1.3 Background Monitoring

Semiannual background monitoring for the Appendix I and detected Appendix II constituents was conducted at MW-37 and MW-101A in March 2023. Semiannual background monitoring for the Appendix I and detected Appendix II constituents will be continued at MW-37 and MW-101A in Fall 2023 and Spring 2024.

6.2 Deeper Bedrock Monitoring Locations

A summary of the Spring 2023 statistical evaluation results for the deeper bedrock system is presented in Table 13.

Table 13
Summary of the Spring 2023 Evaluation - Deeper Bedrock

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Mar. 2023)	Current SSIs	Corrective Action Constituents		Retesting Parameter	Monitoring Program Changes
				Current SSLs [3]	Achieved Compliance with GWPS		
Downgradient Monitoring Locations							
MW-14	Corrective Action	Appendix II	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; Nickel; Silver	Arsenic			
MW-33	Corrective Action	Appendix II	Barium; Chlorobenzene; Cobalt	Arsenic			
Background Monitoring Locations							
MW-38	Background	Appendix II					
MW-101B	Background	Appendix II					
Delineation Monitoring Locations							
MW-109B	Delineation	Appendix I	1,4-Dichlorobenzene; Barium; Chlorobenzene; Nickel	Arsenic; Cobalt; Thallium			

(1) In accordance with Permit Amendment #16, annual monitoring at AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B is scheduled for Fall 2023. Therefore, these locations were not monitored in Mar. 2023.

(2) Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Mar. 2023. Resampling for the full Appendix II list at corrective action and background monitoring locations is conducted every five years

(3) Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).

6.2.1 Delineation Monitoring

In March 2023, semiannual delineation monitoring was conducted at MW-109B for the Appendix I list. The SSIs identified for the assessment constituents in MW-109B are summarized in Table 13. No SSLs were identified for the assessment constituents in deeper bedrock delineation monitoring location MW-109B.

Confidence intervals in corrective action mode or 90% confidence bands around linear trend lines were utilized to evaluate arsenic, cobalt, and thallium in MW-109B (i.e., the corrective action constituents in MW-109B). SSLs continued to be identified for these analyte/well pairs; therefore, compliance with the GWPS has not been achieved. While compliance with the GWPS was not achieved, a statistically significant decreasing trend was identified for cobalt in MW-109B.

Semiannual delineation monitoring for the Appendix I constituents will be conducted at MW-109B in Fall 2023 and Spring 2024. In Fall 2023, annual delineation monitoring will be conducted at MW-102B, MW-105B, and MW-107B for the Appendix I constituents, at MW-104B for arsenic, and at MW-108B for the Appendix I list without cobalt.

6.2.2 Corrective Action Monitoring

In March 2023, semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents was conducted at MW-14 and MW-33. The SSIs identified for the assessment constituents in the deeper bedrock corrective action monitoring locations are summarized in Table 13. No SSLs were identified for the assessment constituents in the deeper bedrock corrective action monitoring locations.

Confidence intervals in corrective action mode were utilized to evaluate arsenic in MW-14 and MW-33 (i.e., the corrective action constituents in these locations). As shown in Table 13, SSLs remained for arsenic in MW-14 and MW-33.

Semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-14 and MW-33 in Fall 2023 and Spring 2024. Annual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at AW-6, CRL-9, MW-22, and MW-36 in Fall 2023. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted at the corrective action monitoring locations in Fall 2025.

6.2.3 Background Monitoring

Semiannual background monitoring for the Appendix I and detected Appendix II constituents was conducted at MW-38 and MW-101B in March 2023. Semiannual background monitoring for the Appendix I and detected Appendix II constituents will be continued at MW-38 and MW-101B in Fall 2023 and Spring 2024.

Attachment 1
Detailed Discussion of Statistical Methods

Foth

Memorandum

Statistical Methodology

1. Comparison to Background

For determining which parameters will need a formal statistical treatment, the Unified Guidance (EPA, 2009) suggests splitting monitoring parameters into three distinct groups: a) reliable indicators selected for formal testing; b) other analytes which are monitored for general groundwater quality information but not statistically tested; and c) those meeting the "never-detected" criteria. Only those parameters with some historically detected presence in background need to be included in the first group and treated with a formal statistical test. Any parameter that has never been detected in background is eligible for the third group of "never-detected" constituents. Constituents with detections below the reporting limit (J-flagged data) will be considered "never-detected." As a means of evaluating the third group, the Unified Guidance suggests the Double Quantification Rule (DQR). The DQR is stated in the Unified Guidance as:

"A confirmed exceedance is registered if any well-constituent pair in the '100% non-detect' group exhibits quantified measurements [i.e., at or above the reporting limit (RL)] in two consecutive sample and resample events."

The Unified Guidance also recommends establishing background sample sizes as large as feasible. The guidance recognizes that small sample sizes in background can be "particularly" troublesome, especially in controlling statistical test false positive and negative rates. With parametric tests (such as parametric prediction limits), the false positive rate may be controlled, but at the expense of statistical power. With non-parametric tests (such as non-parametric prediction limits or the "quasi-statistical" DQR), the false positive rate may be unacceptably high. The Unified Guidance suggests that generally at least 8 to 10 separate background measurements be available, recognizing that statistical power continues to increase with larger sample sizes.

In reports prior to the *2011 Annual Water Quality Report* (Foth, 2012), the ANOVA and a "2x2 contingency table" methods were used to evaluate statistically significant increases (SSIs) over background. These methods met the criteria of Iowa Administrative Code (IAC) 113.10(4)g and h. The ANOVA and "2x2 contingency table" methods were used to maximize the statistical power while minimizing potentially large false positive rates as a result of the smaller sample sizes.

Starting with the *2011 Annual Water Quality Report* (Foth, 2012), the statistical analysis methods utilized for comparison to background were the DQR and "1-of-3" interwell prediction limits as recommended in the Unified Guidance (EPA, 2009). Note that a "1-of-2" retesting plan was not selected as it would have resulted in a 'low' effective statistical power level for the site based on EPA reference power curves as defined in the Unified Guidance.

Starting with the Spring 2021 statistical evaluation, the interwell prediction limit retesting plan was modified to a "1-of-2" plan. With increases in the number of background samples, a "1-of-2" plan was able to achieve a 'good' effective statistical power level for the site based on the EPA reference power curves.

Expansion of the Background Data Set

The background data set was modified in 2013 to add MW-101A and MW-101B to the upper bedrock and deeper bedrock background data sets, respectively. The statistical analysis methods continued the DQR and "1-of-2" interwell prediction limits as recommended in the Unified Guidance (EPA, 2009), utilizing the pooled data from MW-37 and MW-101A for the upper bedrock system and MW-38 and MW-101B for the deeper bedrock system.

Double Quantification Rule

The DQR will be used to evaluate SSIs over background for the Appendix I and II constituents that were not detected above the reporting limit in the background data sets. An SSI will be indicated for any well-constituent pair with quantified measurements at or above the reporting limit noted for two consecutive sample and resample events. If applicable, the resample will be collected prior to next semiannual sampling event.

Interwell Prediction Limits

Interwell prediction limits will be used to statistically evaluate SSIs over background for the Appendix I and II constituents which have been detected above the reporting limit in the background data set. A "1-of-2" retesting plan will be utilized on individual sample results. The 1-of-2 retesting plan as defined in the Unified Guidance concludes that an SSI has occurred when two out of two sample results exceed the prediction limit, while no SSI is concluded if 1-of-2 are below the limit. If applicable, the resample will be collected prior to next semiannual sampling event. The prediction limit for each constituent will be recalculated semiannually.

For interwell constituents with less than or equal to 50% detects in the background data set, a non-parametric prediction limit will be utilized. The non-parametric prediction limit will be taken as the maximum order statistic (maximum value) of the background data.

For interwell constituents with greater than 50% detects in the background data set, normality assumptions will be verified using the Shapiro-Wilk normality test. If the background data is not normally distributed, a non-parametric prediction limit will be utilized (as described in the paragraph above). If the background data is normally distributed or can be fit to a normal distribution utilizing a normalizing transformation, then a normal-based parametric prediction limit will be applied.

When considering a lognormal prediction limit, a comparison will be made to the maximum order statistic for the background data set. Lognormal prediction limits can be sensitive to smaller departures from lognormality. That is, if data are not truly lognormal, but also not rejected as lognormal, the prediction limit may be inflated because of the transformation. In choosing a lognormal limit, in addition to the percent detections and lognormal goodness of fit criteria, an additional convention will be applied. If the lognormal limit exceeds the level of twice the maximum background concentration, it is assumed that the lognormal model does not adequately fit the background distribution and a non-parametric prediction limit will be selected.

For interwell constituents with 50% to 85% detects in the background data set, Kaplan-Meier estimation will be applied to manage statistical bias introduced by non-detects. For interwell constituents with over 85% detects in the background data set, half the reporting limit will be used for non-detect data. These estimation methods follow Unified Guidance recommendations and are given in detail in Unified Guidance Chapter 15 (EPA, 2009).

The parametric prediction limit will be calculated as:

$$PL = \bar{x} + k \cdot s$$

where $\bar{x}$ is the sample mean of the August 2008 through current event background data, *s* is the sample standard deviation, and *k* is the multiplier obtained from the Unified Guidance Table 19-1 (EPA, 2009) for 1-of-2 interwell prediction limits on observations. In determining *k*, the number of constituents of concern (COCs) for formal statistical evaluation along with the number of downgradient wells need to be identified. Per the basic subdivision discussion presented in Section 19.2.1 of the Unified Guidance, along with the discussion regarding the use of the appendix tables for parametric retesting plans given on pages 19-13 through 19-15 of the Unified Guidance (EPA, 2009), the *k*-multiplier is chosen based on the number of constituents, wells, and evaluations performed annually. When an exact well and COC configuration is not given in the appendix tables, the *k*-multiplier is linearly interpolated as described on page 19-14 of the Unified Guidance (EPA, 2009).

Sanitas® v9.6. software (Sanitas Technologies) will be used to check distributional assumptions, perform Kaplan-Meier in the case of 50% to 85% detects in the background data set, and calculate the *k*-multipliers and subsequent prediction limits.

Intrawell Prediction Limits

Intrawell prediction limits are calculated in a similar manner to that described above for the interwell case. A main difference between the two methods is the intrawell limit is calculated from a collection of background measurements within the compliance well. A minimum of eight compliance well background samples will be used when calculating the limit.

A second difference is for the parametric prediction limit, in which the *k*-multiplier is modified from the interwell case, as given in Appendix D Tables 19-10 through 19-18 of the Unified Guidance (EPA, 2009).

Updating intrawell background is performed periodically. The Unified Guidance (Section 5.3.2) recommends that 4 to 8 new compliance observations be collected prior to updating the background dataset. The guidance also states that "a potential update is predicated on there being no statistically significant increase [SSI] recorded for that well constituent, including since the last update." A two-sample t-test or Wilcoxon rank-sum test between existing intrawell background data and the potential set of newer background data is performed, and a non-significant result (α = 0.05) implies that the newer compliance data can be re-classified as background measurements.

For Wilcoxon rank-sum tests, non-detect results cannot be ranked with certainty and the problem is compounded with multiple PQLs and/or J-flagged values (EPA, 2009). In comparisons where a substantial fraction of non-detect and/or J-flagged measurements or changing PQLs occur, professional judgment will be utilized for evaluating significant differences between the existing intrawell background data and the potential newer set of background data. Consideration will be given to whether significant differences are due to artificial variation introduced by censored data.

2. Comparison to Groundwater Protection Standard – Assessment Monitoring

According to IAC 113.10(6)f and g, under the assessment monitoring program Appendix II results which have been determined to be statistically above background are also statistically compared to the GWPS. If "Appendix II constituents are detected at statistically significant levels above the GWPS" a notice is placed in the operating record and characterization is begun.

Under IAC 113.10(6)h, the GWPS is the maximum contaminant level (MCL) promulgated under Section 1412 of the Safe Drinking Water Act in 40 Code of Federal Regulations (CFR) Part 141. If no MCL exists, or if background concentrations are higher than the MCL, the GWPS is defined as background. Also, per IAC 113.10(6)i, an alternative GWPS may be established by the department for constituents for which there is no MCL such as the "health-based concentrations that comply with the statewide standards for groundwater established pursuant to 567 IAC Chapter 137."

When the GWPS is background concentrations, the statistical methods discussed in the above "1. Comparison to Background" are used. When the GWPS is the MCL or an alternative health-based concentration, per the Unified Guidance (EPA, 2009), "confidence intervals are the recommended general statistical strategy in compliance/assessment or corrective action monitoring." In the case of normally distributed data, a normal-based parametric confidence interval is used. If the data are not normally distributed a non-parametric confidence interval on the median is used. A lower 99% confidence limit falling above the GWPS implies that concentrations are detected at statistically significant levels above the GWPS with an α-level of 0.01, which is the minimum RCRA regulatory limit from §264.97(i)(2) for an individual test false positive error rate.

The Unified Guidance recognizes that statistical power is also of prime concern to EPA and that there "should be a high probability that the statistical test will positively identify concentrations that have exceeded a fixed regulatory standard." In compliance/assessment monitoring, instead of pre-specifying the false positive rate prior to computing confidence interval limits, the Unified Guidance suggests the desired level of power (1-β) should be set as an initial target.

For compliance/assessment monitoring purposes, the Unified Guidance (Chapter 22) suggests evaluating increases in the true concentration mean of 1.5 and 2.0 times a fixed standard. (This is similar in concept to the critical power targets in detection monitoring, i.e., 55-60% power at 3σ above background and 80-85% power at 4σ over background). As a general guide, the Unified Guidance suggests there should be at least 70-80% statistical power for detecting increases of 2 times a fixed standard. Specifically, the Unified Guidance recommends there be 50% power of detecting increases in the true concentration mean of 1.5 times a fixed standard (risk ratio of 1.5) and 80% power of detecting increases in the true concentration mean of 2.0 times a fixed standard (risk ratio of 2.0).

To meet these levels of statistical power, α is chosen based on either Unified Guidance Equation 22.1:

$$1 - \beta = G_{T,n-1}\left(t_{1-\alpha,n-1}\middle|\Delta - \sqrt{n}(R-1)\right);$$

where R is the desired risk ratio, $t_{(1-\alpha,n-1)}$ is the (1−α) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter Δ;

or Unified Guidance Equation 22.2:

$$\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R\cdot\widehat{CV}} - t_{1-\beta,n-1}\right);$$

where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{(1-\beta,n-1)}$ is the (1−β) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

The first equation (Unified Guidance Equation 22.1) assumes a coefficient of variation (CV) =1. This version is used if only poorer estimates of the true CV are available. In practice, a convention has been adopted with the statistical updates to utilize Unified Guidance Equation 22.2 in all cases where a parametric confidence interval is calculated and use Unified Guidance Equation 22.1 when non-parametric confidence intervals are calculated. Since a non-parametric confidence interval is based on the median, it is not as sensitive to departures from normality, and the assumption of a CV=1 in Unified Guidance Equation 22.1 should provide a conservative estimate.

Since 0.01 is the minimum RCRA regulatory limit for α, it is never set lower than this. Conversely, the Unified Guidance recognizes the "difficulty of simultaneously attaining the recommended level of power while controlling the false positive rate, especially for small sample sizes and highly variable data." The Unified Guidance suggests a maximum false positive rate of α=0.2 is a reasonable upper bound.

Finally, like the need for defining a SWFPR under detection monitoring, the Unified Guidance (Chapter 7) recognizes there may be concern about the "use of relatively high individual test-wise false positive rates (α) in order to meet a pre-specified power, especially when considering the cumulative false positive error rate across multiple wells and/or constituents." However, "the Unified Guidance considers computation of cumulative SWFPRs in compliance/assessment testing to be problematic, and reliance on individual test false positive rates preferable." Notwithstanding, if several confidence limit calculations are compared to the GWPS with high α-levels, caution should be taken in the interpretation.

For calculation of confidence intervals, Sanitas® v9.6 software is again used to check distributional assumptions, perform Kaplan-Meier estimation in the case of 50% to 85% detects, and calculate either parametric or nonparametric confidence limits.

3. <u>Comparison to Groundwater Protection Standard – Corrective Action Monitoring</u>

As stated above, if "Appendix II constituents are detected at statistically significant levels above the GWPS" a notice is placed in the operating record and characterization is begun. Owners or operators are required to initiate an assessment of corrective measures, select a remedy, and implement a remedy in accordance with IAC 113.10(7), (8), and (9). For remedy completion in accordance with IAC 113.10(9)e(2), compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS for

a period of three consecutive years or an alternate length of time established by the Department.

Starting with the Fall 2019 statistical evaluation, individual analyte/well pairs may return to assessment constituents (at the corrective action monitoring location) once compliance with the GWPS has been achieved for a period of 3 years. Note that monitoring wells will not move out of the corrective action monitoring program until all Appendix II constituents have achieved compliance with the GWPS for a period of three consecutive years.

Confidence Intervals in Corrective Action Mode

In the case of the GWPS being a fixed standard as either the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source, "confidence intervals are the recommended general statistical strategy in compliance/assessment or corrective action monitoring" (EPA, 2009). However, a primary difference between confidence intervals as used under assessment monitoring and confidence intervals used under corrective action is reversal of the null hypothesis. As detailed in Section 7.2 of the Unified Guidance (EPA, 2009), the hypothesis testing structure under assessment monitoring is to presume compliance point concentrations do not to exceed the fixed standard unless sampling data indicates otherwise. As a formal statistical hypothesis, this is written as:

$$H_0: \Theta \leq G \quad \text{vs.} \quad H_A: \Theta > G$$

In corrective action mode, the hypothesis is reversed. Namely, compliance point concentrations are presumed to exceed the fixed standard and evidence must be presented to demonstrate regulatory compliance. In the case of corrective action, the statistical hypothesis is written as:

$$H_0: \Theta > G \quad \text{vs.} \quad H_A: \Theta \leq G$$

For testing under assessment monitoring, a lower confidence limit (LCL) is compared to the compliance standard *G*. If the LCL is larger than the standard *G*, it is concluded that the compliance standard has been violated.

However, under corrective action monitoring, the upper confidence limit (UCL) is compared to the compliance standard G. In this case, the UCL should lie below the standard to accept the alternative hypothesis that concentration levels are in compliance.

The UCL α-level under corrective action monitoring is set so that a high degree of confidence is achieved in declaring successful remediation. Per the Unified Guidance (Section 7.4.2) "EPA's overriding concern in corrective action is that remediation efforts are not declared successful without sufficient statistical proof." The Unified Guidance "recommends the use of a reasonably low, fixed test-wide false positive rate (e.g., α = 0.05 or 0.10)." In this case, α = 0.10 corresponds to a 90% UCL.

GWPS as Background

Pursuant to IAC 113.10(6)h, when background concentrations of an analyte exceed the applicable MCL or IAC Statewide Standard for a Protected Groundwater Source, the GWPS is the background concentration. In this case, the GWPS is not a fixed standard but based on a distribution of background sample results.

Section 7.5 of the Unified Guidance (EPA, 2009) details statistical hypothesis testing under corrective action when the GWPS is background. The Unified Guidance offers two alternative statistical approaches to hypothesis testing in this case. These alternatives are as follows:

A. The first represents a *two-sample* test of two distinct populations, namely the compliance well to background populations. Similar to the statistical tests used under detection and assessment monitoring, with this alternative under corrective action, the Unified Guidance states that "one highly recommended statistical test approach is a prediction limit." The Unified Guidance also states, "whatever the critical value for a selected background test, it becomes the GWPS under compliance/assessment or corrective action monitoring." Further, "the only allowable hypothesis test structure for the two-sample approach follows that of detection and compliance monitoring. Once exceeded and in corrective action, a return to compliance is through evidence that future samples lie below the GWPS using the same hypothesis structure." Therefore, with this approach in corrective action, prediction limits are calculated similarly as in assessment monitoring. Compliance well concentrations below a prediction limit indicate a return to concentrations below the background GWPS.

B. The second involves computation of a fixed statistic from the background data as the GWPS. The Unified Guidance recommendation in this case is to define a fixed GWPS based on a background upper tolerance limit with 95% confidence and 95% coverage. This is designed to be a "reasonable maximum on the likely range of background concentrations." This upper tolerance limit based on background data is then used as a fixed standard in statistical comparisons with 90% or 95% UCLs from compliance wells as discussed previously. Also, with the UCL method, the null hypothesis is reversed from that of assessment monitoring, assuming contamination is above the GWPS. A UCL falling below the background GWPS offers evidence of a return to concentrations below the GWPS. The Unified Guidance refers to this approach as a *single-sample* testing method, since the compliance well population is tested against a defined fixed standard.

The Unified Guidance discusses tradeoffs between the two approaches and does not necessarily prescribe either approach over the other. The Unified Guidance suggests that both approaches may be used, where "the background GWPS would be a range based on the two testing methods rather than a single value."

<u>Normality</u>
For calculation of confidence intervals, Sanitas® v9.6 software is again used to check distributional assumptions, perform Kaplan-Meier estimation in the case of 50% to 85% detects, and calculate either parametric or nonparametric confidence limits. "Corrective Action Mode" is selected for this analysis.

<u>Non-Corrective Action Constituents</u>
As recommended in the Unified Guidance (EPA, 2009), confidence intervals in corrective action mode will be utilized to evaluate only constituents and monitoring locations with previously identified SSLs over the GWPS. Other compliance constituents (i.e., those without SSLs over the GWPS during prior statistical evaluations) will continue to be evaluated using the "<u>1. Comparison to Background</u>" and "<u>2. Comparison to Groundwater Protection Standard – Assessment Monitoring</u>" methods described above.

Note: The Unified Guidance (EPA, 2009) states: “it should be recognized that once corrective action or remediation activities are initiated, there will be a considerable time during which the GWPS may still be exceeded. As provided in the RCRA regulations, it is at the conclusion of remediation activities that formal corrective action monitoring evaluation is appropriate. However, in the intervening period of remedial activity, well constituents can still be monitored, and the relative efficacy of remediation measures tracked. The same corrective action hypothesis can be assumed for the targeted constituents; techniques such as trend testing may be appropriate interim applications.” Given the statement above and the intentions of IAC 113.10(6)g, as soon as an SSL is identified for an assessment monitoring constituent/location, then the next statistical evaluation will utilize corrective action monitoring (confidence intervals in corrective action mode).

Data Concentration Shifts During Corrective Action

Confidence intervals assume that the population is stable over time. As a result, confidence intervals may not accurately represent the current well concentrations if increasing or decreasing trends are observed (i.e., during a release or under active remediation). Per the Unified Guidance (EPA, 2009), lower or upper confidence limits constructed on accumulated data may be overly wide (due to high sample variability caused by combining pre- and post-shift data) and may not be reflective of more recent upward/downward shifts in the contaminant distribution.

Alternative procedures may be applied to data sets with shifting distributions. For example, where trends tests are significant, pre-shift data may be removed from the well/parameter data set for the purposes of constructing the confidence interval. “The reduction in sample size will often be more than offset by the gain in statistical power. More recent measurements may exhibit less variation around the shifted mean value, resulting in a shorter confidence interval” (EPA, 2009).

Another alternative is to construct confidence bands around the trend line to track progress towards exceeding or meeting a fixed standard. As suggested in the Unified Guidance (Chapter 22), if a trend is present, a 90% confidence band (upper 95% confidence limit) is placed on the linear trend line. If the upper 95% confidence limit on the trend line falls below the GWPS, the well is found to have reduced to levels statistically below the GWPS.

As the discussed in the Unified Guidance, “inferences concerning a linear regression are generally appropriate when two conditions hold: 1) the residuals from the regression are approximately normal or at least reasonably symmetric in distribution; and 2) a plot of residuals versus concentrations indicates a scatter cloud of essentially uniform vertical thickness or width.” These conditions are assessed through normal probability plots of the regression residuals and plots of residuals against the predicted concentrations.

Data Adjustments Due to Exiting Corrective Action

When analyte/well pairs exit corrective action and return to assessment constituents, the hypothesis testing structure is reversed again. In corrective action mode, compliance point concentrations were presumed to exceed the GWPS, and evidence must be presented to demonstrated regulatory compliance (i.e., UCLs below the GWPS for three consecutive years). With the return to assessment constituents, analyte/well pairs have demonstrated regulatory compliance. The hypothesis testing structure reverts to the assessment monitoring structure where compliance point concentrations are presumed to not exceed the GWPS unless sampling

data indicates otherwise (i.e., LCL is above the GWPS). With this reversion in hypothesis, the focus shifts to evaluating concentration changes in the analyte/well pair that would indicate an increase over the GWPS and re-trigger corrective action. For constituents with historical SSLs, earlier concentrations that had previously triggered corrective action are no longer providing useful information regarding the current assessment monitoring hypothesis. Retaining the historical data during the timeframe in which the GWPS was exceeded will result in the regression or confidence interval methods being slower to respond to new increases. As a result, the historical data prior to when statistical compliance with the GWPS was first achieved will be removed when analyte/well pairs exit corrective action and return to assessment constituents.

Attachment 2
Sanitas Report Output for Prediction Limit Calculations

Upper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations[2]													
Antimony (mg/L)	MW-26	0.00739	1/27/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-26	0.00739	3/23/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-26	0.00205	1/27/2023	0.001ND	No	47	n/a	n/a	78	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-26	0.00205	3/23/2023	0.00149J	No	47	n/a	n/a	79	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-26	0.115	1/27/2023	0.139	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-26	0.115	3/23/2023	0.131	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-26	0.008	1/27/2023	0.00025ND	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-26	0.008	3/23/2023	0.000334J	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Copper (mg/L)	MW-26	0.0225	1/27/2023	0.0025ND	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-26	0.0225	3/23/2023	0.00213J	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-26	0.00695	1/27/2023	0.00025ND	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-26	0.00695	3/23/2023	0.000286J	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-26	0.0522	1/27/2023	0.0025ND	No	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-26	0.0522	3/23/2023	0.0025ND	No	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-26	0.152	1/27/2023	0.0025ND	No	48	n/a	n/a	96	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-26	0.152	3/23/2023	0.0025ND	No	48	n/a	n/a	96	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-26	0.0805	1/27/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-26	0.0805	3/23/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Corrective Action Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	MW-12	0.00739	3/23/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-13	0.00739	3/23/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-16	0.00739	3/24/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-17	0.00739	3/24/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-32	0.00739	3/22/2023	0.001ND	No	46	n/a	n/a	80	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-12	0.115	3/23/2023	0.407	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-13	0.115	3/23/2023	1.1	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-16	0.115	3/24/2023	0.172	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-17	0.115	3/24/2023	0.161	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-32	0.115	3/22/2023	0.695	Yes	43	-3.107	0.4045	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-12	0.008	3/23/2023	0.00434	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-13	0.008	3/23/2023	0.00204	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-16	0.008	3/24/2023	0.000748	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-17	0.008	3/24/2023	0.00554	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-32	0.008	3/22/2023	0.00354	No	34	n/a	n/a	32	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Copper (mg/L)	MW-12	0.0225	3/23/2023	0.0025ND	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-13	0.0225	3/23/2023	0.0025ND	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-16	0.0225	3/24/2023	0.0025ND	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-17	0.0225	3/24/2023	0.0025ND	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-32	0.0225	3/22/2023	0.00222J	No	46	n/a	n/a	93	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-12	0.00695	3/23/2023	0.00025ND	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-13	0.00695	3/23/2023	0.00025ND	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-16	0.00695	3/24/2023	0.000381J	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-17	0.00695	3/24/2023	0.00025ND	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-32	0.00695	3/22/2023	0.000534	No	45	n/a	n/a	76	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-12	0.0522	3/23/2023	0.0828	Yes	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-13	0.0522	3/23/2023	0.0117	No	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-16	0.0522	3/24/2023	0.0182	No	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2

Upper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents (Continued)													
Nickel (mg/L)	MW-17	0.0522	3/24/2023	0.00967	No	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-32	0.0522	3/22/2023	0.0285	No	46	n/a	n/a	59	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-12	0.152	3/23/2023	0.0025ND	No	48	n/a	n/a	96	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-32	0.152	3/22/2023	0.0025ND	No	48	n/a	n/a	96	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-12	0.0805	3/23/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-13	0.0805	3/23/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-16	0.0805	3/24/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-17	0.0805	3/24/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-32	0.0805	3/22/2023	0.01ND	No	48	n/a	n/a	85	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2

[1] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-37 and MW-101A data set. Note that background data set adjustments were incorporated in accordance with Section 3.1 of the Spring 2023 Statistical Evaluation memo.

[2] At MW-26, interwell prediction limit comparisons were conducted on the Jan. and Mar. 2023 baseline assessment monitoring event data.

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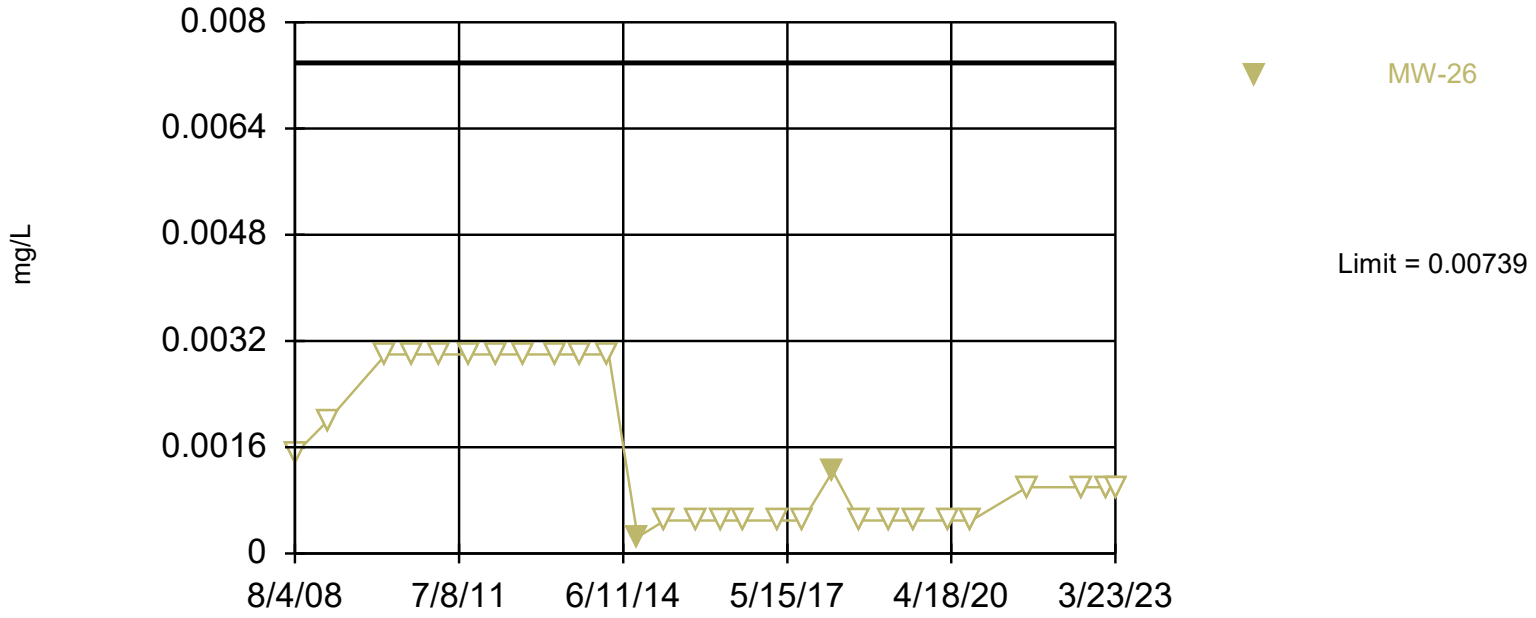
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 80.43% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Antimony Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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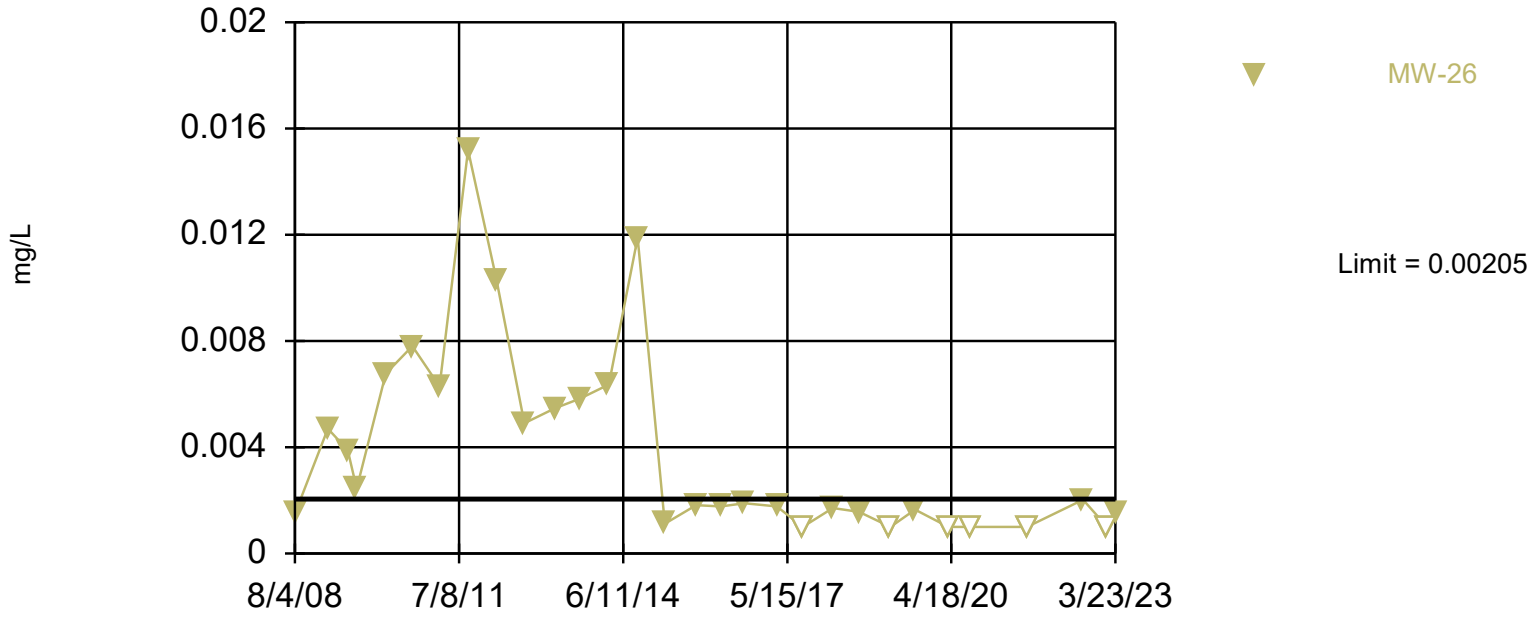
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 78.72% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

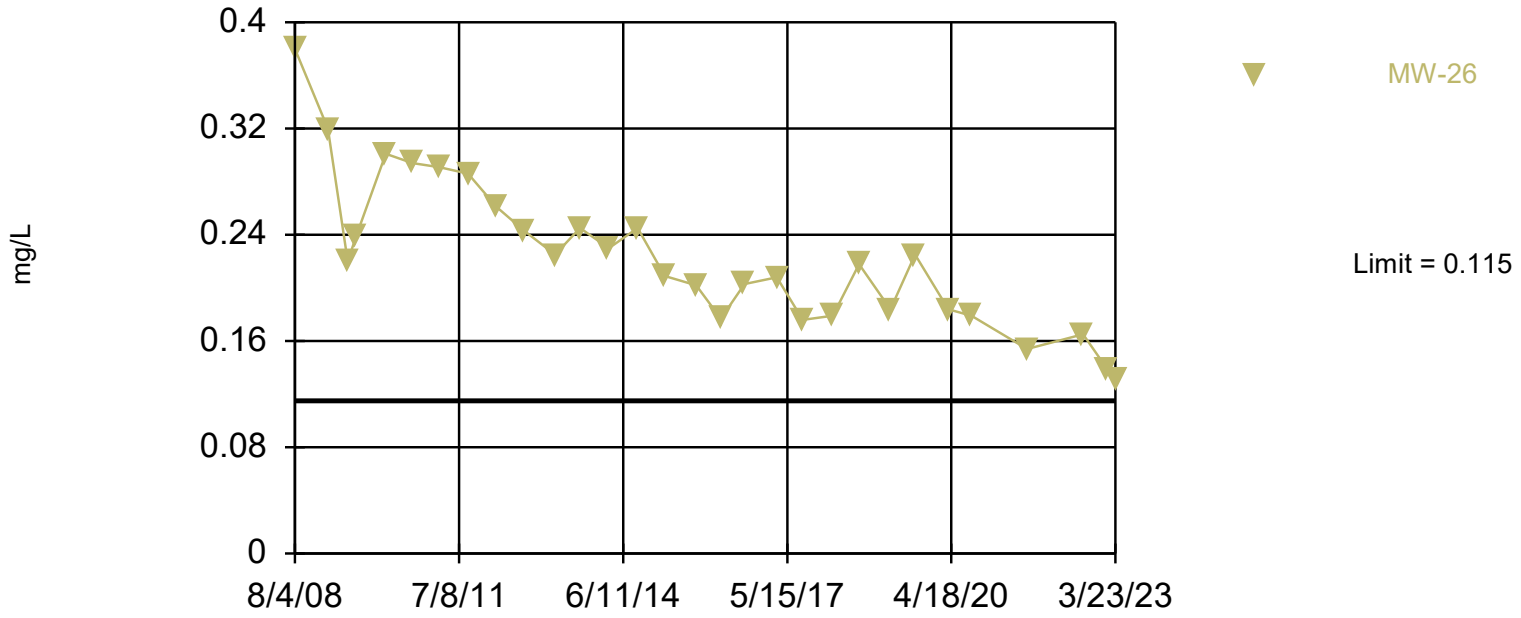
Constituent: Arsenic Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Exceeds Limit: MW-26

Prediction Limit - Assessment Monitoring

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.107, Std. Dev.=0.4045, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9274, critical = 0.923. Kappa = 2.336 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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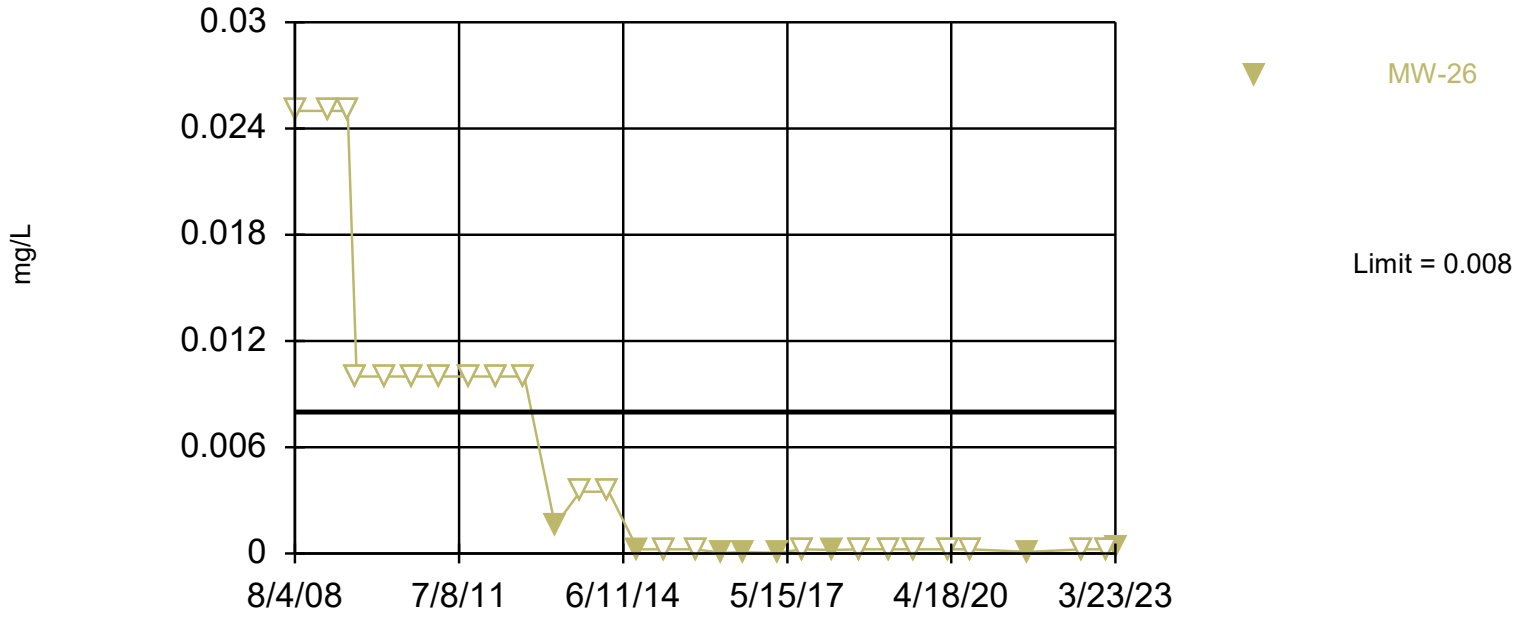
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 32.35% NDs. Annual per-constituent alpha = 0.06241. Individual comparison alpha = 0.0014 (1 of 2).

Constituent: Cobalt Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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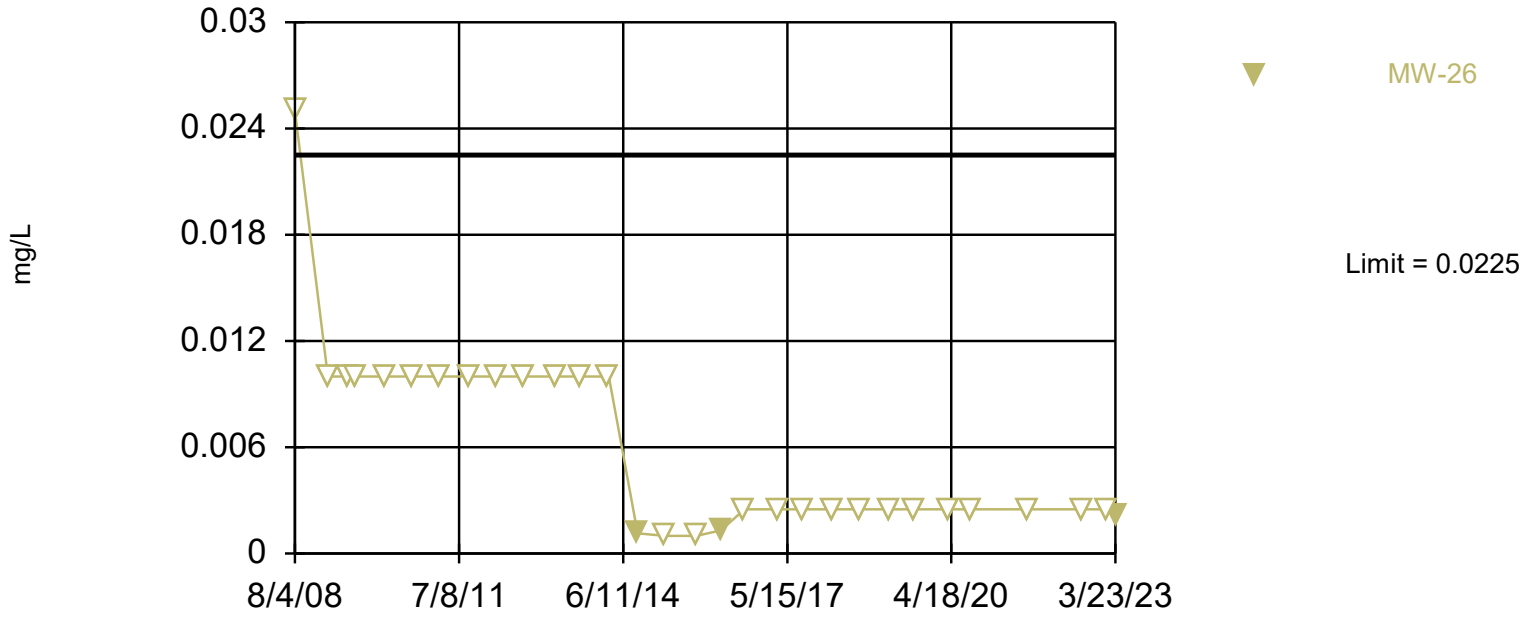
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 93.48% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Copper Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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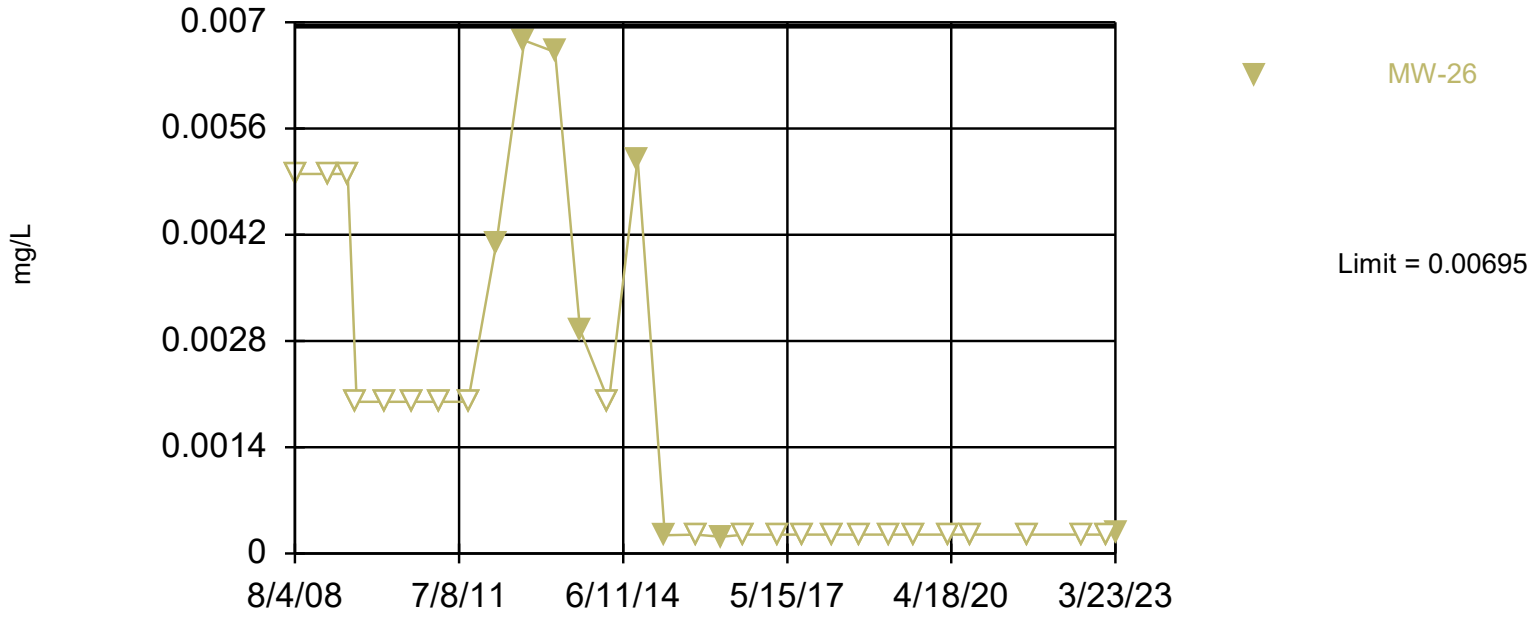
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 75.56% NDs. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Lead Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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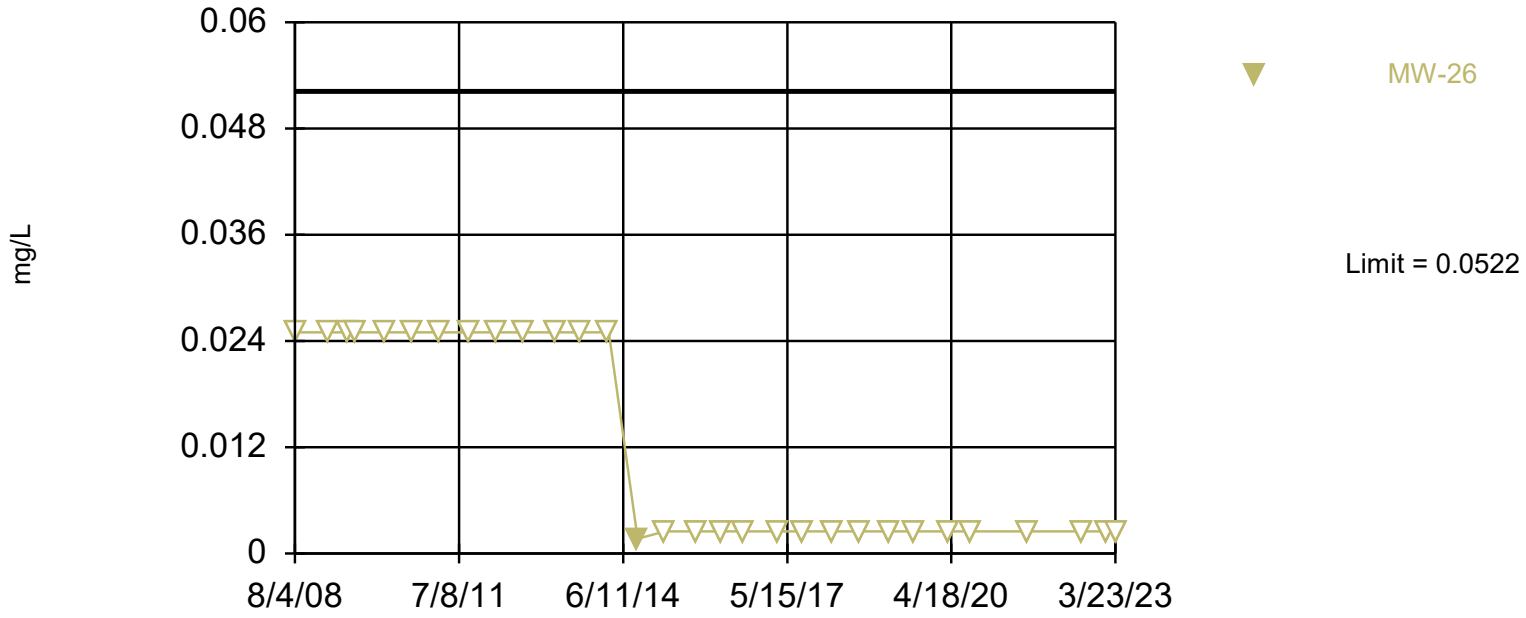
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 58.7% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Nickel Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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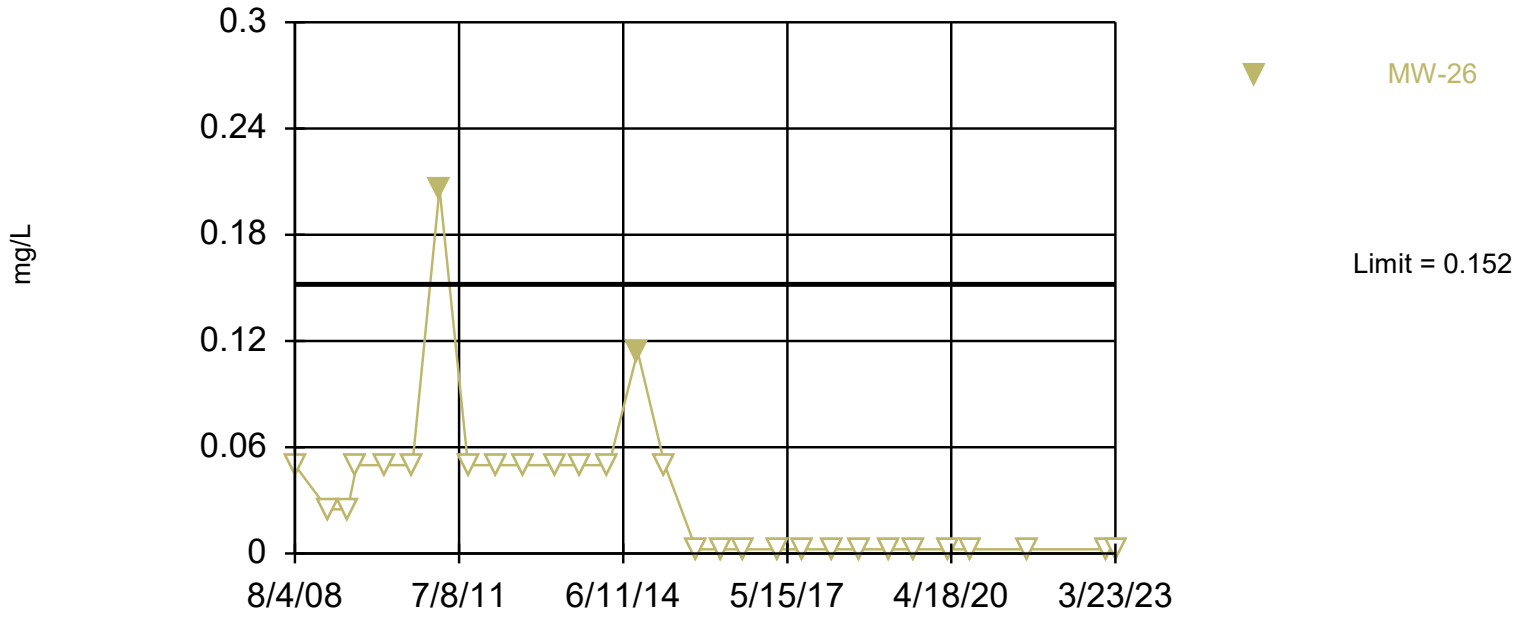
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 95.83% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Tin Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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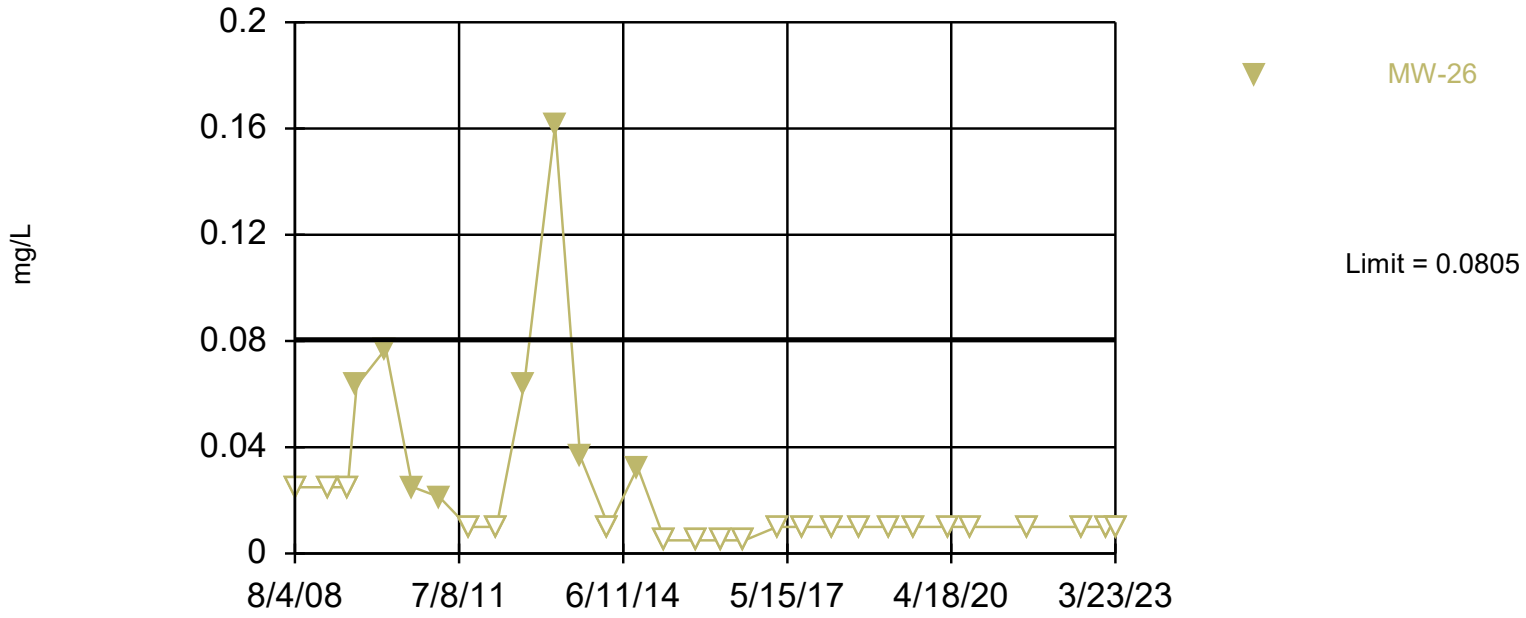
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 85.42% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Zinc Analysis Run 5/17/2023 9:15 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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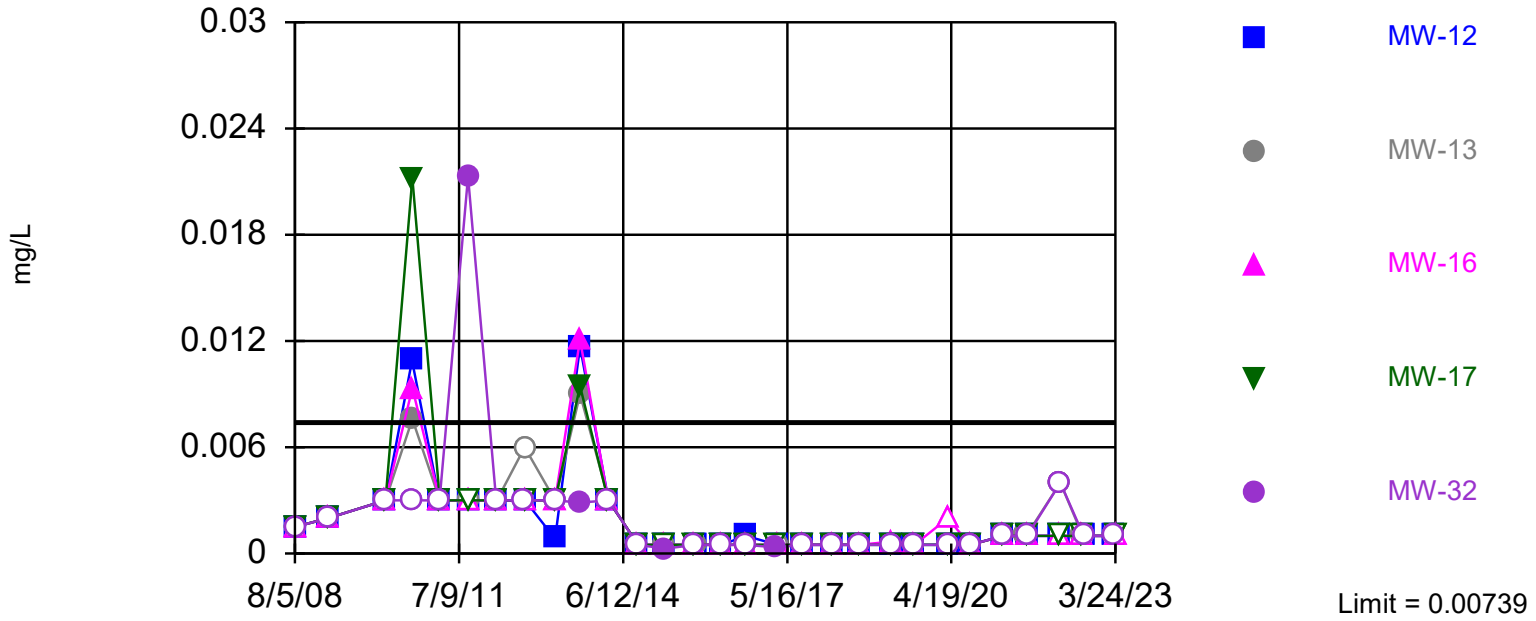
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 80.43% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Antimony Analysis Run 5/17/2023 9:19 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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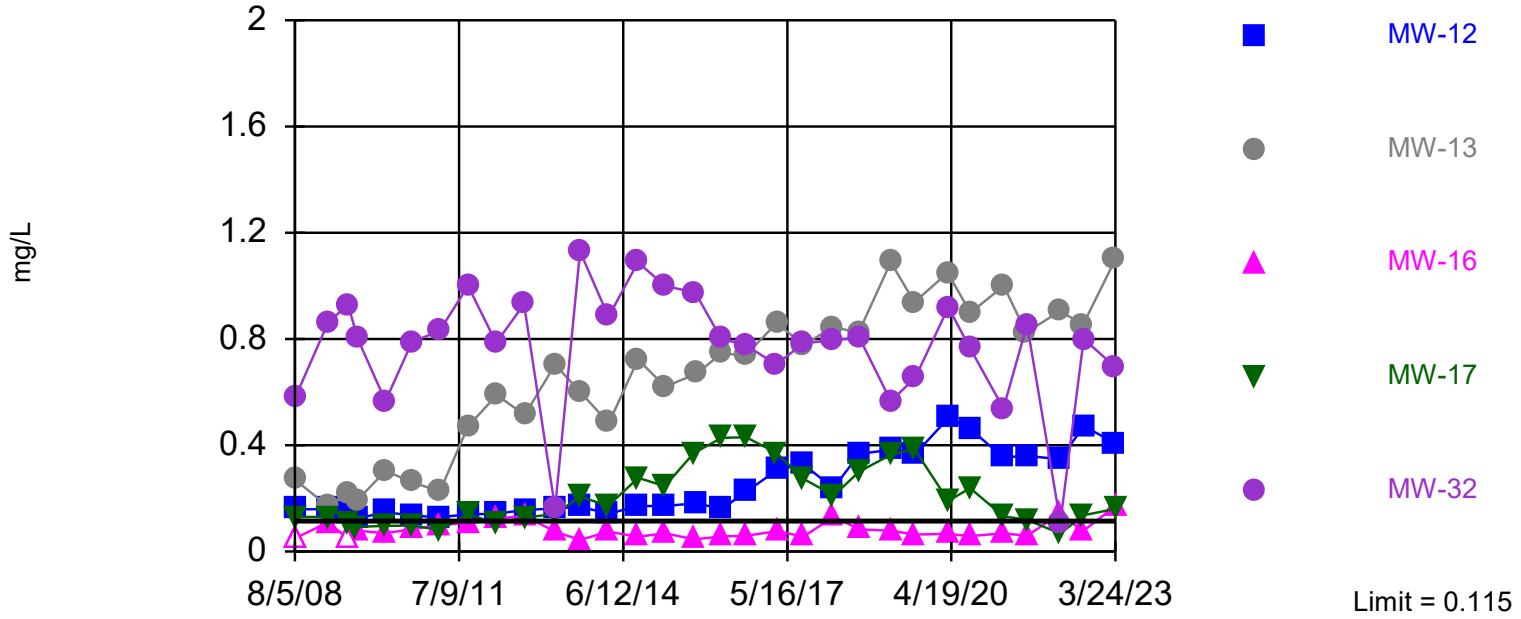
Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-13, MW-16, MW-17, MW-32

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.107, Std. Dev.=0.4045, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9274, critical = 0.923. Kappa = 2.336 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 5/17/2023 9:19 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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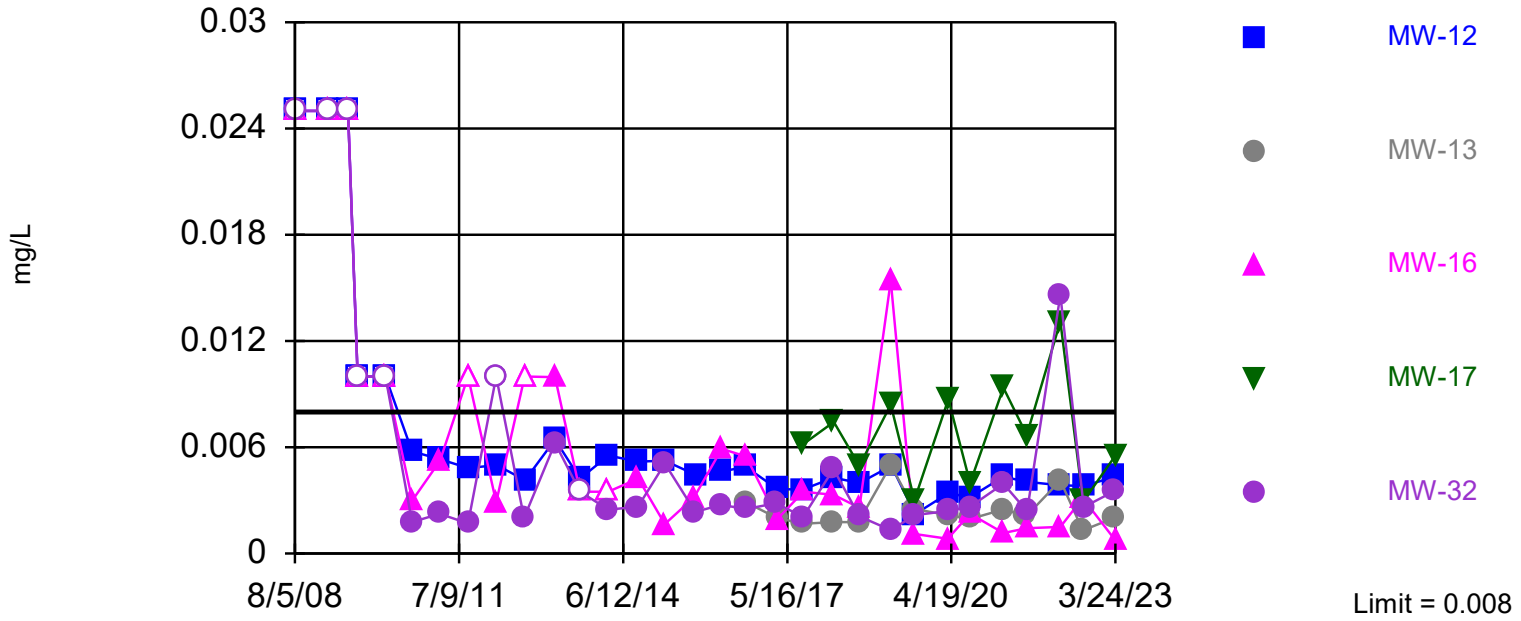
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 32.35% NDs. Annual per-constituent alpha = 0.06241. Individual comparison alpha = 0.0014 (1 of 2).

Constituent: Cobalt Analysis Run 5/17/2023 9:19 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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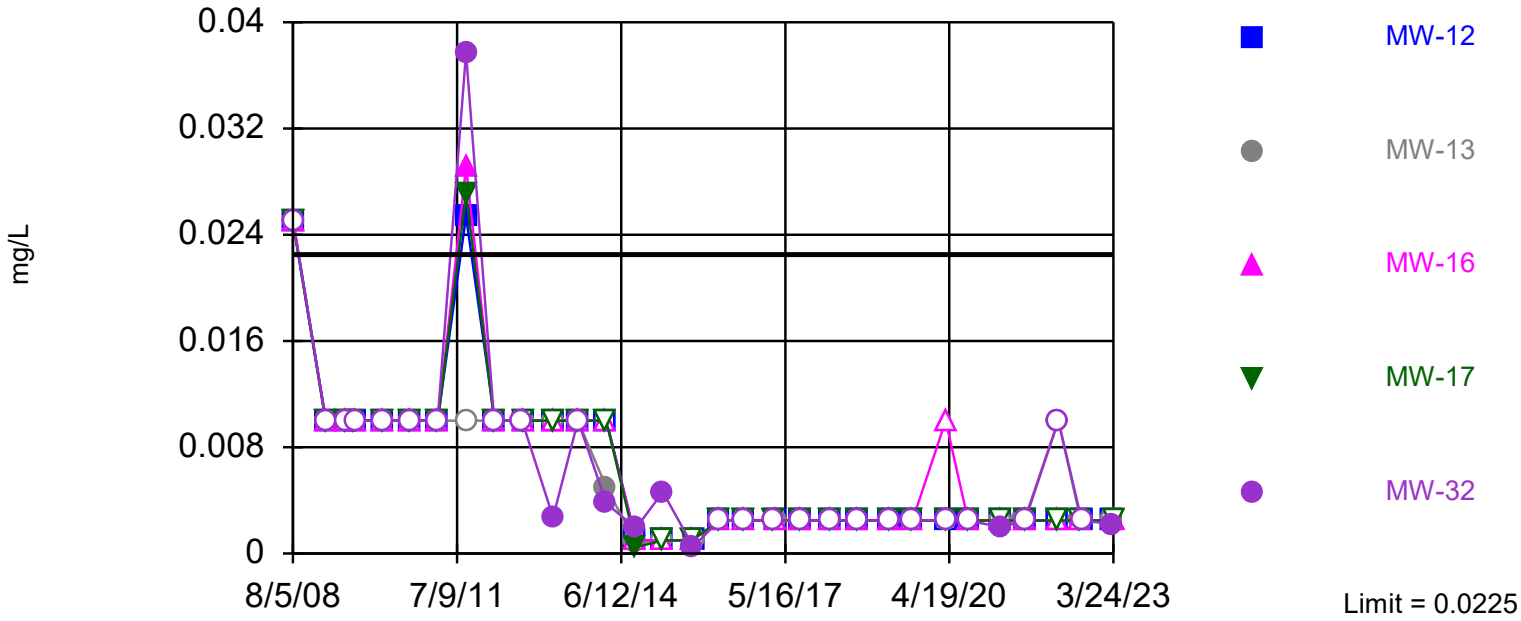
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 93.48% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Copper Analysis Run 5/17/2023 9:19 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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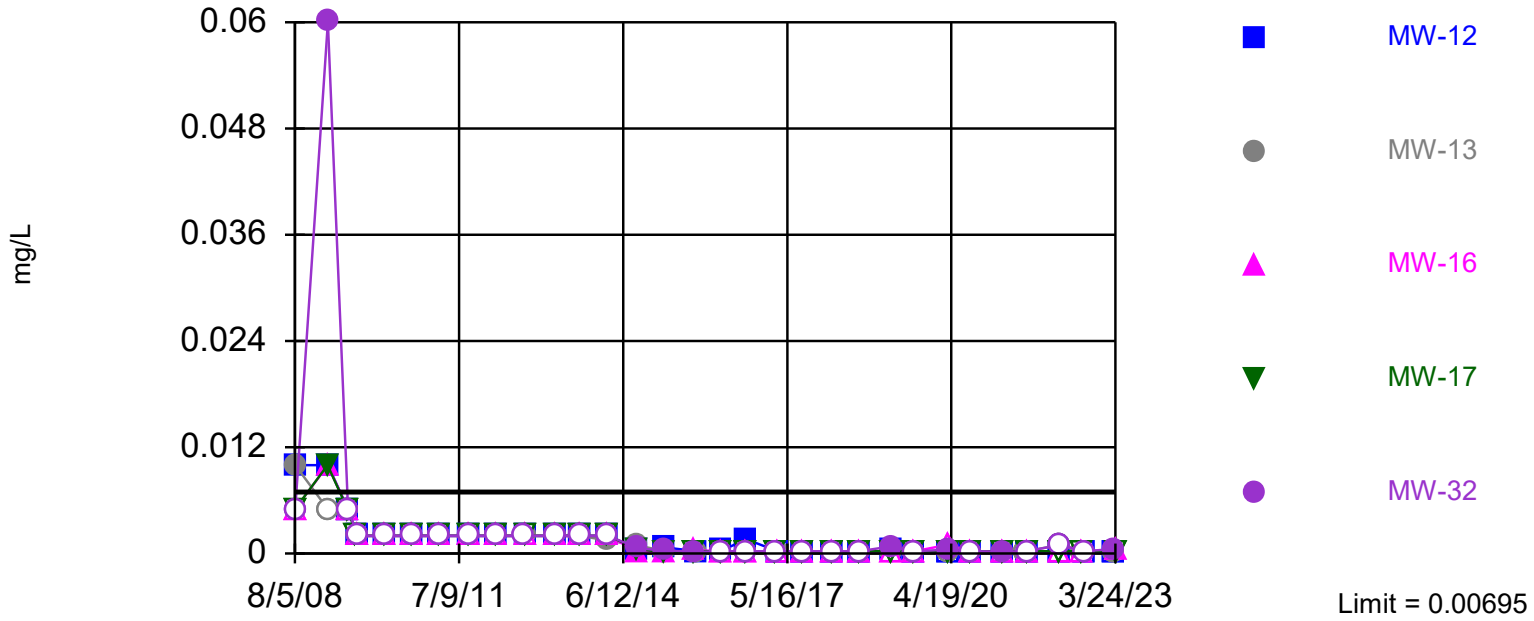
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 75.56% NDs. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Lead Analysis Run 5/17/2023 9:19 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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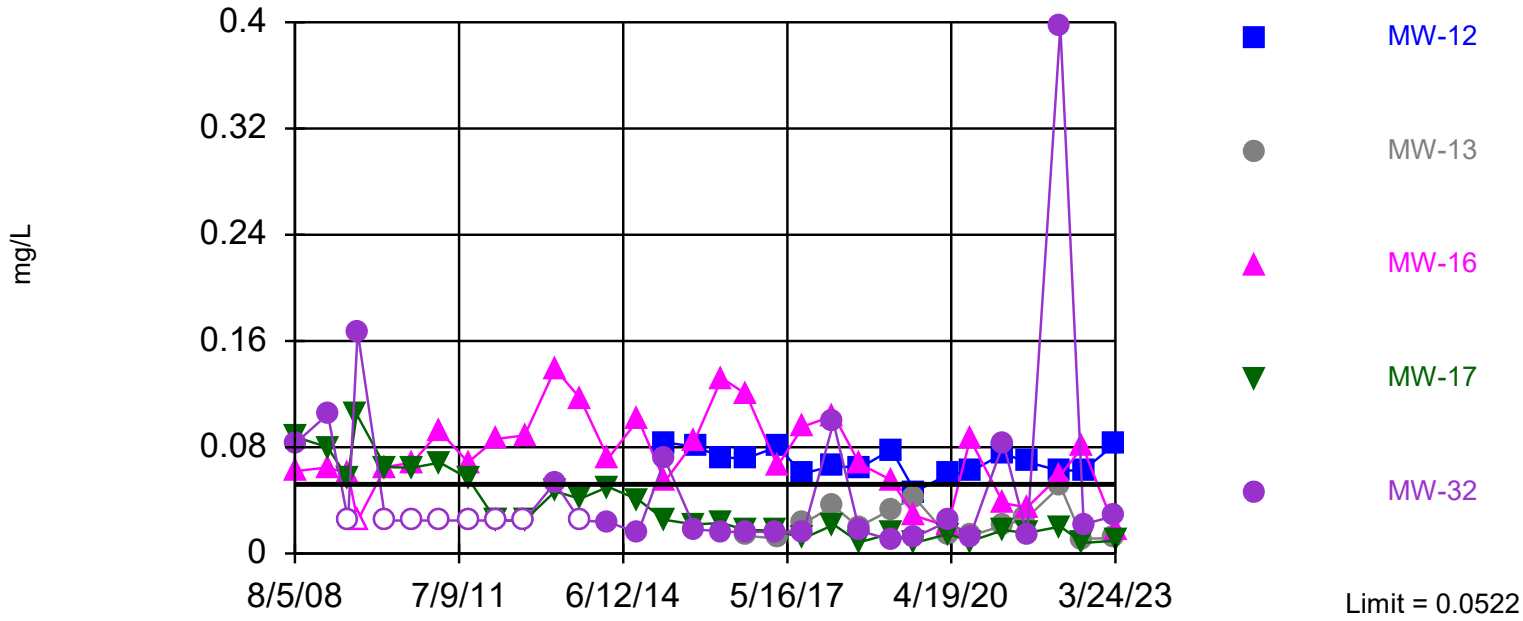
Hollow symbols indicate censored values.

Exceeds Limit: MW-12

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 58.7% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Nickel Analysis Run 5/17/2023 9:19 AM

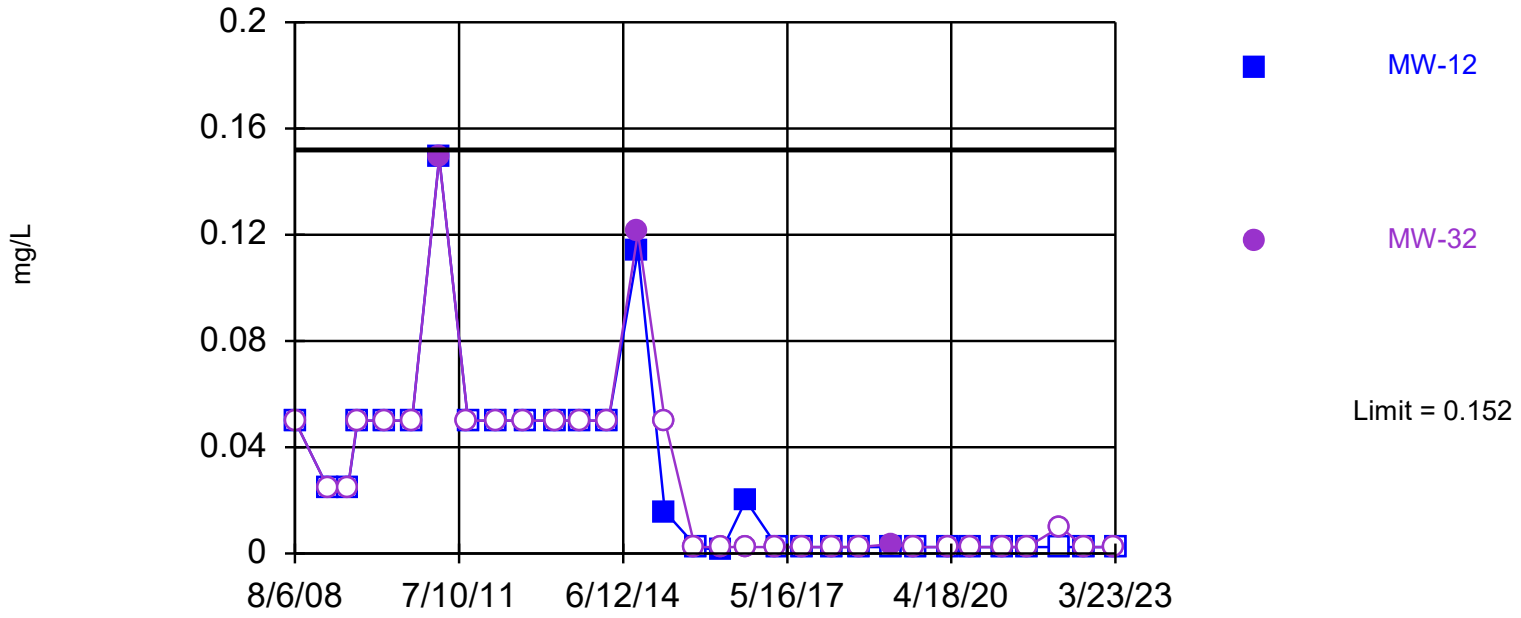
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Sanitas™ v.9.6.37 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 95.83% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Tin Analysis Run 5/17/2023 9:19 AM

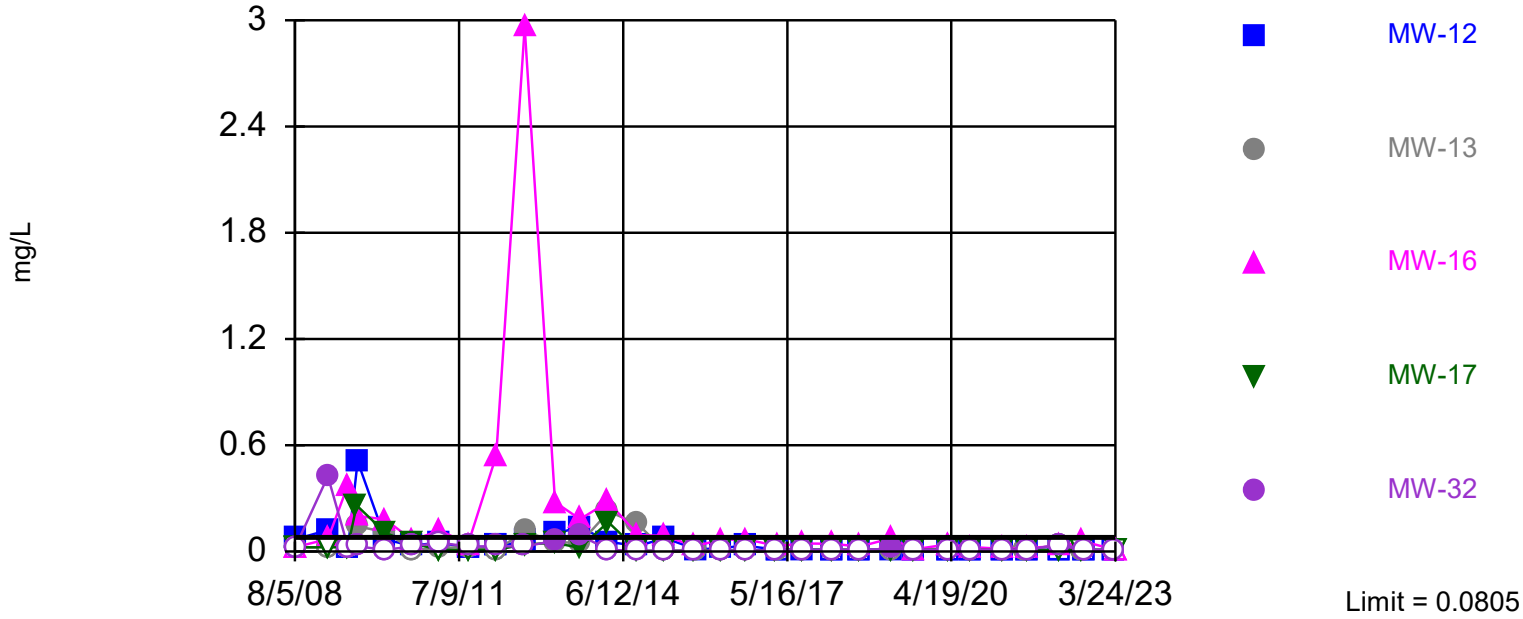
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Sanitas™ v.9.6.37 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 85.42% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Zinc Analysis Run 5/17/2023 9:19 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Deeper Bedrock

Interwell Prediction Limit [(1)]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	MW-109B	0.0101	3/23/2023	0.001ND	No	45	n/a	n/a	96	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-109B	0.138	3/23/2023	0.633	Yes	43	n/a	n/a	0	n/a	n/a	0.0009437	NP Inter (normality) 1 of 2
Cadmium (mg/L)	MW-109B	0.000824	3/23/2023	0.00005ND	No	44	n/a	n/a	98	n/a	n/a	0.0009091	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-109B	0.0108	3/23/2023	0.0025ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-109B	0.00735	3/23/2023	0.0366	Yes	34	n/a	n/a	50	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Zinc (mg/L)	MW-109B	0.0366	3/23/2023	0.01ND	No	47	n/a	n/a	89	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Corrective Action Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	MW-14	0.0101	3/23/2023	0.001ND	No	45	n/a	n/a	96	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-33	0.0101	3/22/2023	0.001ND	No	45	n/a	n/a	96	n/a	n/a	0.0008745	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-14	0.138	3/23/2023	0.283	Yes	43	n/a	n/a	0	n/a	n/a	0.0009437	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-33	0.138	3/22/2023	0.449	Yes	43	n/a	n/a	0	n/a	n/a	0.0009437	NP Inter (normality) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-33	25.4	3/22/2023	5.55ND	No	47	n/a	n/a	91	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-14	0.000824	3/23/2023	0.000135	No	44	n/a	n/a	98	n/a	n/a	0.0009091	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-33	0.000824	3/22/2023	0.00005ND	No	44	n/a	n/a	98	n/a	n/a	0.0009091	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-14	0.0009063	3/23/2023	0.000698	No	34	-8.286	0.5338	15	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-33	0.0009063	3/22/2023	0.00104	Yes	34	-8.286	0.5338	15	None	ln(x)	0.0002545	Param Inter 1 of 2
Copper (mg/L)	MW-14	0.0108	3/23/2023	0.0025ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-33	0.0108	3/22/2023	0.0025ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-14	0.00735	3/23/2023	0.0156	Yes	34	n/a	n/a	50	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-33	0.00735	3/22/2023	0.00555	No	34	n/a	n/a	50	n/a	n/a	0.0014	NP Inter (normality) 1 of 2
Tin (mg/L)	MW-33	0.109	3/22/2023	0.0025ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-14	0.0366	3/23/2023	0.01ND	No	47	n/a	n/a	89	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-33	0.0366	3/22/2023	0.01ND	No	47	n/a	n/a	89	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2

[(1)] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-38 and MW-101B data set. Note that background data set adjustments were incorporated in accordance with Section 3.1 of the Spring 2023 Statistical Evaluation memo.

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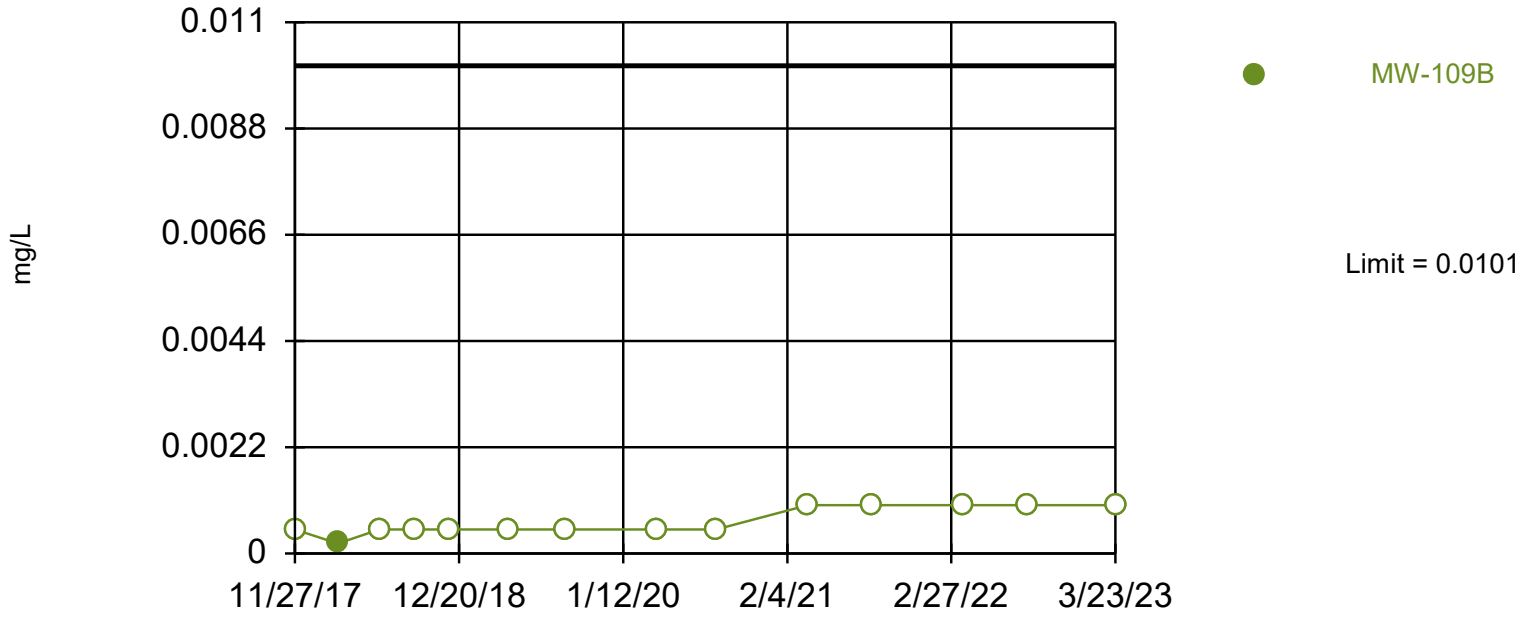
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 95.56% NDs. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

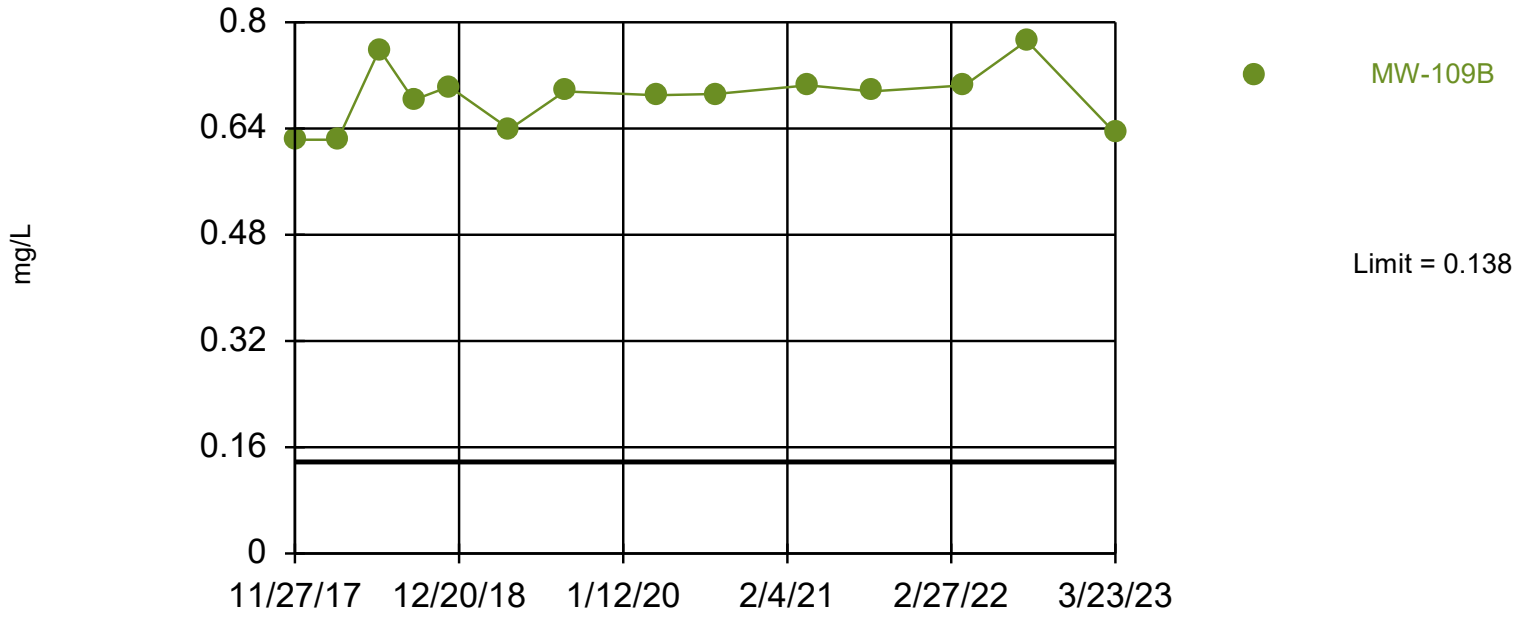
Constituent: Antimony Analysis Run 5/17/2023 9:28 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Exceeds Limit: MW-109B

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. Annual per-constituent alpha = 0.0425. Individual comparison alpha = 0.0009437 (1 of 2).

Constituent: Barium Analysis Run 5/17/2023 9:28 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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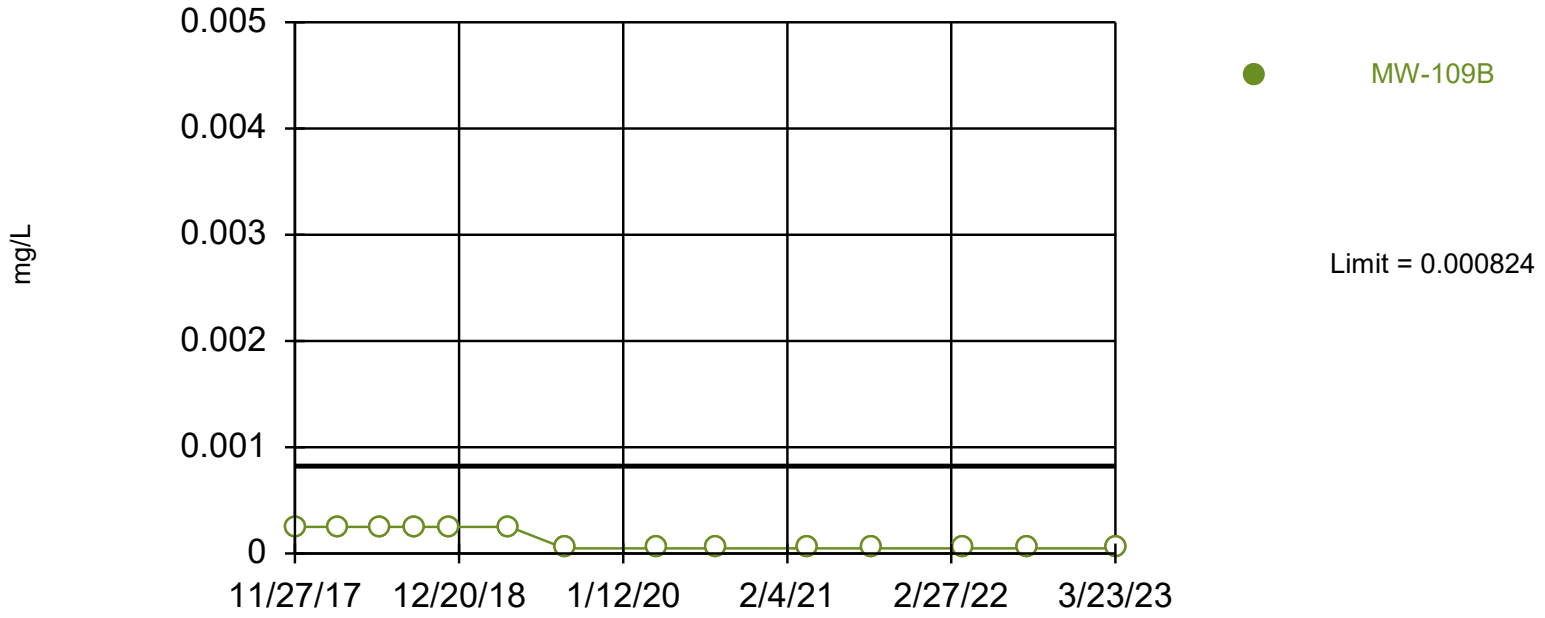
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 97.73% NDs. Annual per-constituent alpha = 0.04097. Individual comparison alpha = 0.0009091 (1 of 2).

Constituent: Cadmium Analysis Run 5/17/2023 9:28 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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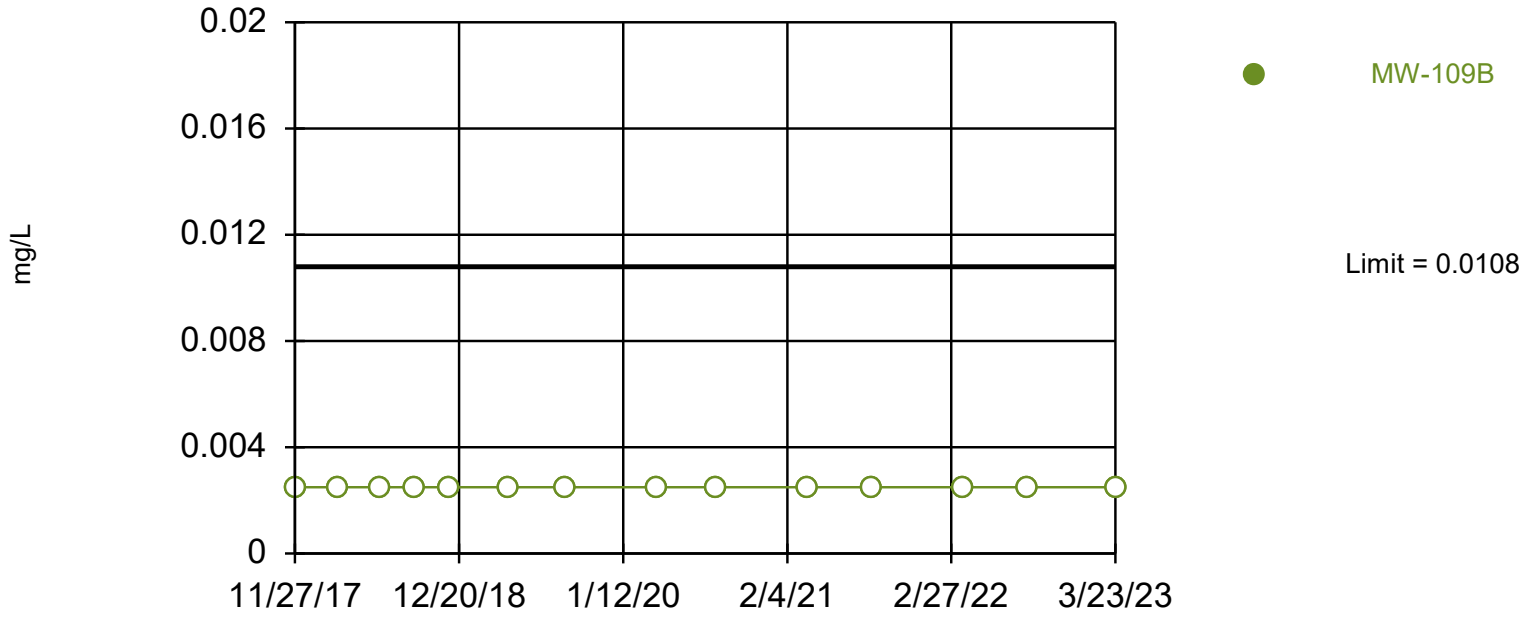
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 97.83% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Copper Analysis Run 5/17/2023 9:28 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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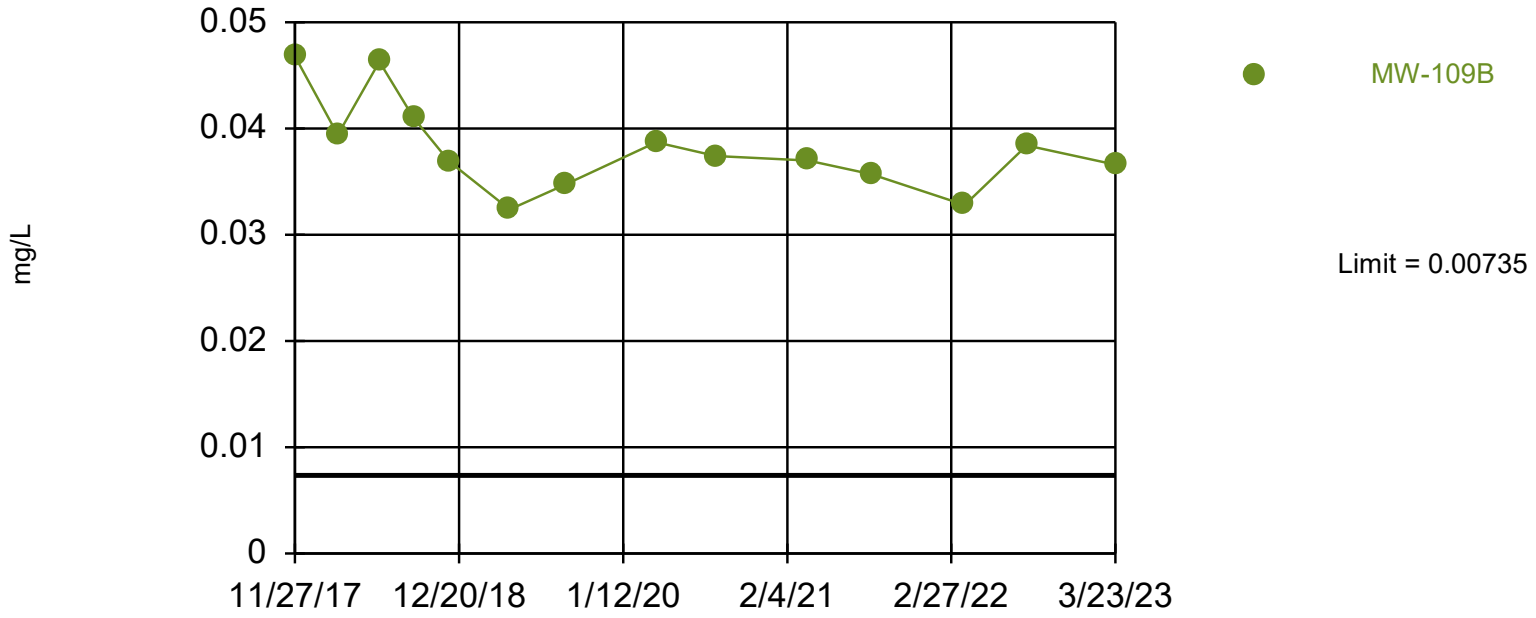
Exceeds Limit: MW-109B

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 50% NDs. Annual per-constituent alpha = 0.06241. Individual comparison alpha = 0.0014 (1 of 2).

Constituent: Nickel Analysis Run 5/17/2023 9:28 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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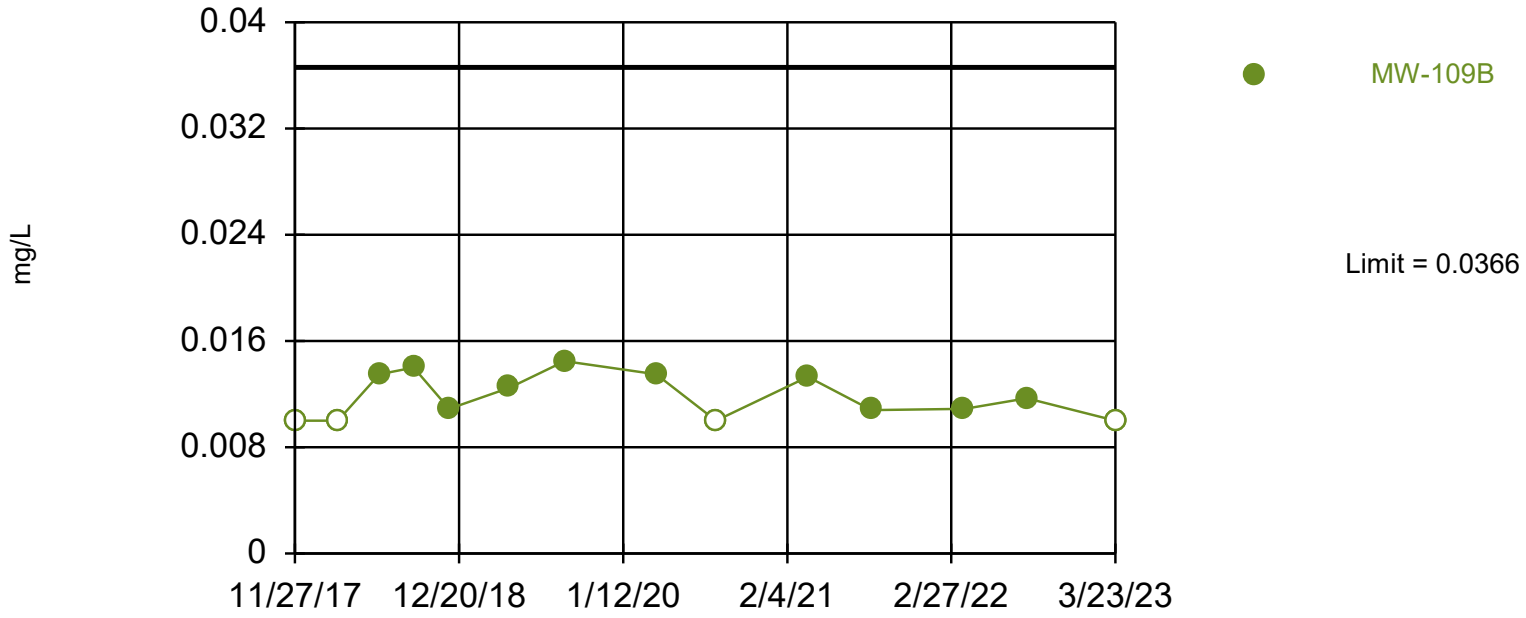
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 89.36% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Zinc Analysis Run 5/17/2023 9:28 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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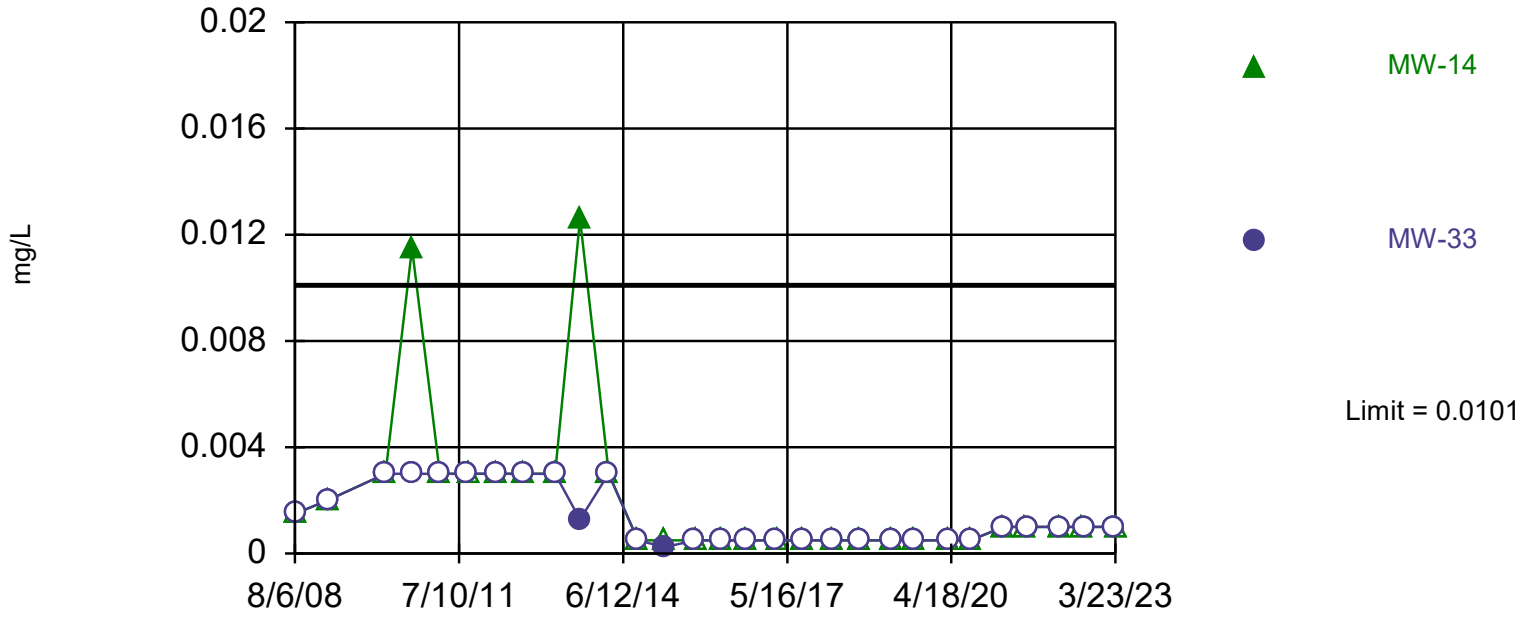
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 45 background values. 95.56% NDs. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Antimony Analysis Run 5/17/2023 9:32 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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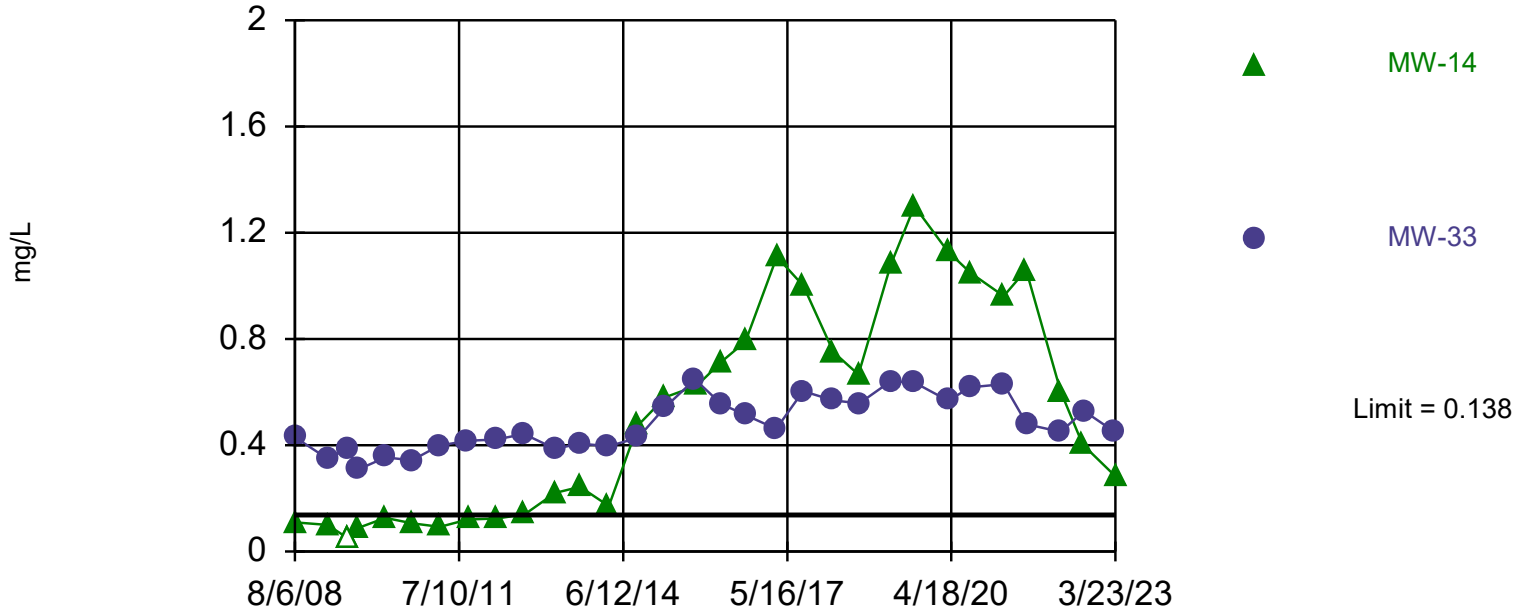
Hollow symbols indicate censored values.

Exceeds Limit: MW-14, MW-33

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 43 background values. Annual per-constituent alpha = 0.0425. Individual comparison alpha = 0.0009437 (1 of 2).

Constituent: Barium Analysis Run 5/17/2023 9:32 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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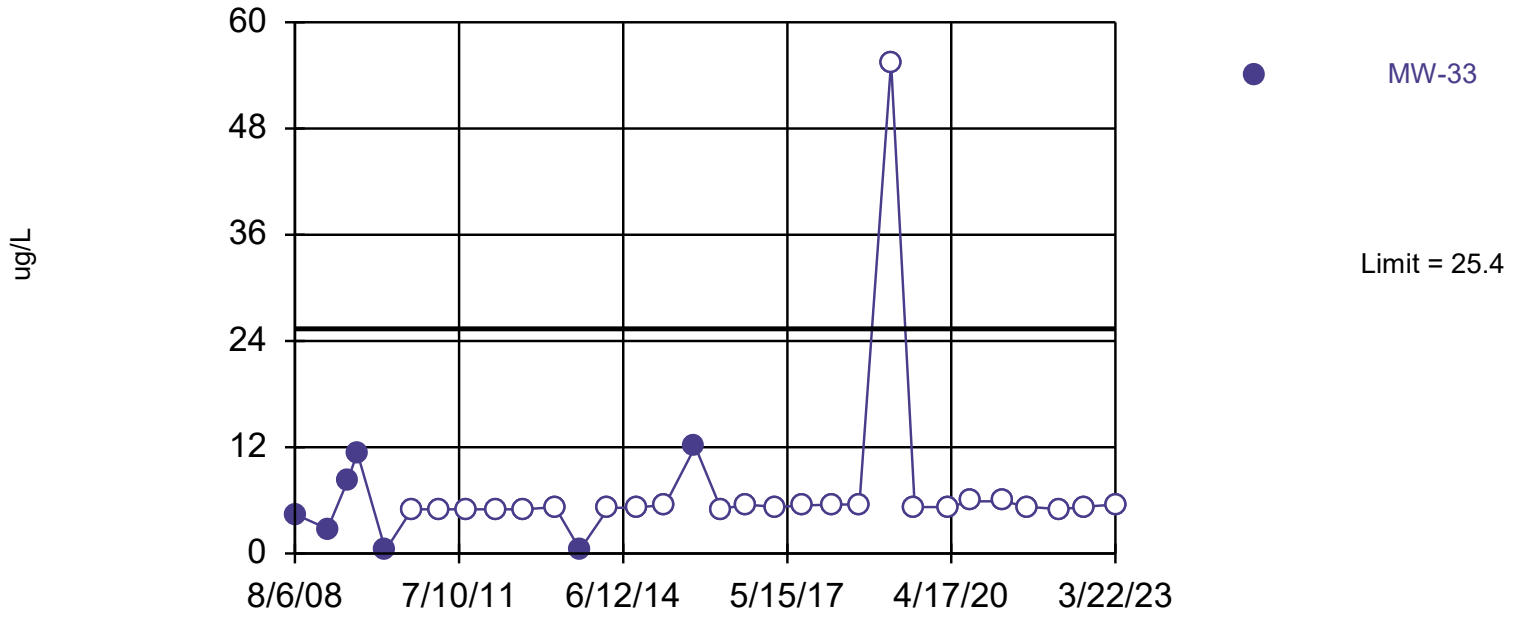
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 91.49% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: bis[2-Ethylhexyl]phthalate Analysis Run 5/17/2023 9:32 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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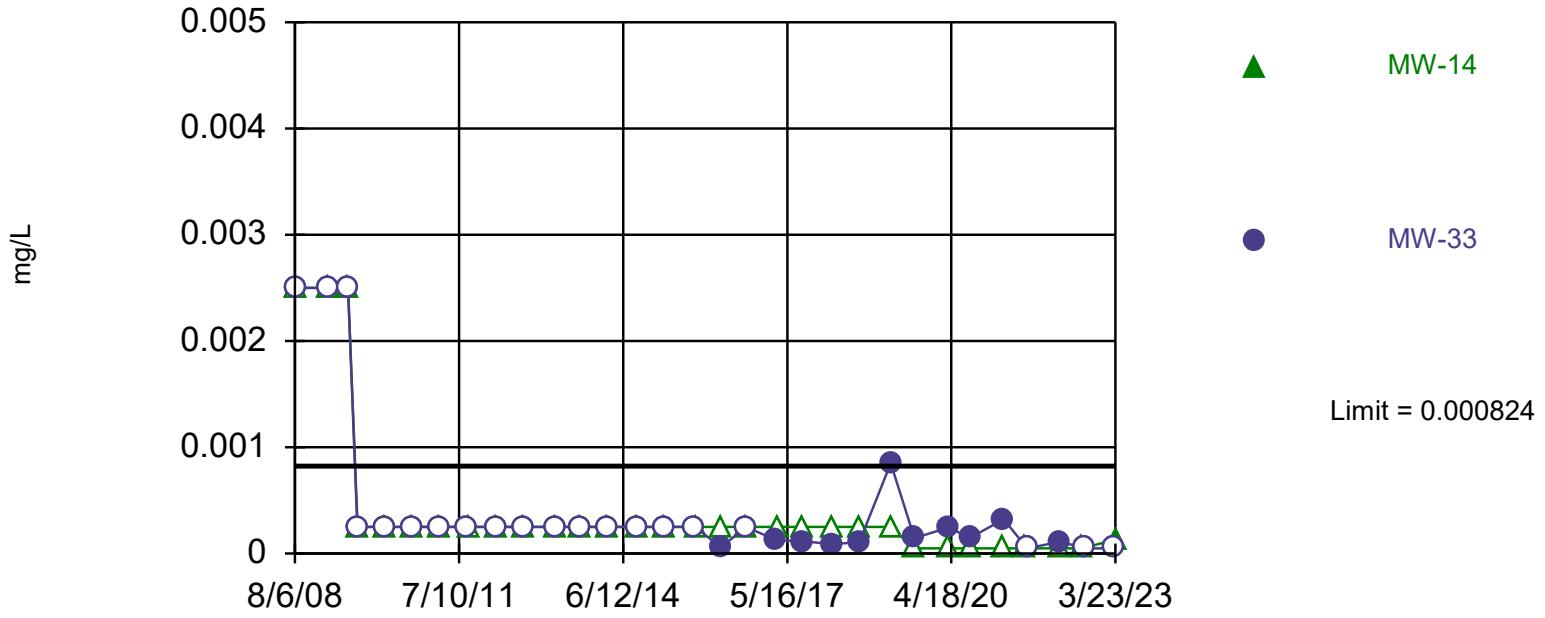
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 97.73% NDs. Annual per-constituent alpha = 0.04097. Individual comparison alpha = 0.0009091 (1 of 2).

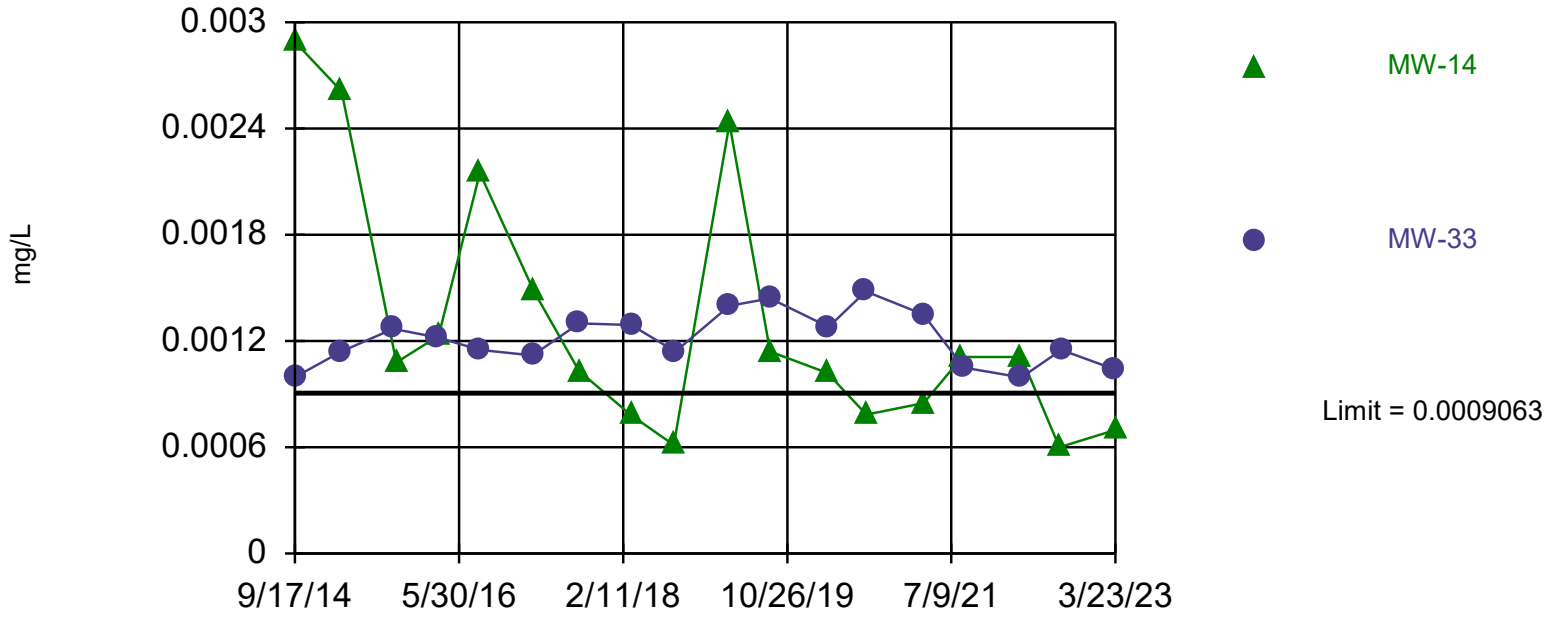
Constituent: Cadmium Analysis Run 5/17/2023 9:32 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Exceeds Limit: MW-33

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-8.286, Std. Dev.=0.5338, n=34, 14.71% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9479, critical = 0.908. Kappa = 2.397 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Cobalt Analysis Run 5/17/2023 9:32 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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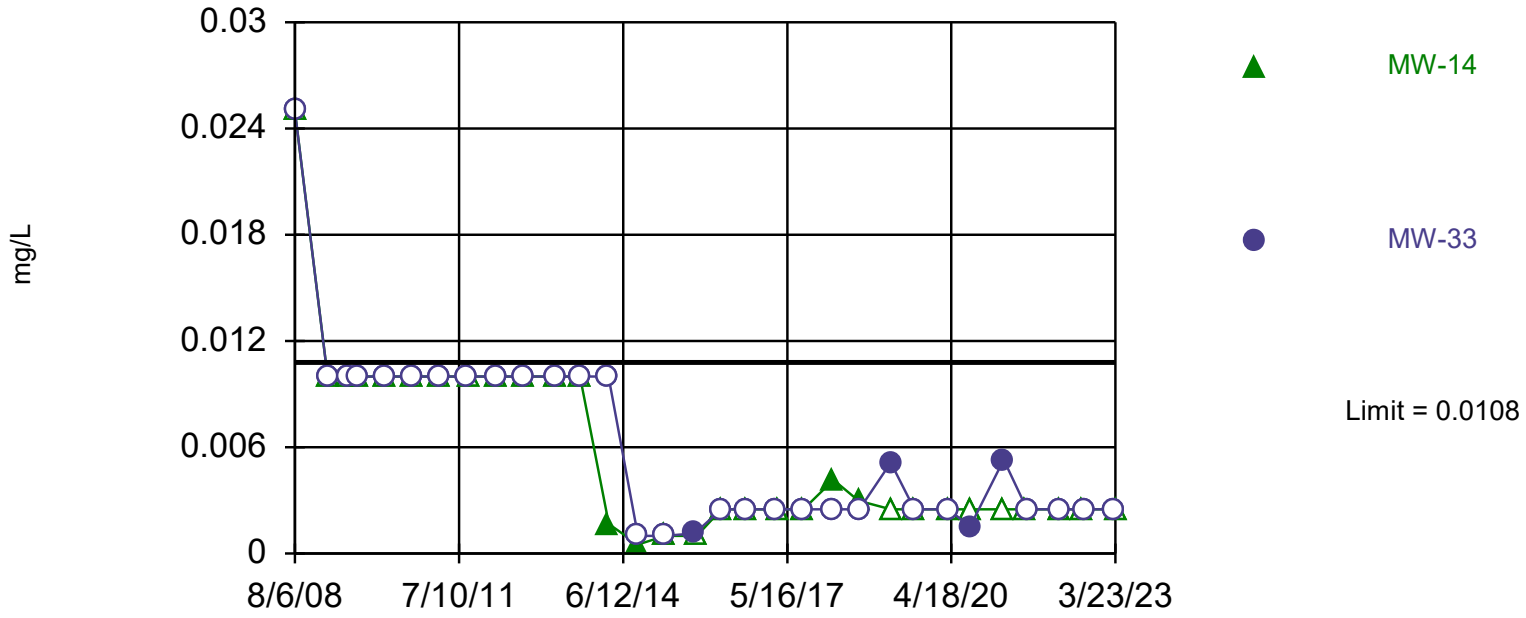
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 97.83% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

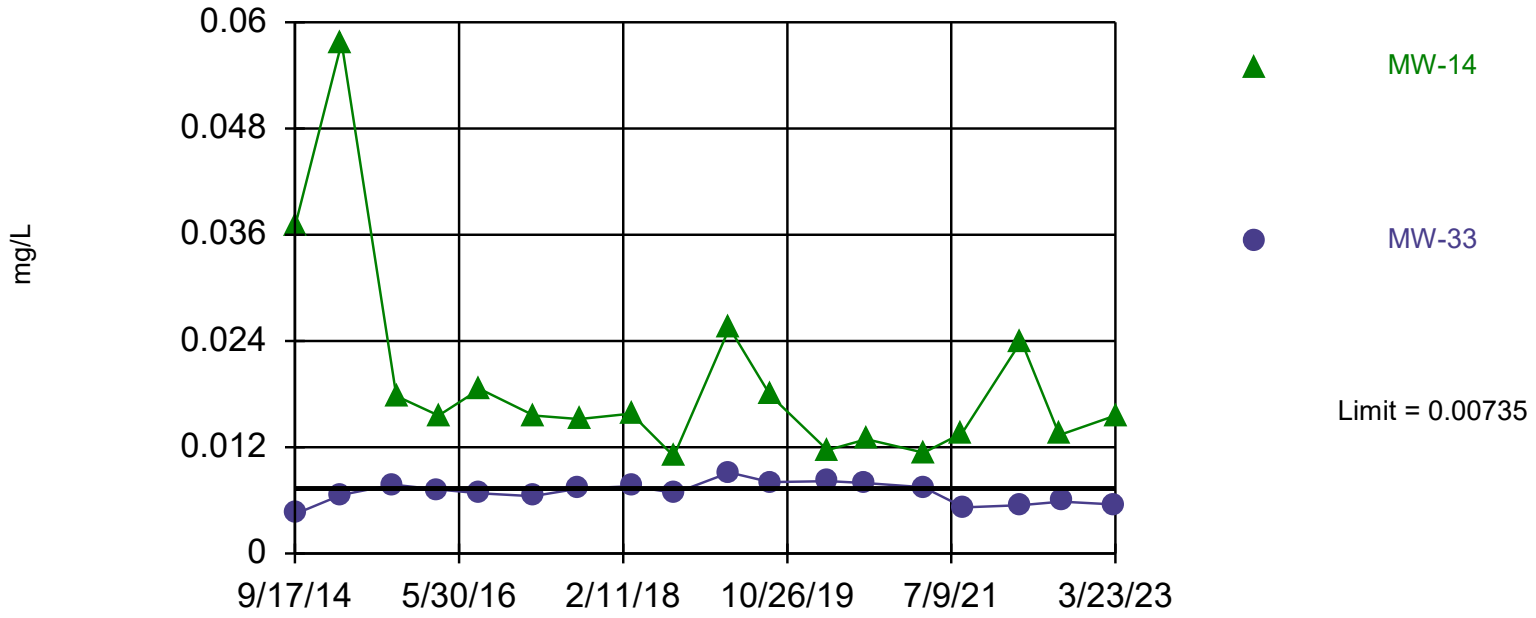
Constituent: Copper Analysis Run 5/17/2023 9:32 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Exceeds Limit: MW-14

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 50% NDs. Annual per-constituent alpha = 0.06241. Individual comparison alpha = 0.0014 (1 of 2).

Constituent: Nickel Analysis Run 5/17/2023 9:33 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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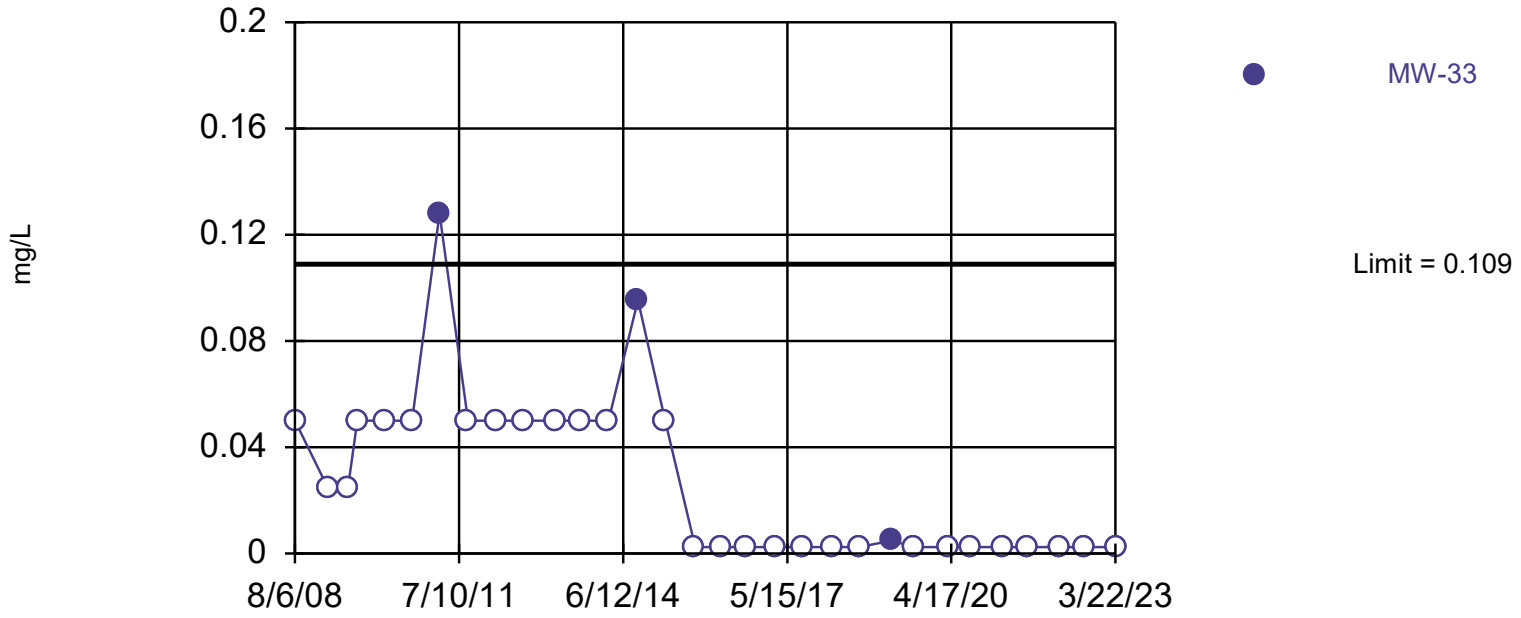
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 95.74% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Tin Analysis Run 5/17/2023 9:33 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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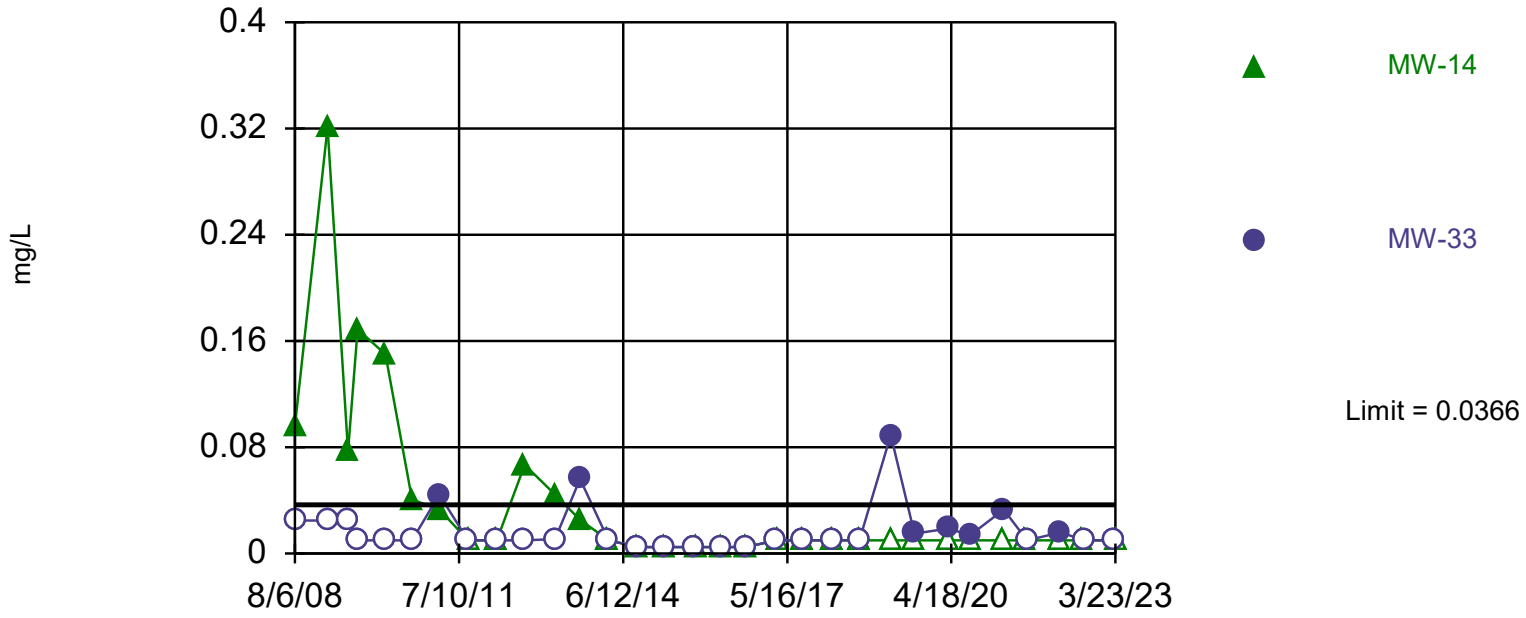
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 89.36% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Zinc Analysis Run 5/17/2023 9:33 AM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Attachment 3

Sanitas Report Output for Double Quantification Rule Evaluations

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Detect Screening - Assessment Monitoring

Analysis Run 5/12/2023 3:43 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

A listing of detects for 209 constituents in MW-26 in January and March 2023:

Acetone, MW-26, 3/23/2023: 11.6

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Detect Screening - Corrective Action Monitoring Assessment Constituents

Analysis Run 5/12/2023 3:52 PM
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

A listing of detects for 209 constituents in MW-12, MW-13, MW-16, MW-17, and MW-32 in March 2023:

1,1-Dichloroethane, MW-12, 3/23/2023: 4.57
1,1-Dichloroethane, MW-13, 3/23/2023: 2.01
1,2-Dichlorobenzene, MW-12, 3/23/2023: 2.28
1,2-Dichlorobenzene, MW-13, 3/23/2023: 2.2
1,2-Dichlorobenzene, MW-16, 3/24/2023: 1.21
1,4-Dichlorobenzene, MW-12, 3/23/2023: 5.99
1,4-Dichlorobenzene, MW-13, 3/23/2023: 14.6
1,4-Dichlorobenzene, MW-16, 3/24/2023: 5.2
1,4-Dichlorobenzene, MW-32, 3/22/2023: 2.32
Benzene, MW-12, 3/23/2023: 0.918
Benzene, MW-13, 3/23/2023: 3.74
Benzene, MW-16, 3/24/2023: 0.726
Cadmium, MW-16, 3/24/2023: 0.000134
Chlorobenzene, MW-12, 3/23/2023: 4.12
Chlorobenzene, MW-13, 3/23/2023: 4.31
Chlorobenzene, MW-16, 3/24/2023: 1.75
Chlorobenzene, MW-32, 3/22/2023: 8.93
cis-1,2-Dichloroethene, MW-12, 3/23/2023: 3.67
Silver, MW-16, 3/24/2023: 0.00159
Thallium, MW-12, 3/23/2023: 0.0041
Thallium, MW-16, 3/24/2023: 0.00141

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Detect Screening - Delineation Monitoring Assessment Constituents

Analysis Run 5/12/2023 4:03 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

A listing of detects for 208 constituents in MW-109B in March 2023:

1,4-Dichlorobenzene, MW-109B, 3/23/2023: 1.72
Chlorobenzene, MW-109B, 3/23/2023: 7.41

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A listing of detects for 208 constituents in MW-14 and MW-33 in March 2023:

1,1-Dichloroethane, MW-14, 3/23/2023: 1.7
1,4-Dichlorobenzene, MW-14, 3/23/2023: 5.39
Benzene, MW-14, 3/23/2023: 0.665
Chlorobenzene, MW-14, 3/23/2023: 1.72
Chlorobenzene, MW-33, 3/22/2023: 4.04
cis-1,2-Dichloroethene, MW-14, 3/23/2023: 1.15
Silver, MW-14, 3/23/2023: 0.00164

Attachment 4

Sanitas Report Output for Confidence Interval Calculations
Assessment Mode

Upper Bedrock

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations																
Acetone (ug/L)	MW-26	11.6	5.0	6300	No	30	13.3	42.2	3.2	<0.01	<0.01	83	None	No	0.01	NP (NDs)
Barium (mg/L)	MW-26	0.25	0.20	2	No	30	0.22	0.06	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Corrective Action Monitoring Locations - Assessment Constituents																
1,1-Dichloroethane (ug/L)	MW-12	22.8	13.8	140	No	31	18.3	10.2	0.6	<0.01	<0.01	0	None	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW-13	13.6	2.4	140	No	31	9.1	7.7	0.8	<0.01	<0.01	0	None	No	0.01	NP (normality)
1,2-Dichlorobenzene (ug/L)	MW-12	3.6	1.0	600	No	31	2.3	1.5	0.6	<0.01	<0.01	10	None	No	0.01	NP (normality)
1,2-Dichlorobenzene (ug/L)	MW-13	3.0	2.3	600	No	31	2.7	0.9	0.3	<0.01	<0.01	3	None	No	0.01	Param.
1,2-Dichlorobenzene (ug/L)	MW-16	1.3	0.5	600	No	31	0.9	0.5	0.5	<0.01	<0.01	35	None	No	0.01	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW-12	6.3	3.5	75	No	31	4.9	3.1	0.6	<0.01	<0.01	3	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-13	14.7	11.8	75	No	31	12.6	3.4	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW-16	4.2	2.3	75	No	31	3.2	2.1	0.6	<0.01	<0.01	13	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-32	5.3	3.4	75	No	31	4.3	2.1	0.5	<0.01	<0.01	10	None	No	0.01	Param.
Barium (mg/L)	MW-12	0.36	0.16	2	No	31	0.25	0.12	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-13	0.79	0.54	2	No	31	0.66	0.28	0.4	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-16	0.08	0.06	2	No	31	0.08	0.03	0.4	<0.01	<0.01	6	None	No	0.01	NP (normality)
Barium (mg/L)	MW-17	0.27	0.13	2	No	31	0.20	0.11	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-32	0.88	0.70	2	No	31	0.77	0.22	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)
Benzene (ug/L)	MW-12	2.58	1.39	5	No	31	1.98	1.35	0.7	<0.01	<0.01	10	None	No	0.01	Param.
Benzene (ug/L)	MW-13	4.93	3.92	5	No	31	4.43	1.15	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Benzene (ug/L)	MW-16	2.79	1.79	5	No	31	2.29	1.13	0.5	<0.01	<0.01	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-16	0.00025	0.00020	0.005	No	31	0.00042	0.00070	1.6	<0.01	<0.01	97	None	No	0.01	NP (NDs)
Chlorobenzene (ug/L)	MW-12	6.4	2.7	100	No	31	4.9	2.6	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Chlorobenzene (ug/L)	MW-13	5.4	4.2	100	No	31	4.8	1.3	0.3	<0.01	<0.01	3	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-16	2.1	1.3	100	No	31	1.7	0.8	0.5	<0.01	<0.01	10	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-32	11.6	8.8	100	No	31	10.2	3.2	0.3	<0.01	<0.01	0	None	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-12	10.6	4.2	70	No	31	8.9	6.3	0.7	<0.01	<0.01	0	None	No	0.01	NP (normality)
Nickel (mg/L)	MW-12	0.076	0.063	0.1	No	17	0.069	0.010	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Silver (mg/L)	MW-16	0.010	0.001	0.1	No	31	0.006	0.008	1.3	<0.01	<0.01	94	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-12	0.00428	0.00119	0.002	No	31	0.00343	0.00311	0.9	<0.01	<0.01	23	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-16	0.00101	0.00050	0.002	No	30	0.00109	0.00170	1.6	<0.01	<0.01	53	None	No	0.01	NP (NDs)

[1] Under assessment mode, an SSL is indicated when the lower confidence limit exceeds the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] For parametric confidence intervals: Except where otherwise indicated, based on Unified Guidance Equation 22.2, i.e., $\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right)$
where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{1-b,n-1}$ is the (1−b) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

[4] For non-parametric confidence intervals: Based on Unified Guidance Equation 22.1, i.e., $1-\beta = G_{T,n-1}(t_{1-\alpha,n-1}|\Delta = \sqrt{n}(R-1))$
where R is the desired risk ratio, $t_{1-a,n-1}$ is the (1−a) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter D.

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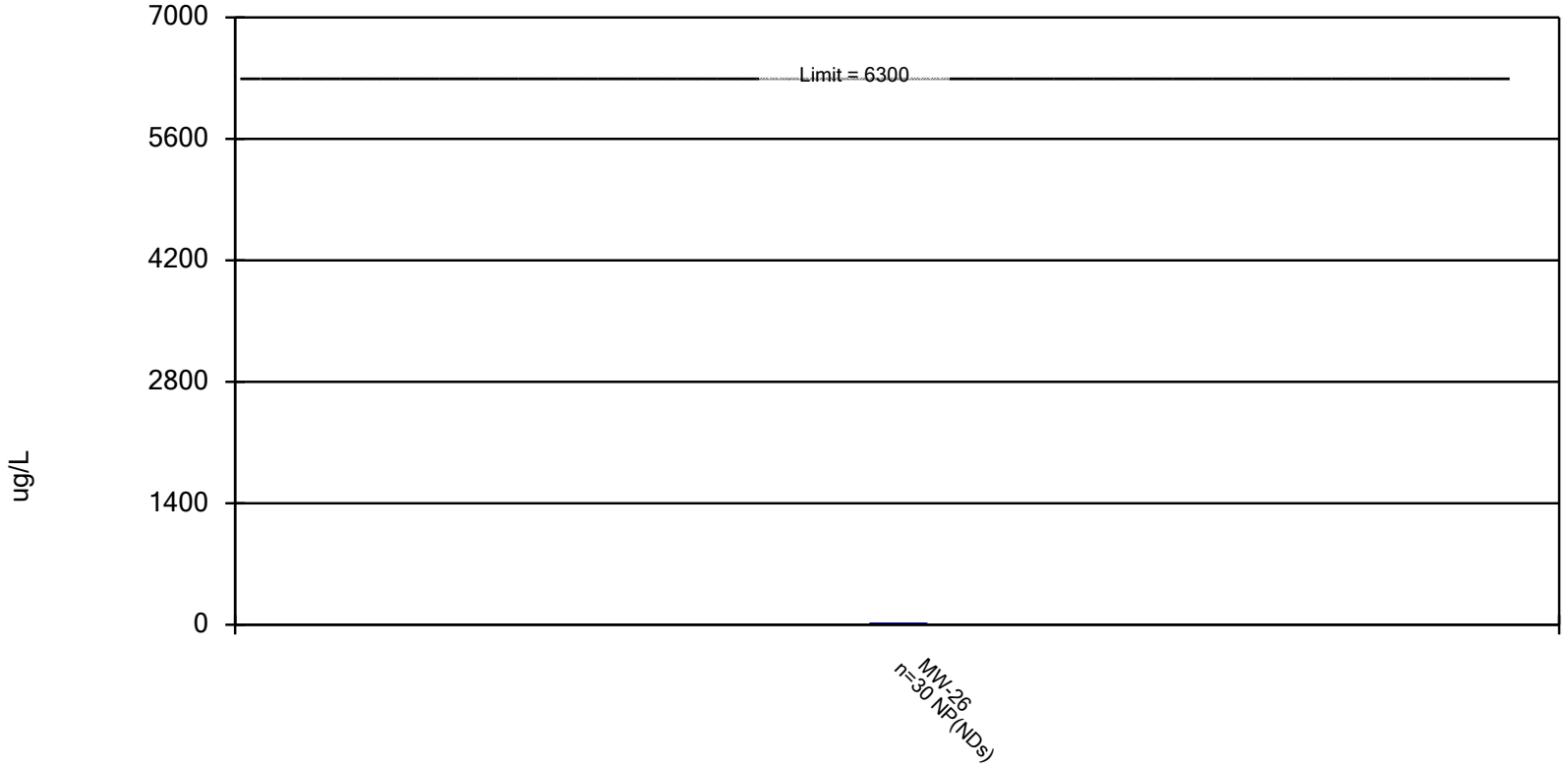
Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Acetone Analysis Run 5/19/2023 4:06 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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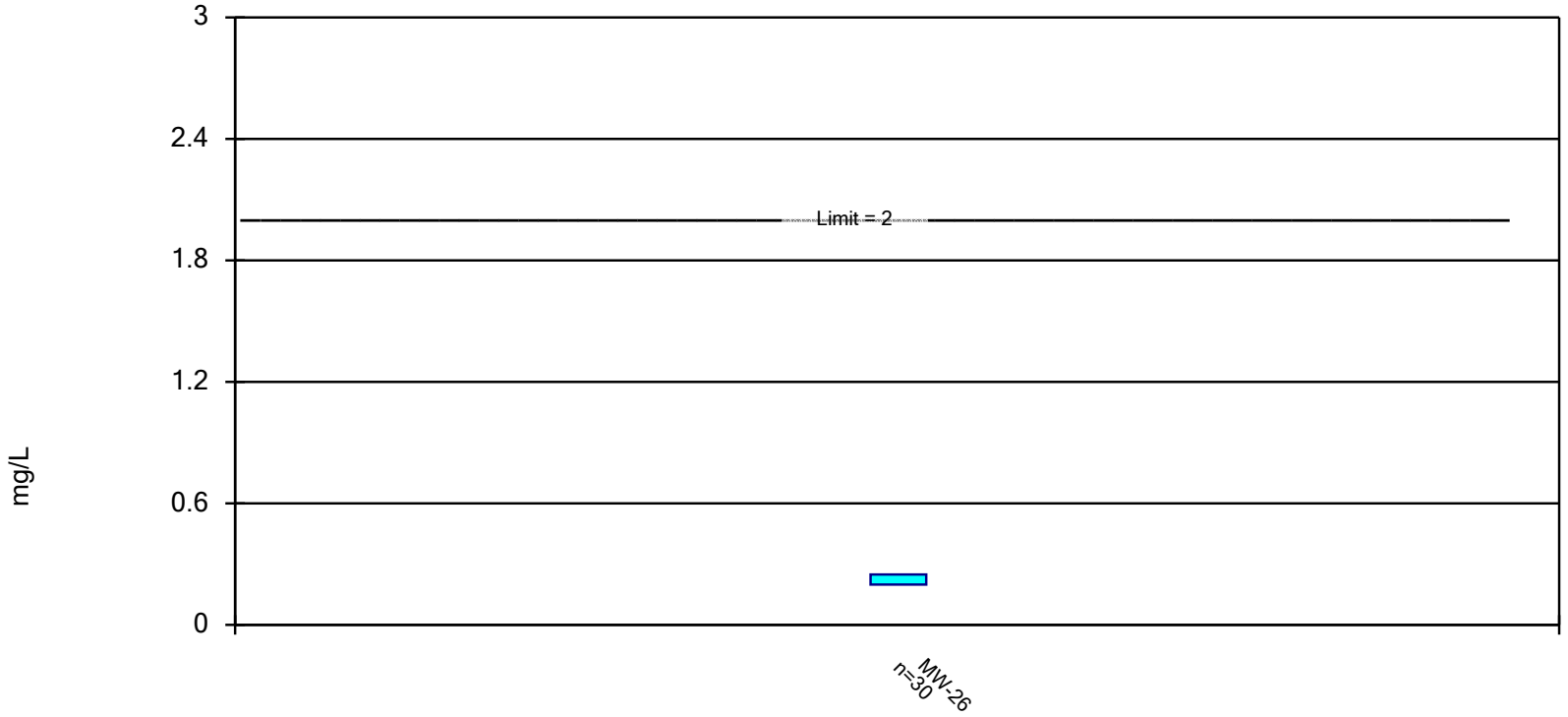
Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/19/2023 4:06 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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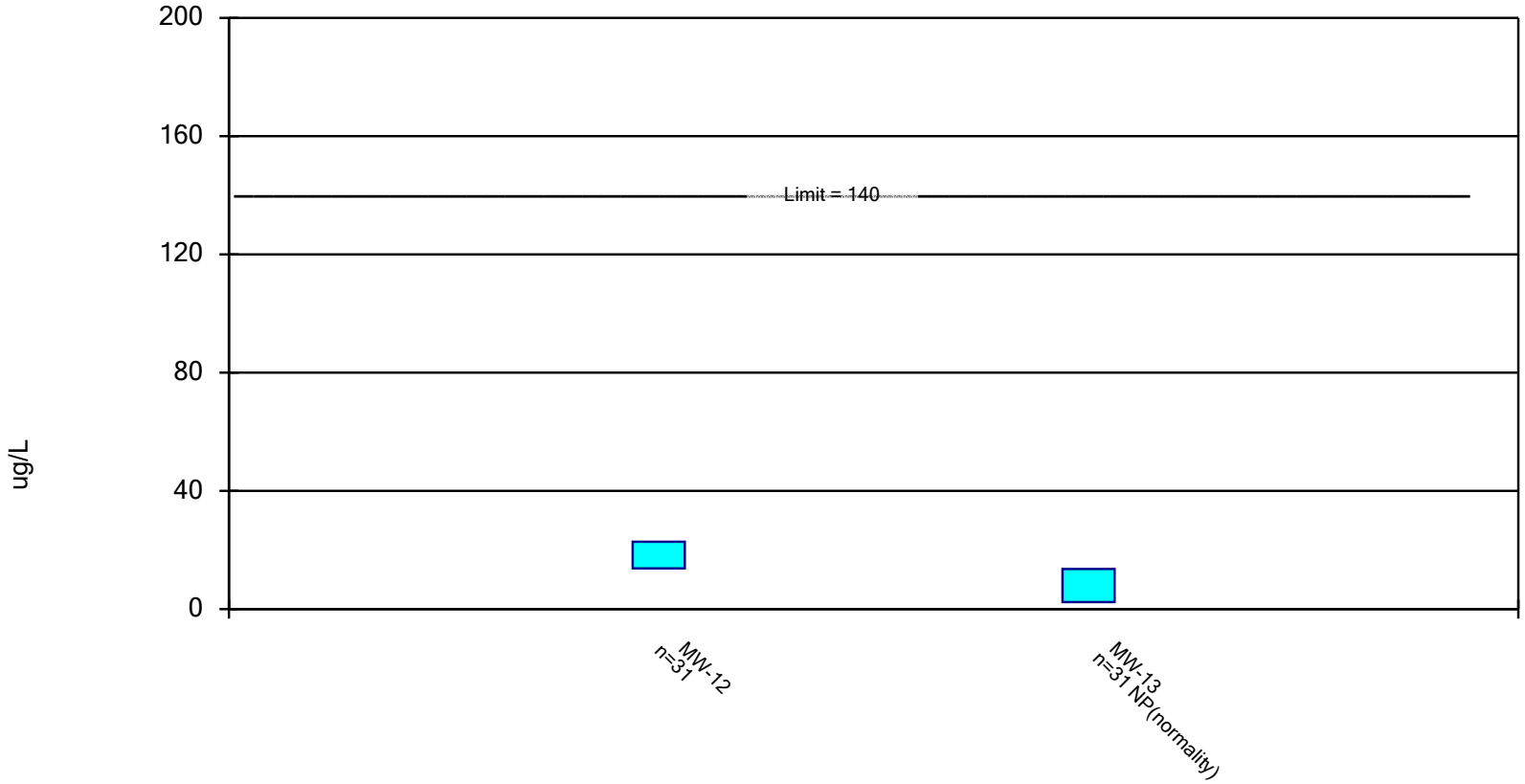
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

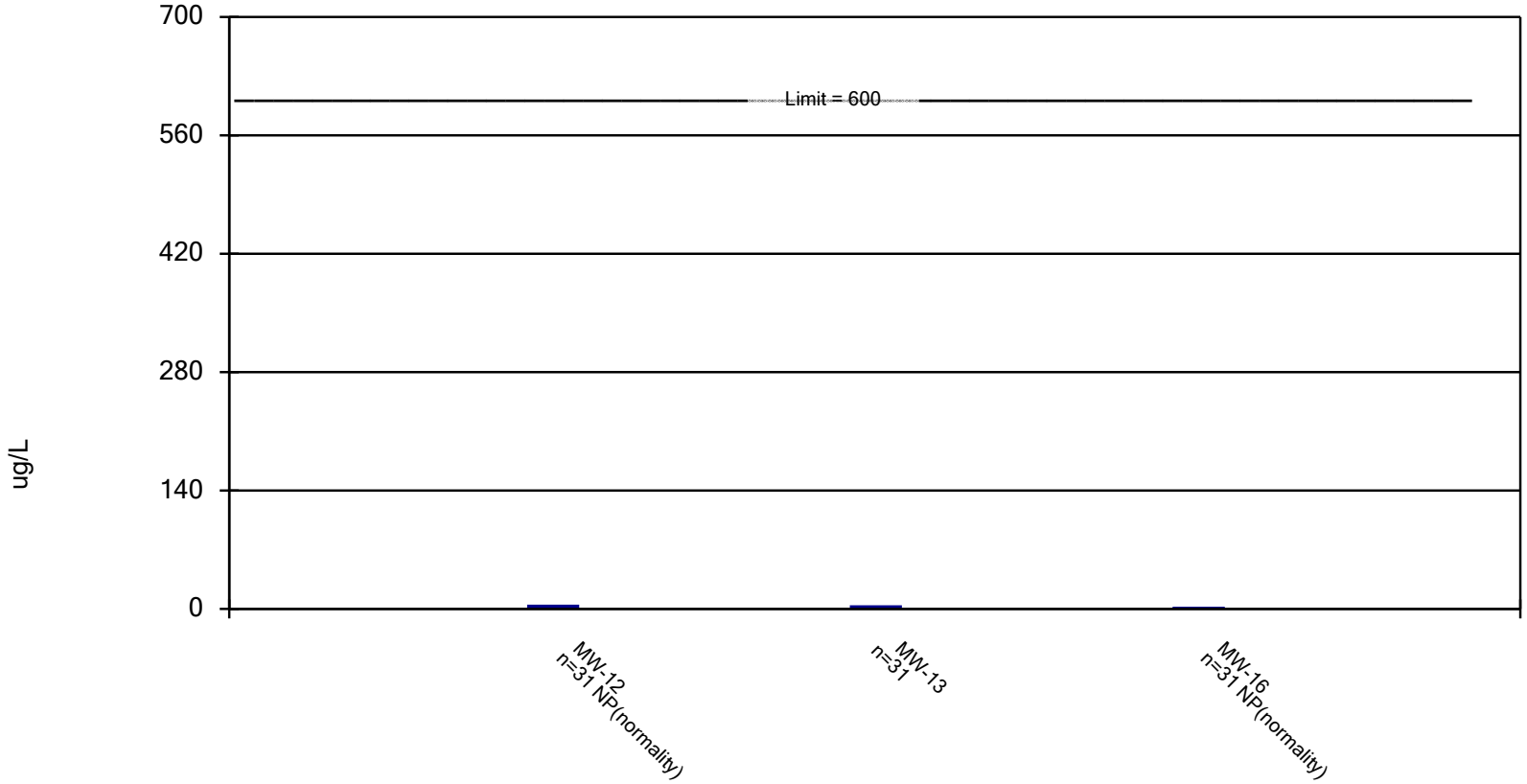


Constituent: 1,1-Dichloroethane Analysis Run 5/19/2023 4:17 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: 1,2-Dichlorobenzene Analysis Run 5/19/2023 4:17 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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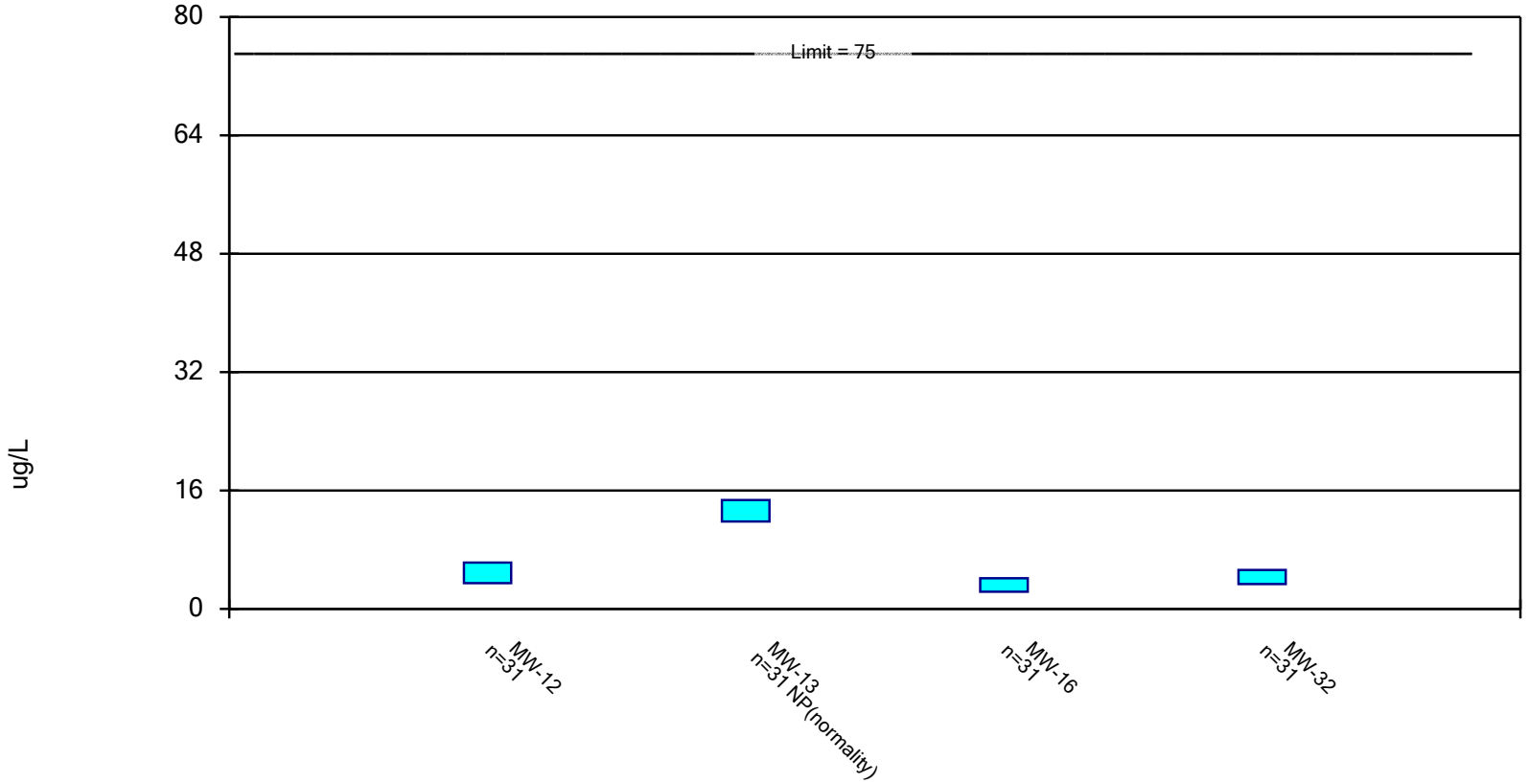
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: 1,4-Dichlorobenzene Analysis Run 5/19/2023 4:17 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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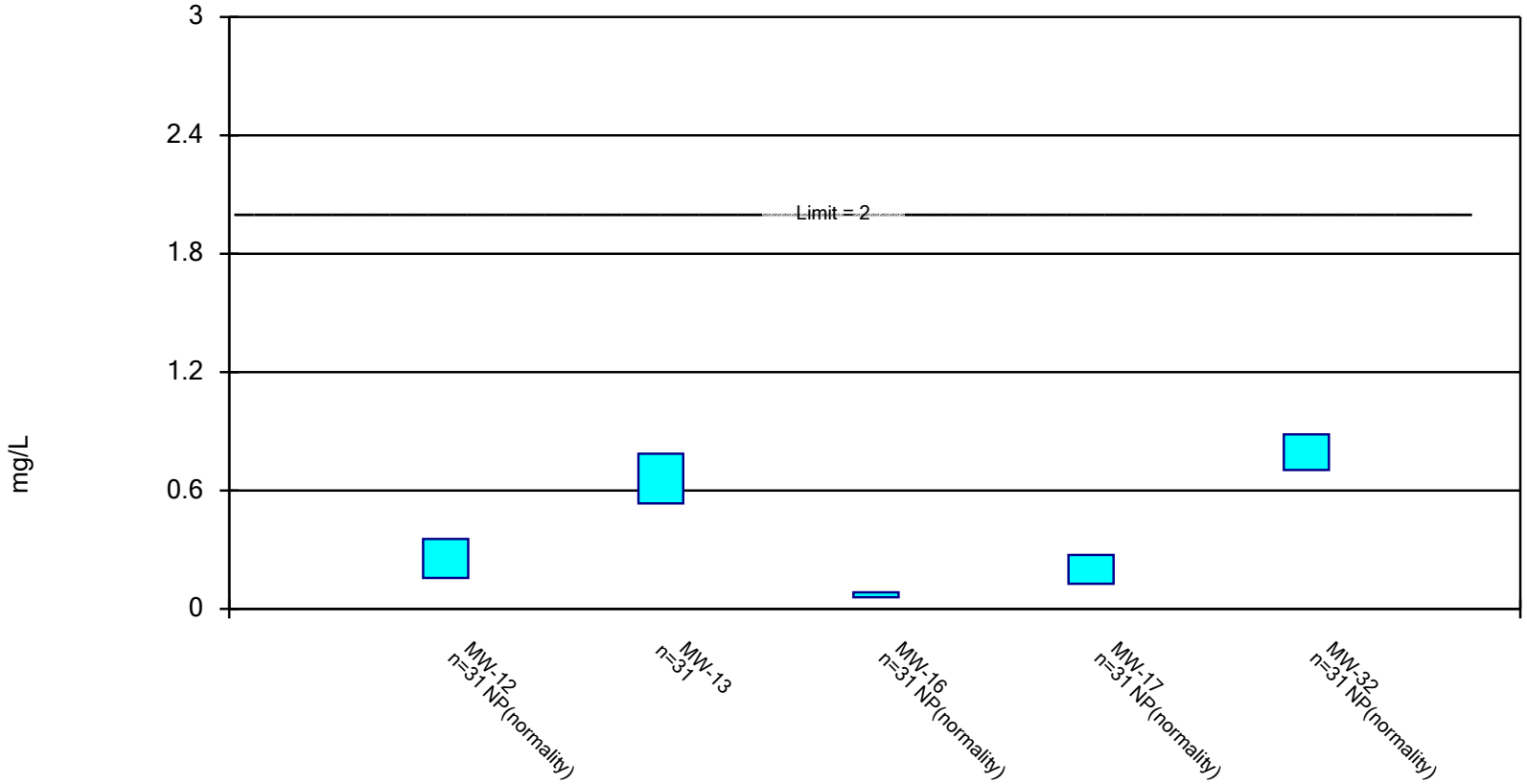
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/19/2023 4:17 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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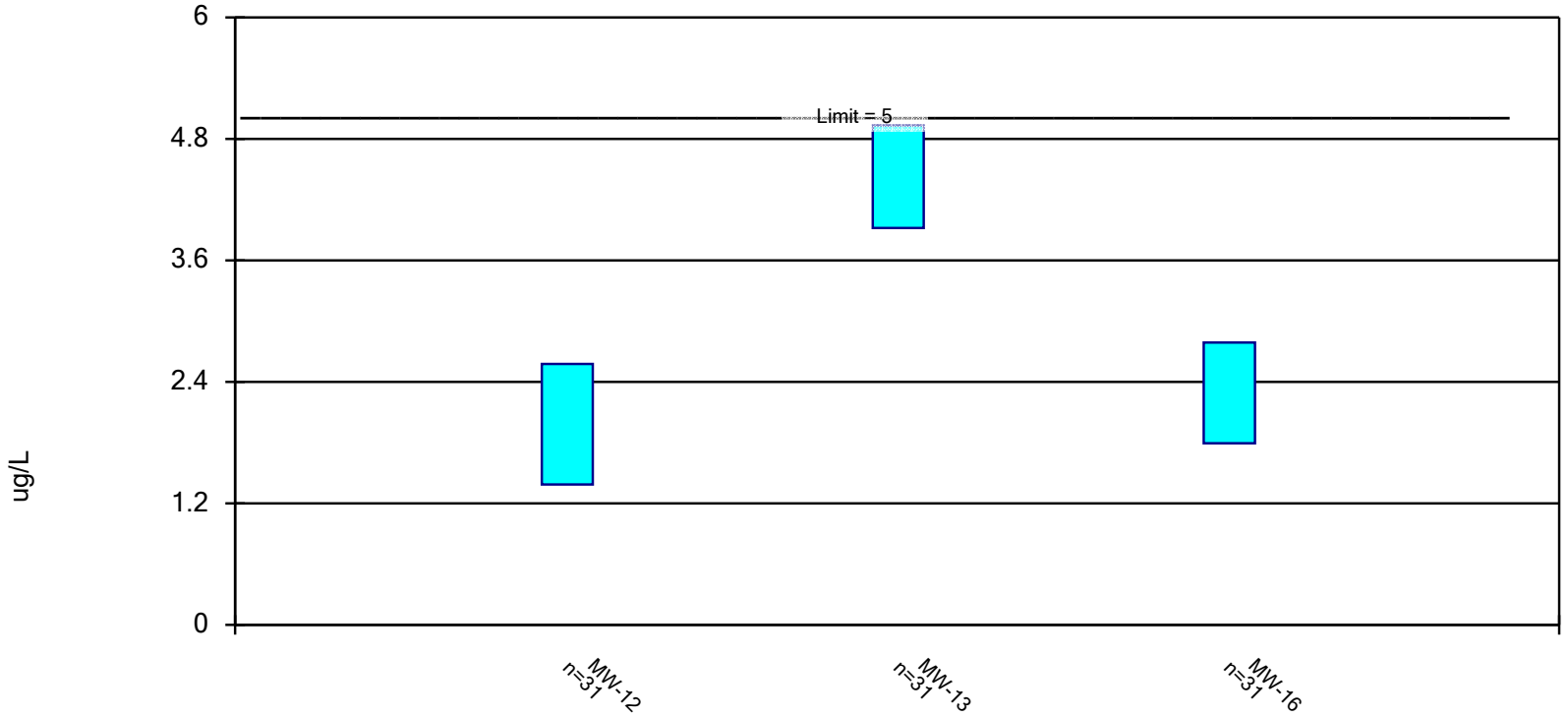
Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Benzene Analysis Run 5/19/2023 4:17 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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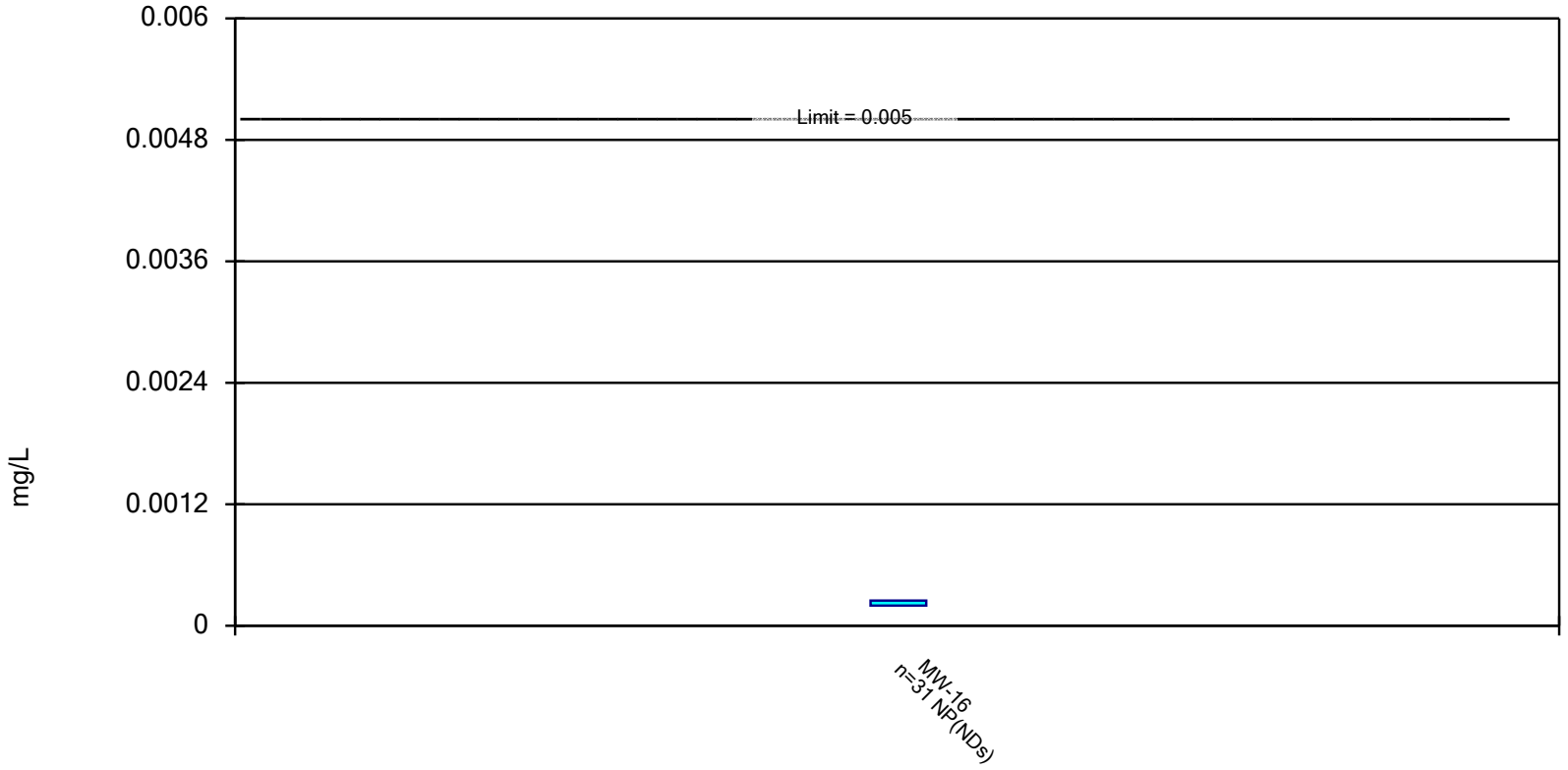
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 5/19/2023 4:17 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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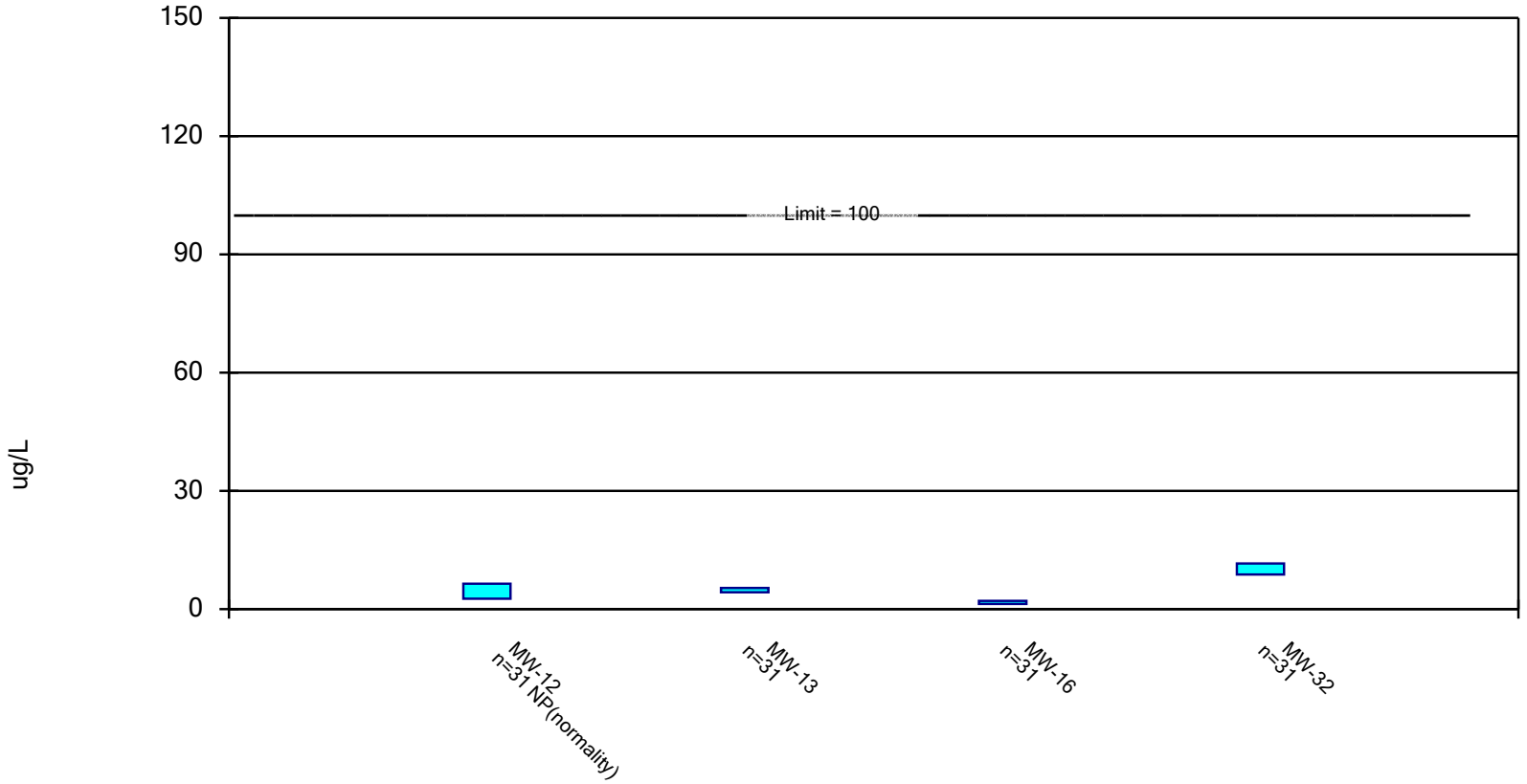
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

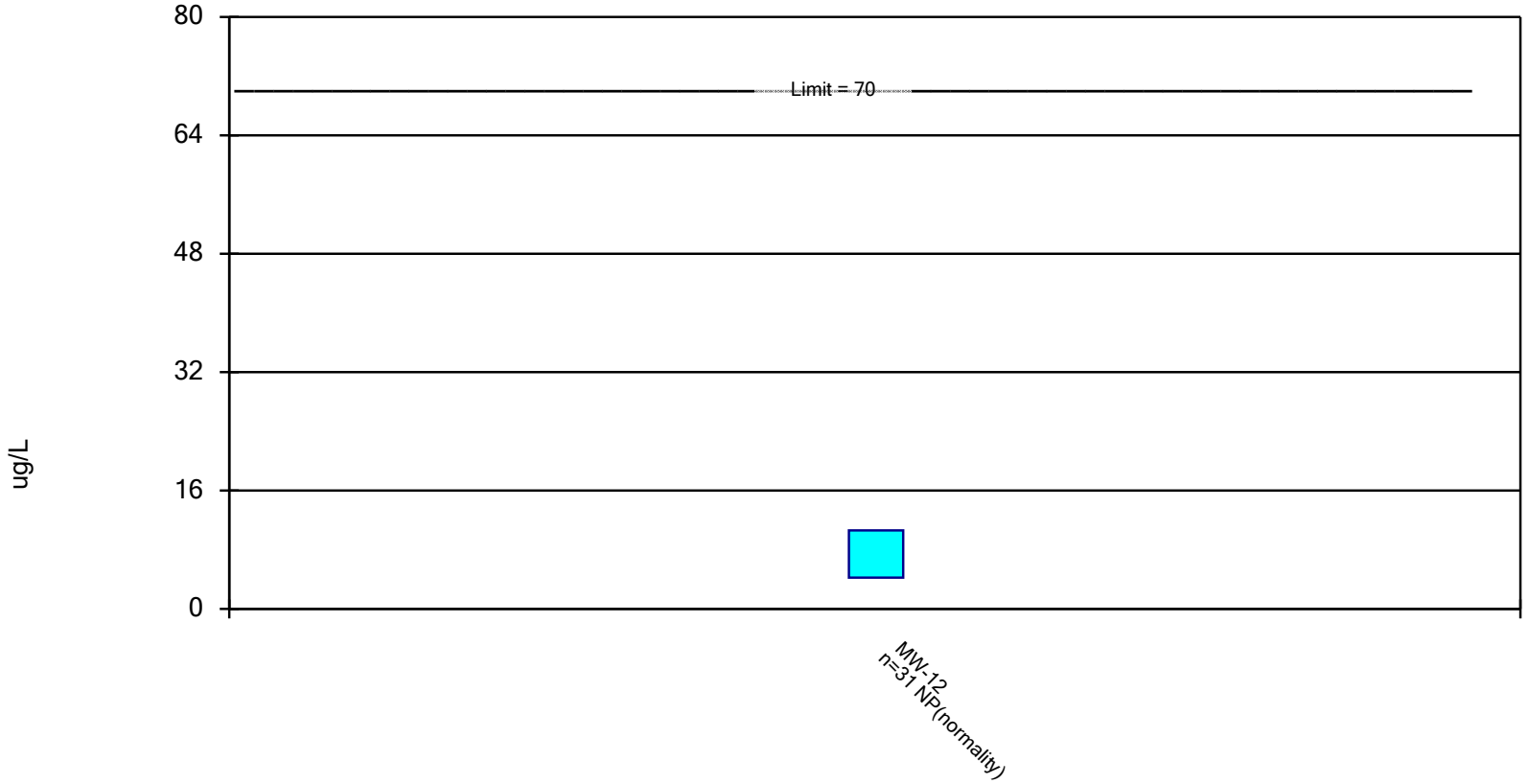


Constituent: Chlorobenzene Analysis Run 5/19/2023 4:18 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.

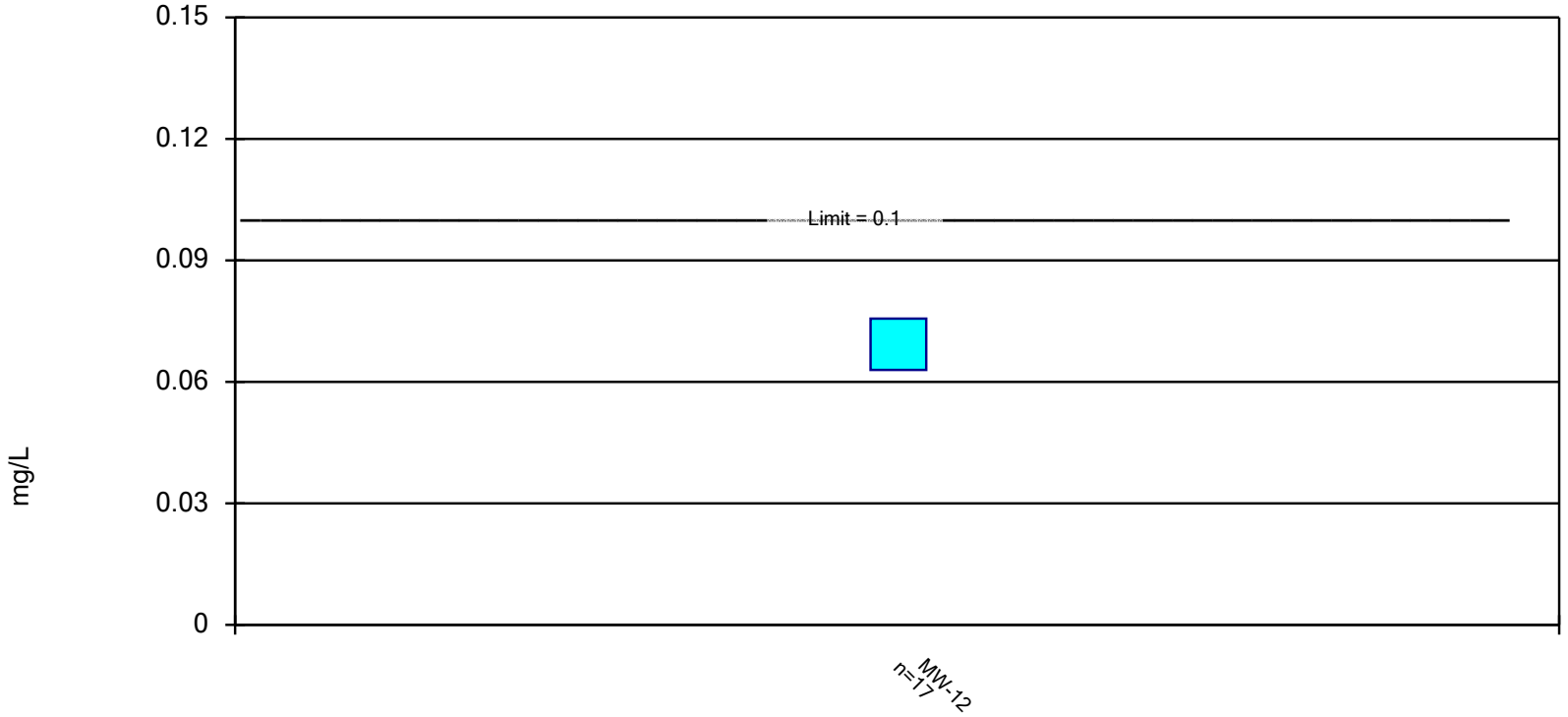


Constituent: cis-1,2-Dichloroethene Analysis Run 5/19/2023 4:18 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 5/19/2023 4:18 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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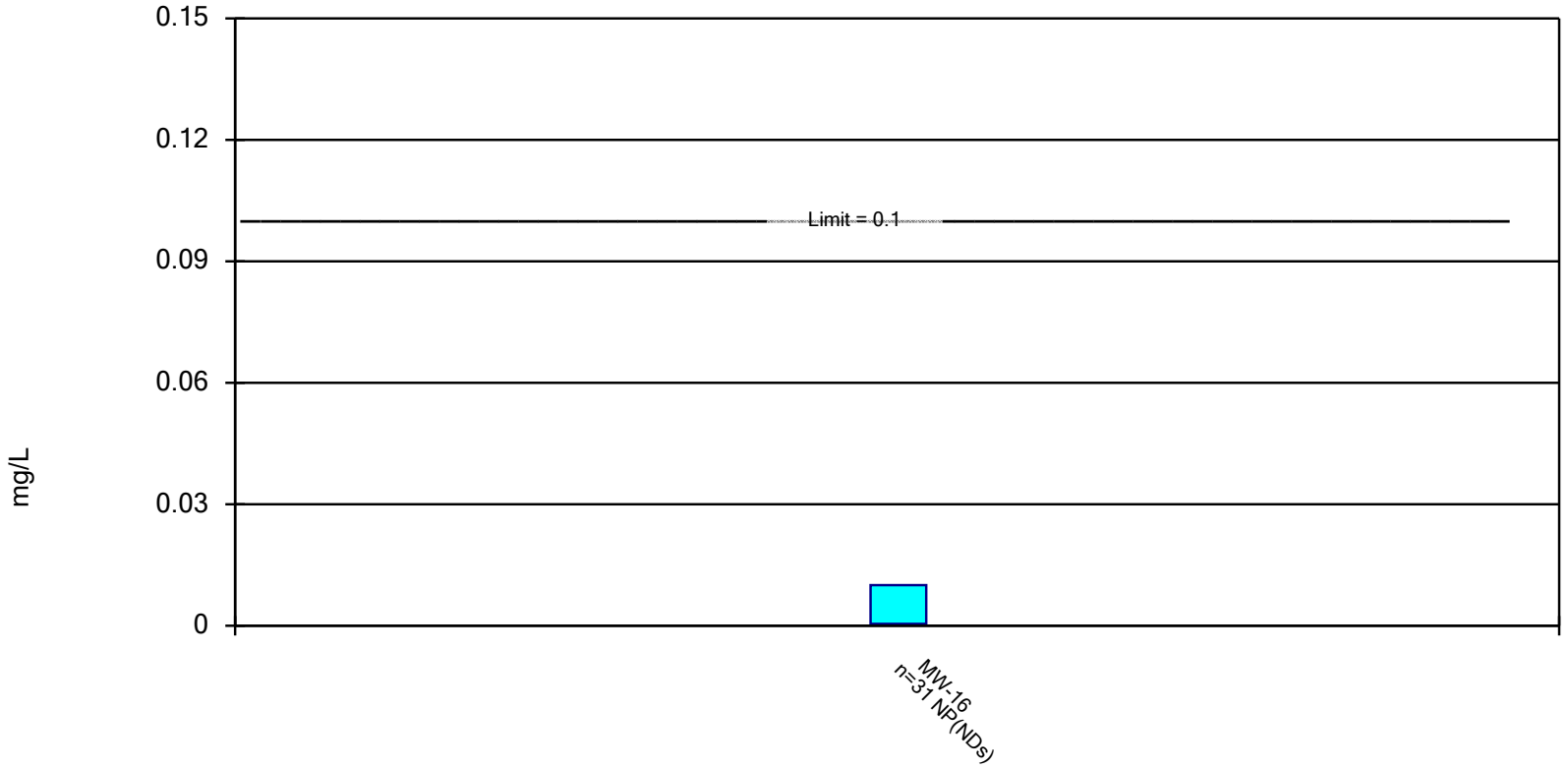
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Silver Analysis Run 5/19/2023 4:18 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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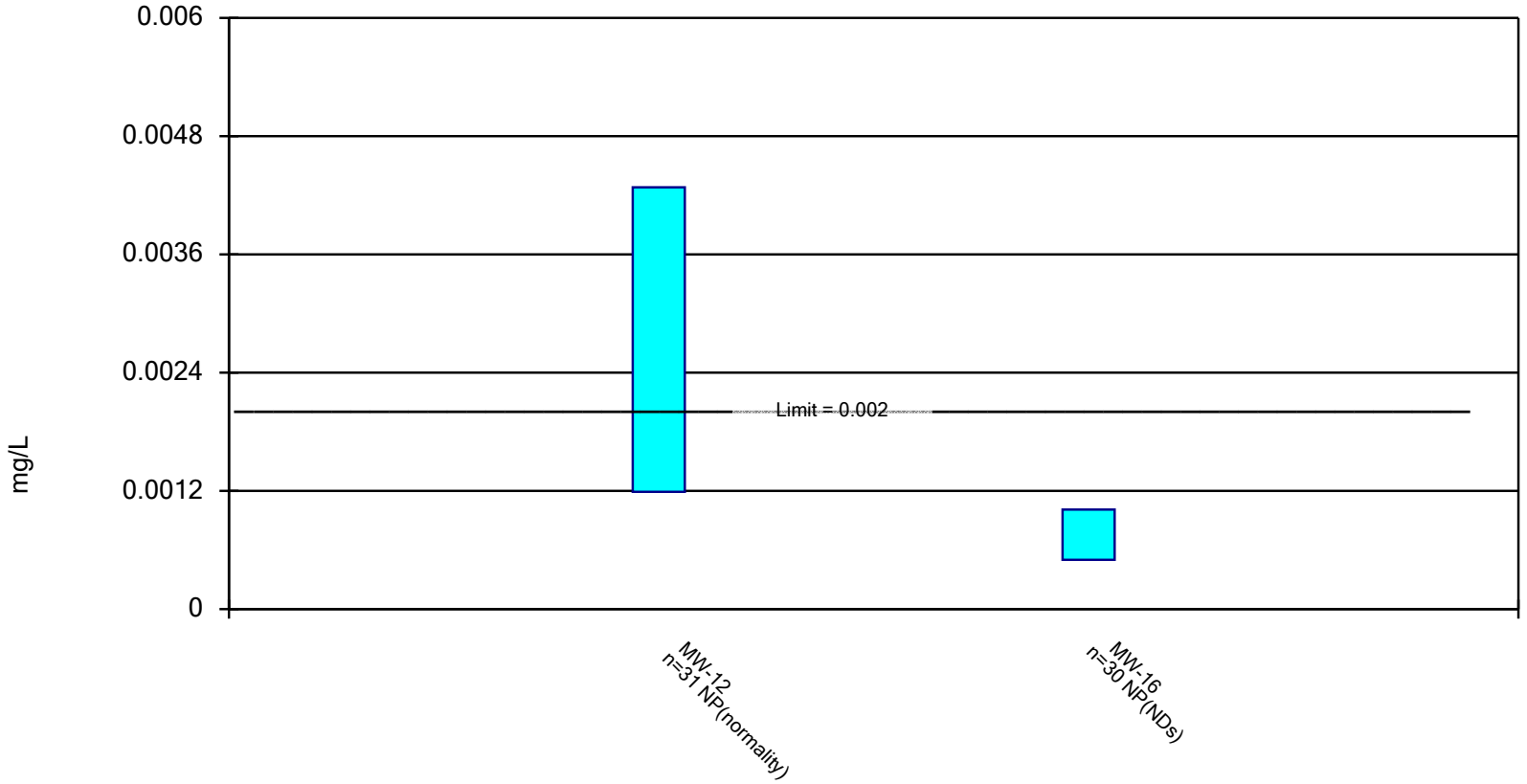
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/19/2023 4:18 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Deeper Bedrock

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations - Assessment Constituents																
1,4-Dichlorobenzene (ug/L)	MW-109B	1.8	1.1	75	No	14	1.3	0.5	0.4	0.04	0.01	21	None	No	0.04	NP (normality)
Barium (mg/L)	MW-109B	0.72	0.65	2	No	14	0.69	0.05	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-109B	7.3	6.3	100	No	14	6.8	0.7	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-109B	0.041	0.035	0.1	No	14	0.038	0.004	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Corrective Action Monitoring Locations - Assessment Constituents																
1,1-Dichloroethane (ug/L)	MW-14	12.9	1.9	140	No	31	7.8	6.6	0.8	<0.01	<0.01	3	None	No	0.01	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW-14	8.0	4.8	75	No	31	6.4	3.7	0.6	<0.01	<0.01	16	Kaplan-Meier	No	0.01	Param.
Barium (mg/L)	MW-14	0.79	0.13	2	No	31	0.53	0.41	0.8	<0.01	<0.01	3	None	No	0.01	NP (normality)
Barium (mg/L)	MW-33	0.53	0.44	2	No	31	0.48	0.10	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Benzene (ug/L)	MW-14	3.37	2.37	5	No	31	2.87	1.14	0.4	<0.01	<0.01	3	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-14	3.8	2.8	100	No	31	3.3	1.1	0.3	<0.01	<0.01	10	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-33	4.7	3.4	100	No	31	4.1	1.5	0.4	<0.01	<0.01	3	None	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-14	5.7	0.9	70	No	31	3.6	4.4	1.2	<0.01	<0.01	6	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-33	0.00130	0.00112	0.0021	No	18	0.00121	0.00015	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-14	0.019	0.013	0.1	No	18	0.019	0.011	0.6	0.02	<0.01	0	None	No	0.02	NP (normality)
Silver (mg/L)	MW-14	0.010	0.001	0.1	No	31	0.006	0.008	1.3	<0.01	<0.01	97	None	No	0.01	NP (NDs)

[1] Under assessment mode, an SSL is indicated when the lower confidence limit exceeds the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] For parametric confidence intervals: Except where otherwise indicated, based on Unified Guidance Equation 22.2, i.e., $\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R + \widehat{CV}} - t_{1-\beta,n-1}\right)$

where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{1-b,n-1}$ is the (1–b) Student's t-quantile with (n–1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

[4] For non-parametric confidence intervals: Based on Unified Guidance Equation 22.1, i.e., $1 - \beta = G_{T,n-1}\left(t_{1-\alpha,n-1} \middle| \Delta = \sqrt{n}(R-1)\right)$

where R is the desired risk ratio, $t_{1-a,n-1}$ is the (1–a) Student's t-quantile with (n–1) degrees of freedom and G represents the cumulative non-central t-distribution with (n–1) degrees of freedom and noncentrality parameter D.

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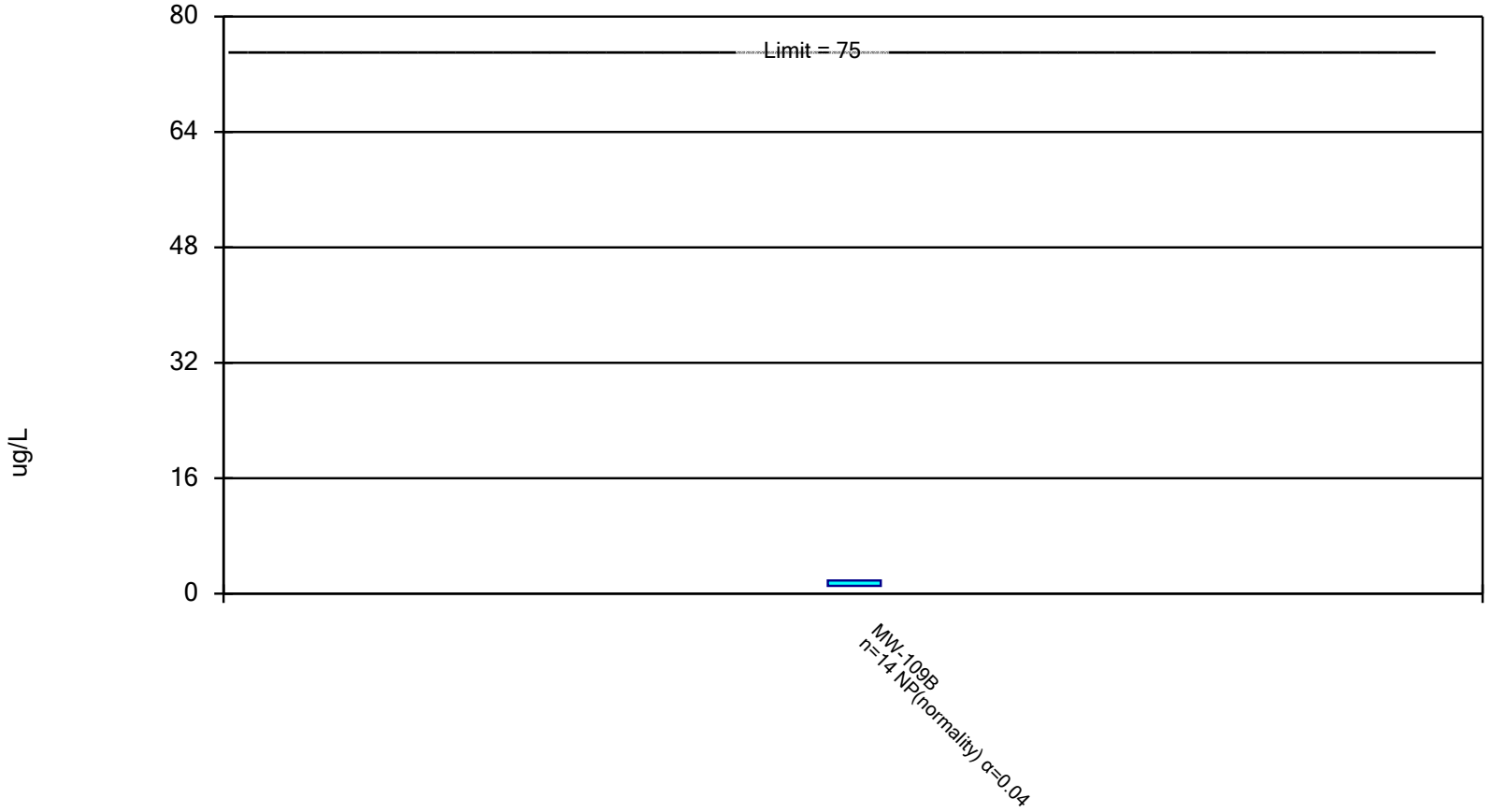
Non-Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded.



Constituent: 1,4-Dichlorobenzene Analysis Run 5/19/2023 5:35 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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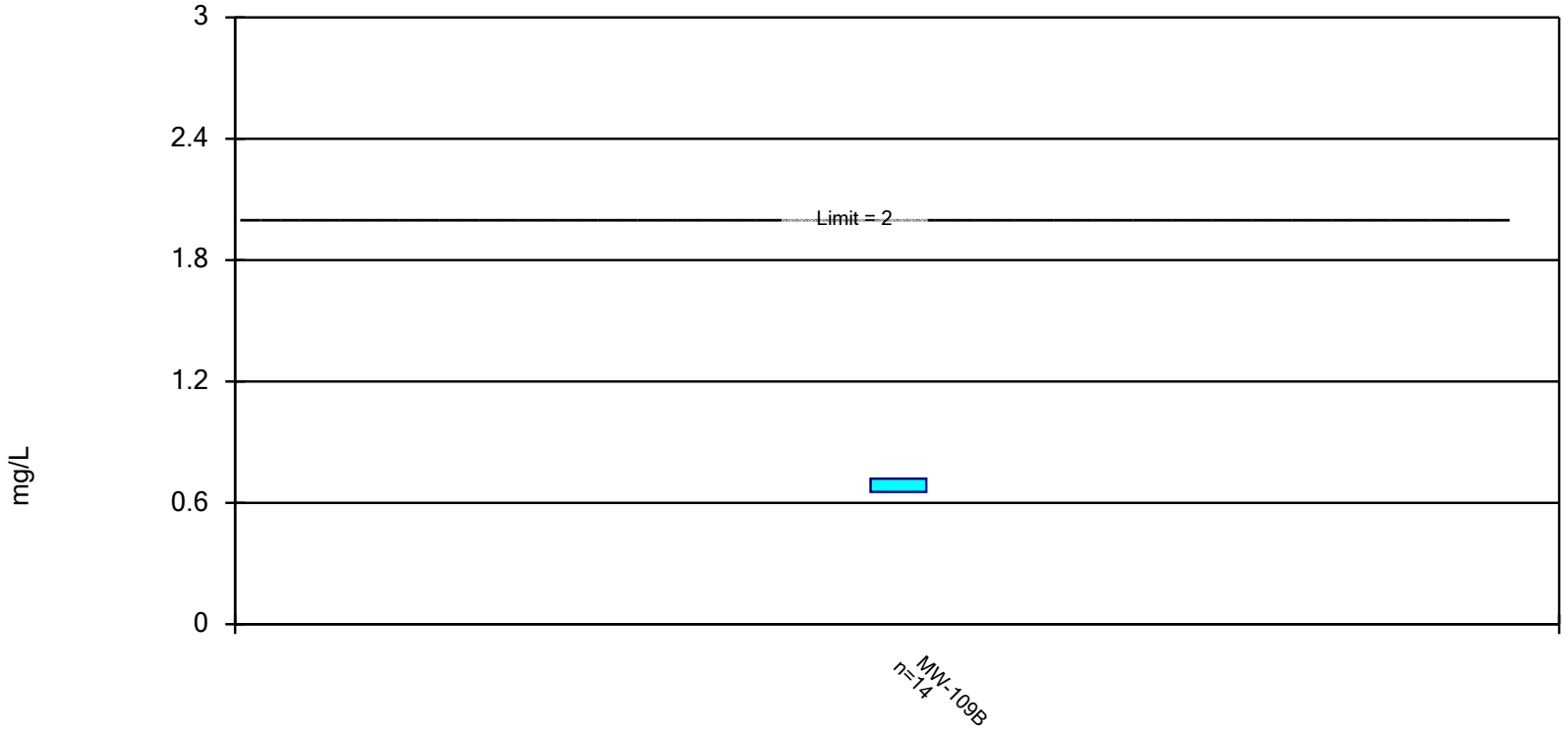
Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

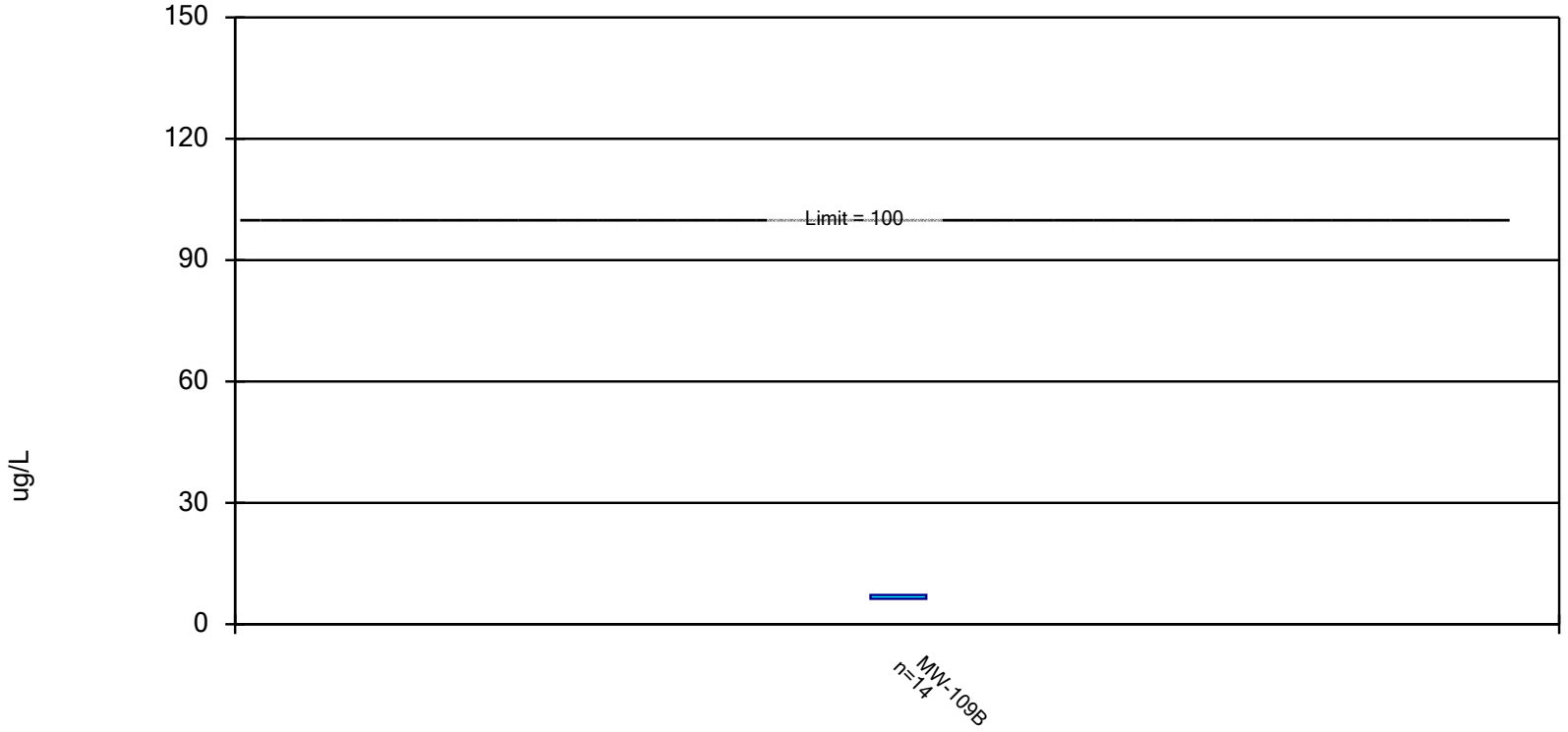


Constituent: Barium Analysis Run 5/19/2023 5:35 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

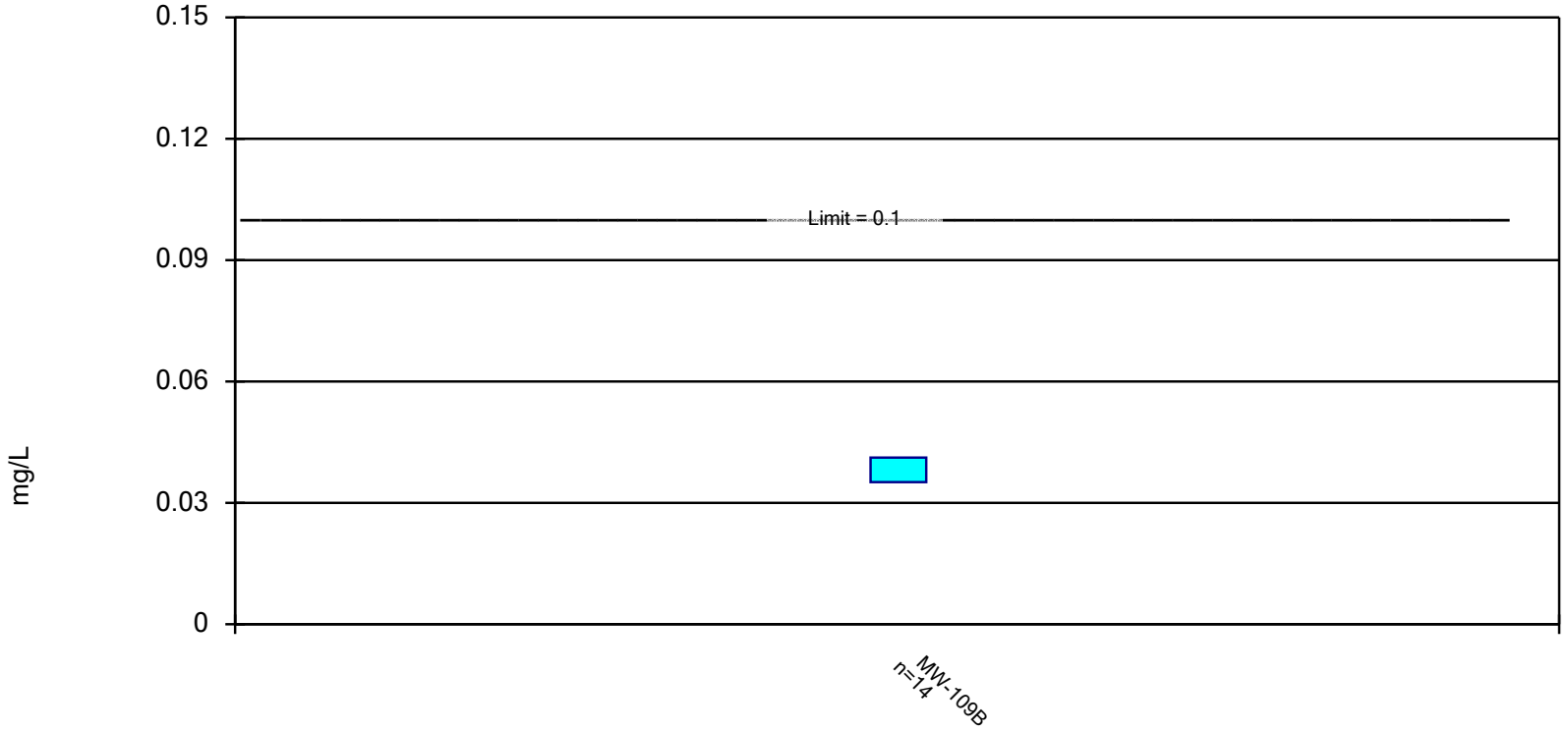


Constituent: Chlorobenzene Analysis Run 5/19/2023 5:35 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 5/19/2023 5:35 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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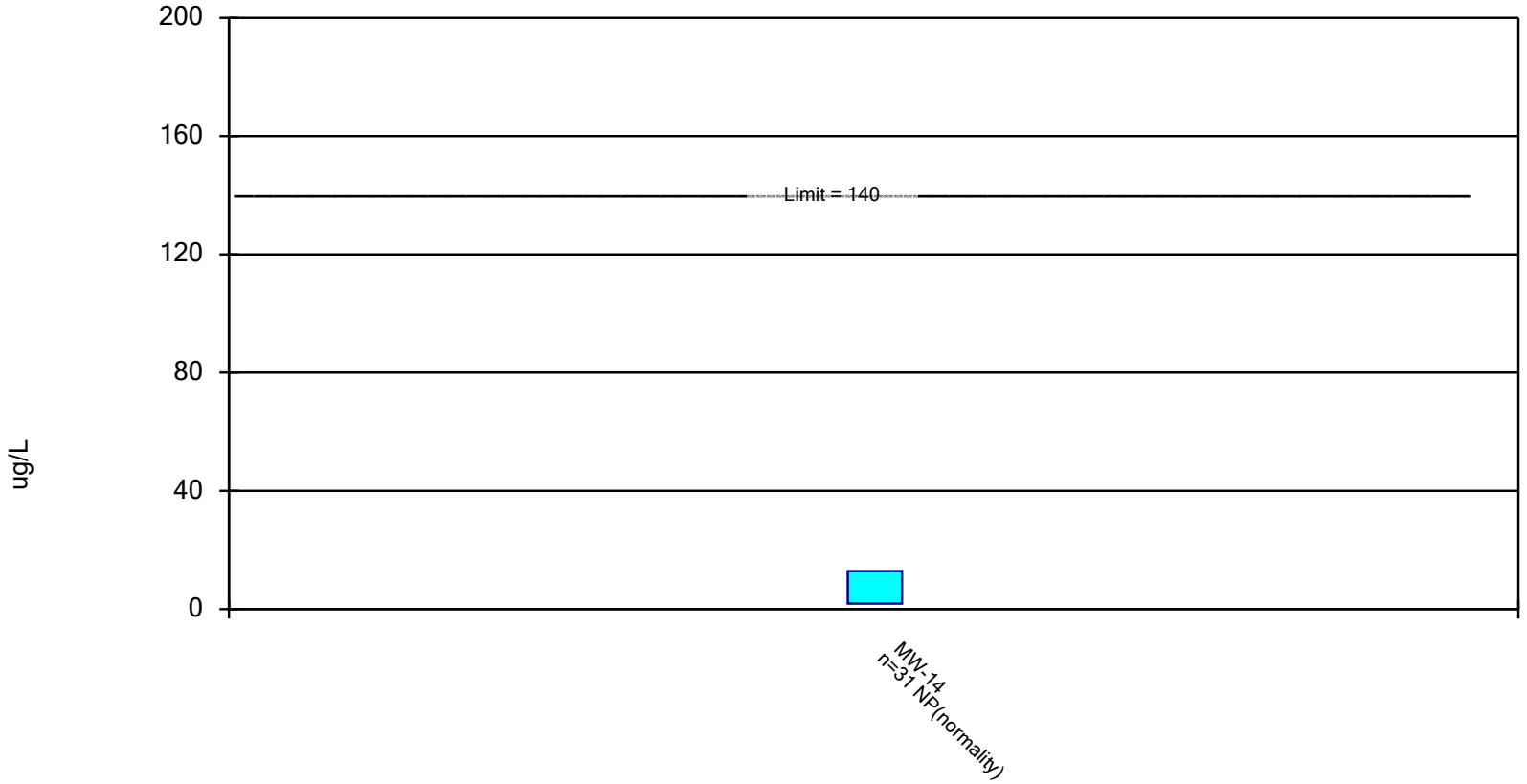
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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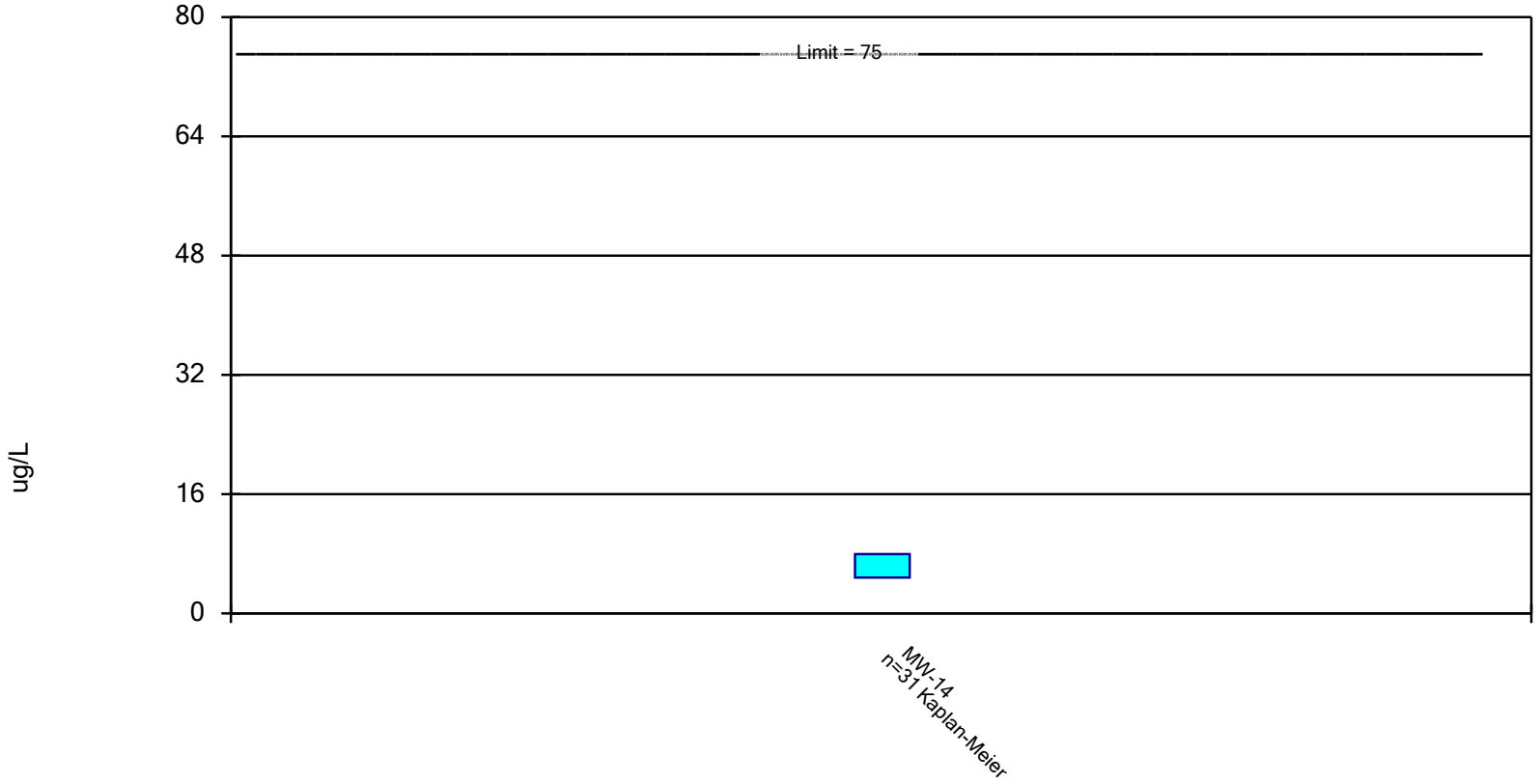
Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: 1,4-Dichlorobenzene Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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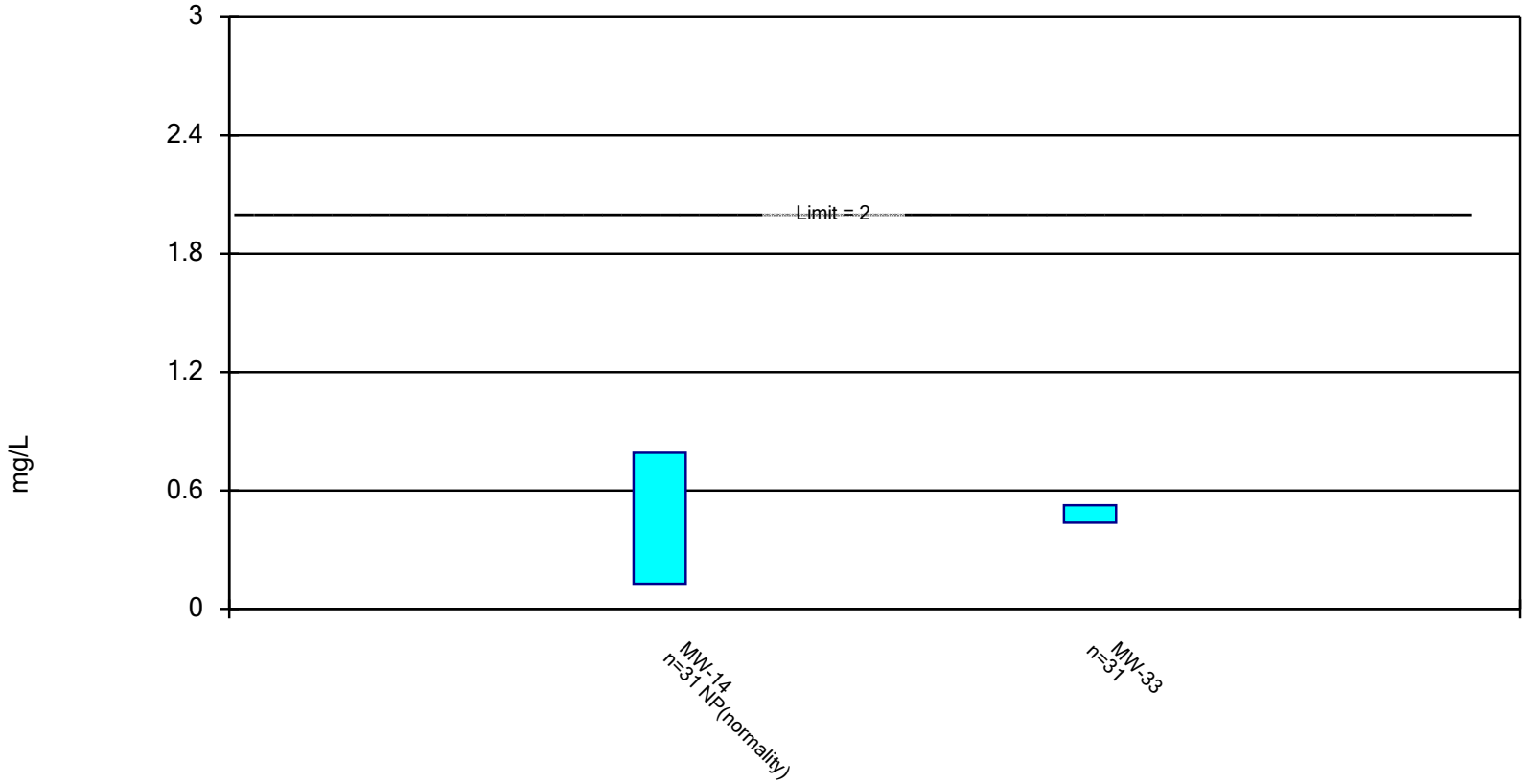
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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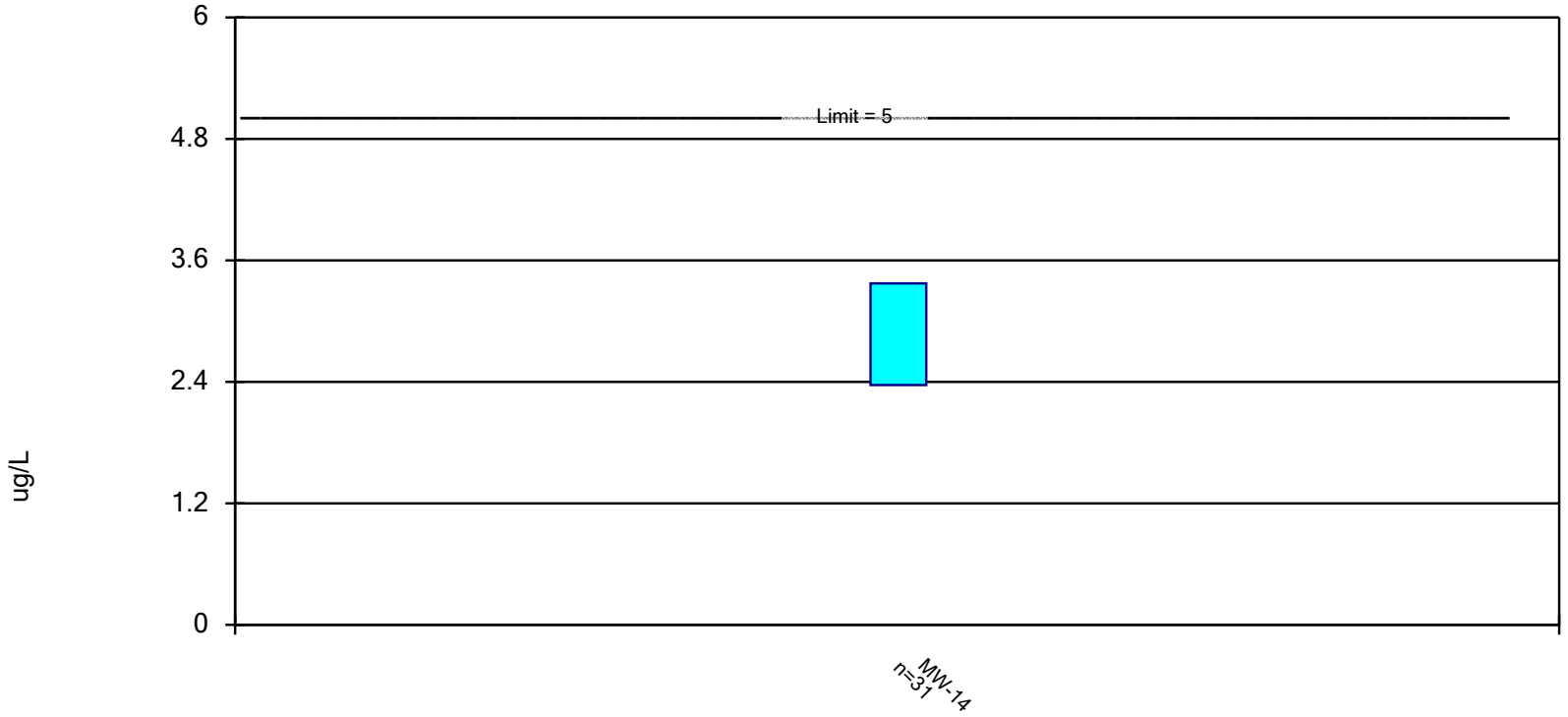
Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

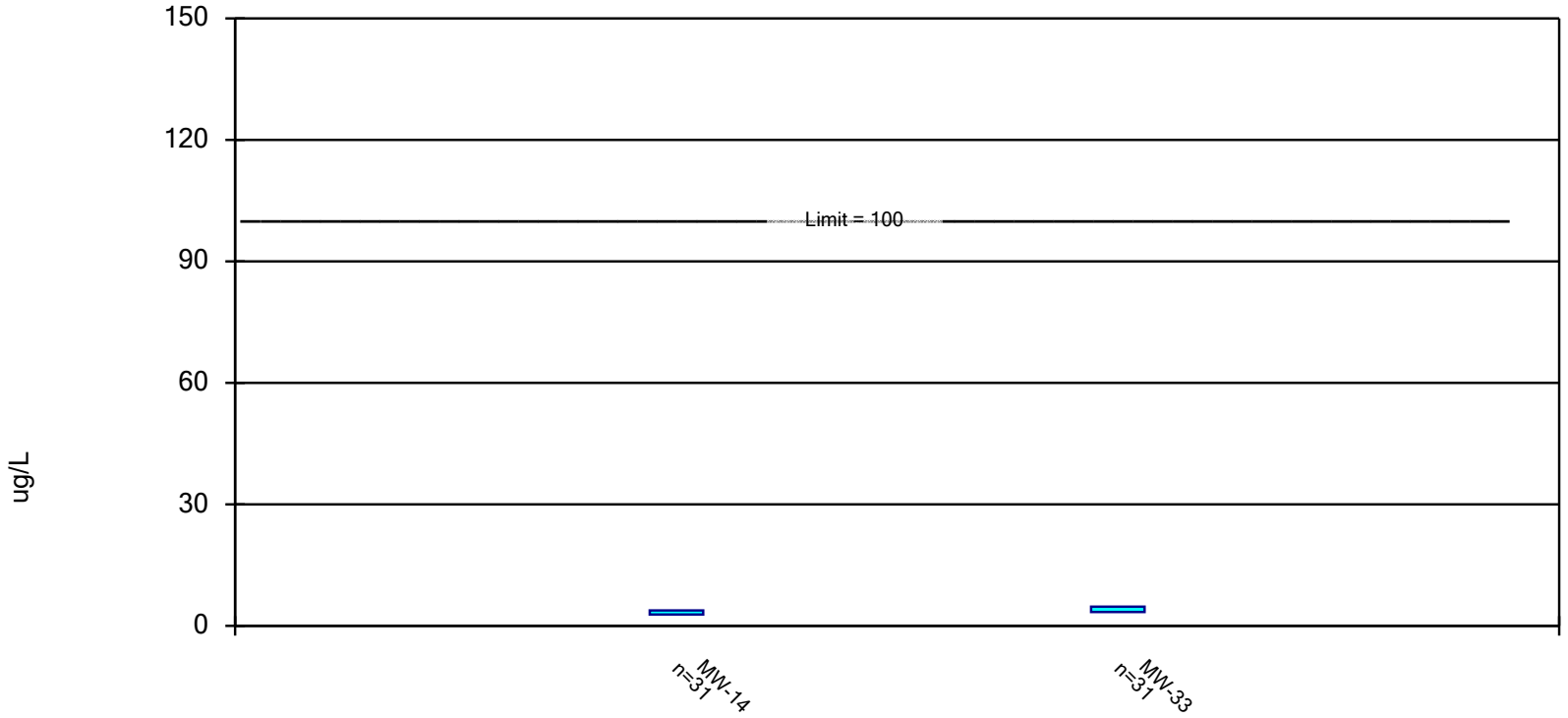


Constituent: Benzene Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chlorobenzene Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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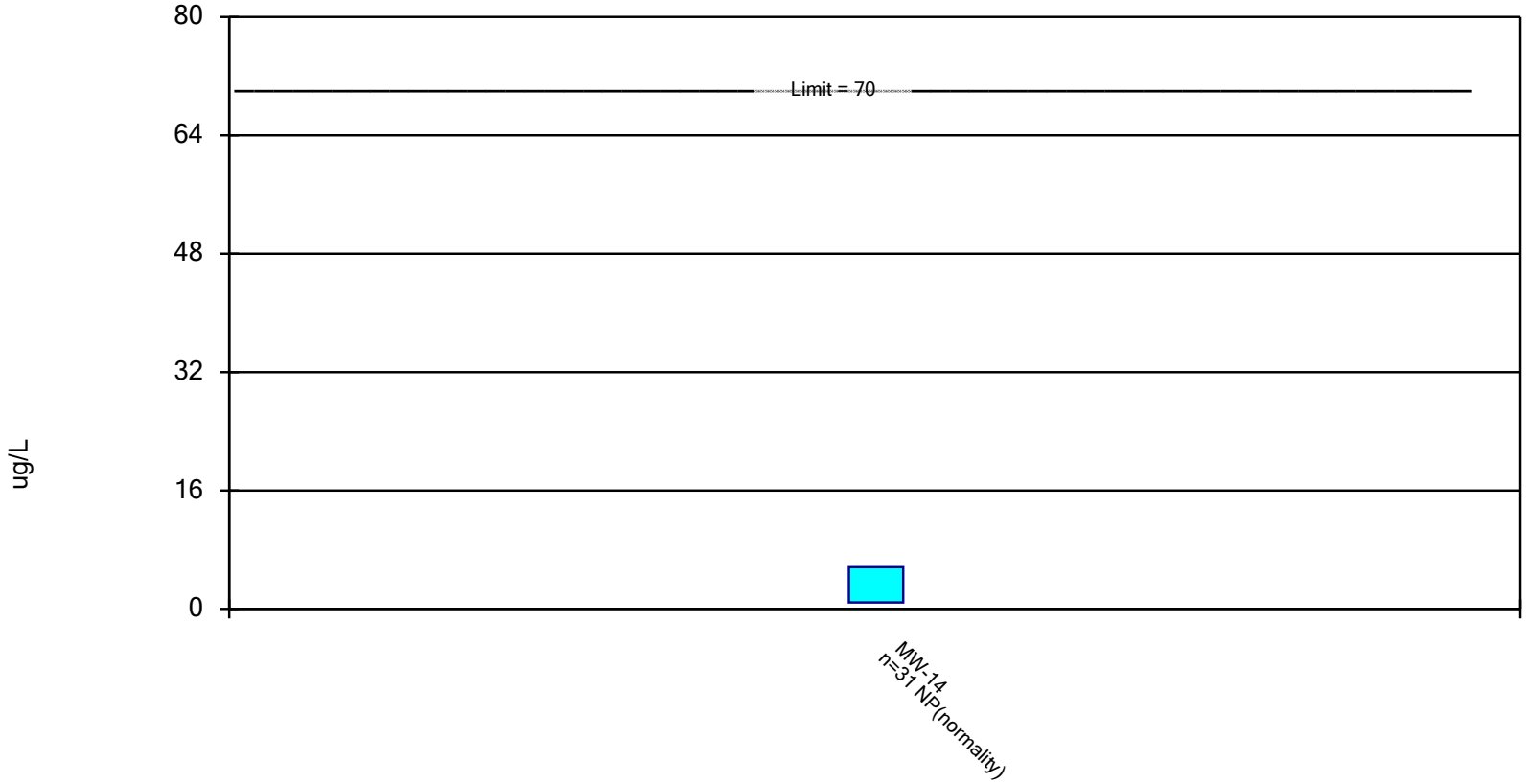
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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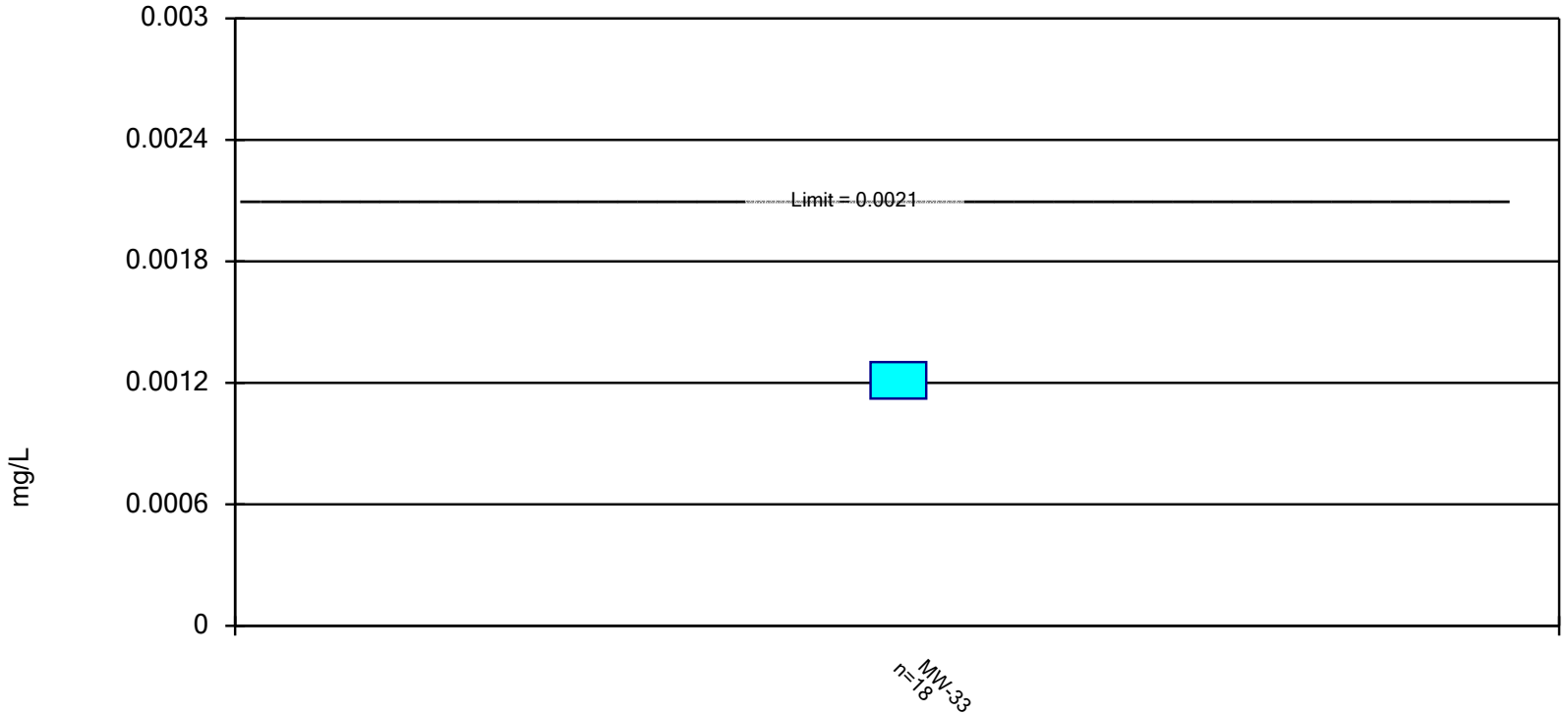
Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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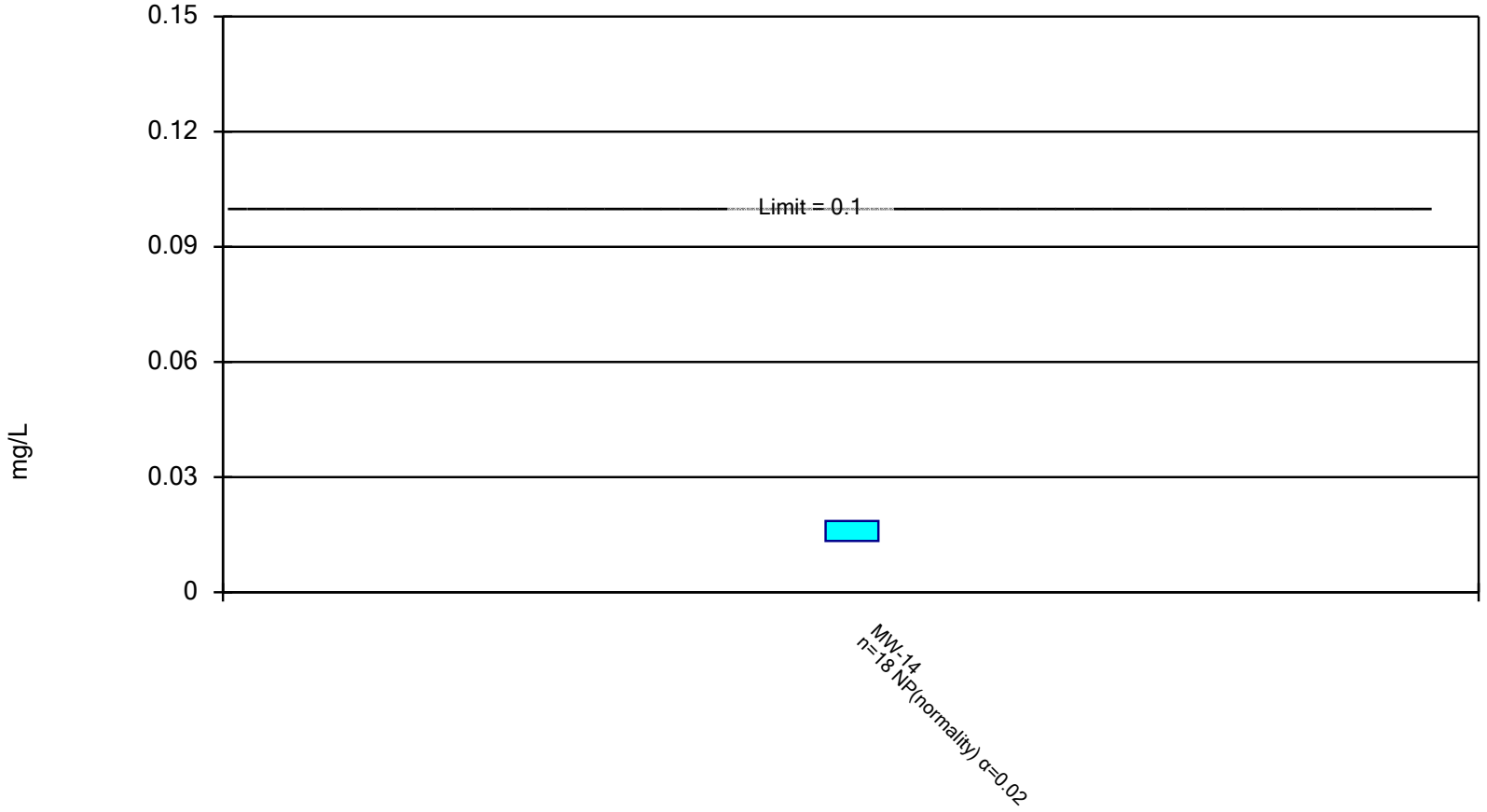
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded.



Constituent: Nickel Analysis Run 5/19/2023 5:11 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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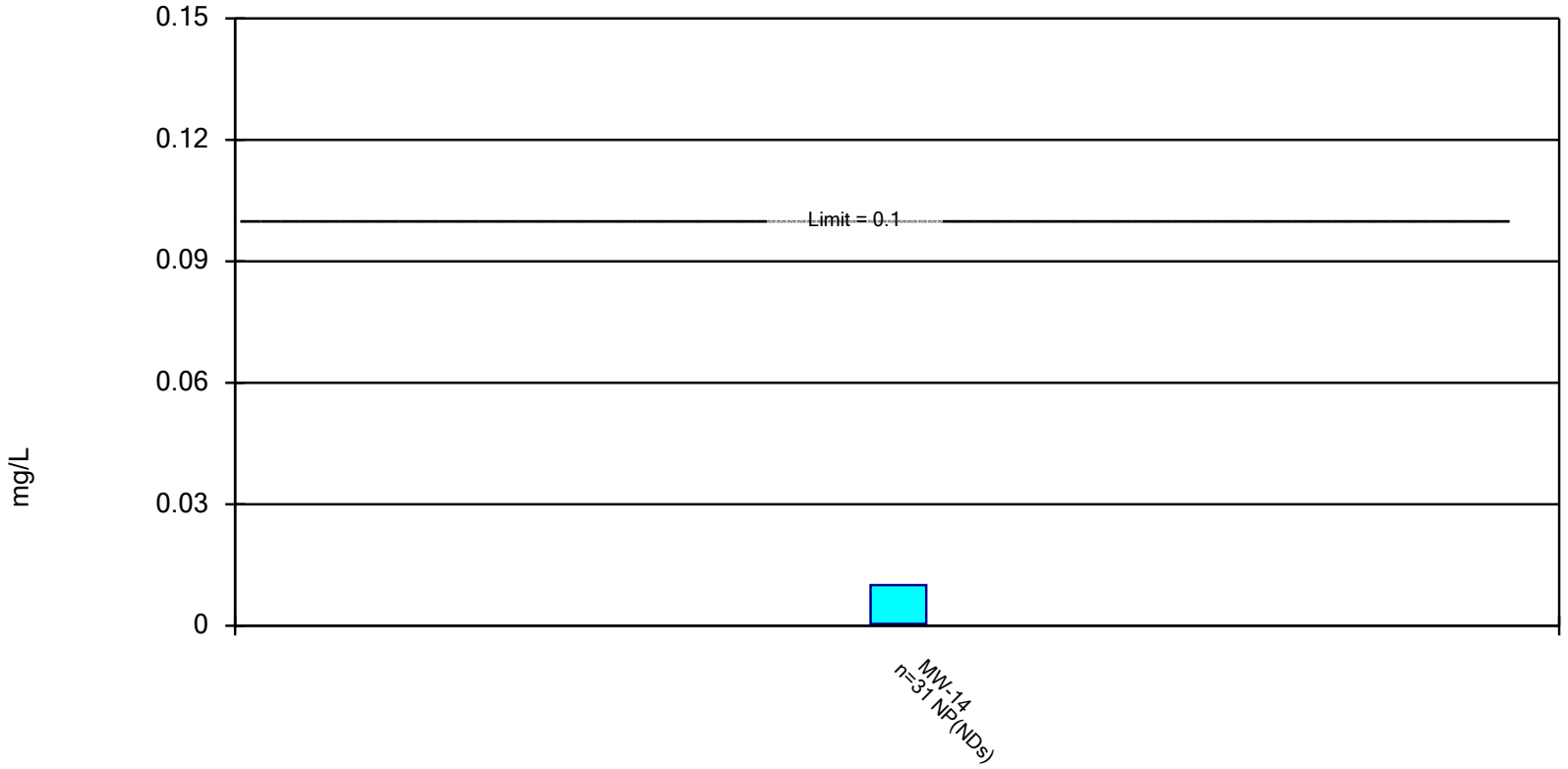
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Silver Analysis Run 5/19/2023 5:05 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Attachment 5

Sanitas Report Output for Confidence Interval Calculations and Regression Summary
Corrective Action Mode

Upper Bedrock Cobalt

GWPS as Background - One-Sample Confidence Interval Testing Method

Calculations of Cobalt Upper Tolerance Limit with 95% Coverage[1] and 95% Confidence

Constituent Name	Upper Limit	Background N	Background Wells	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method	Minimum Achieved Coverage
Cobalt (mg/l)	0.008	34	MW-37,101A	n/a	n/a	32	n/a	n/a	0.0377	NP Inter(normality)	92%

[1] Note that a nonparametric tolerance limit was utilized in the cobalt background calculation. The nonparametric limit achieves 90% coverage.

Upper Bedrock

Confidence Interval - Corrective Action Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations													
Arsenic (mg/L)	MW-12	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Arsenic (mg/L)	MW-13	0.0553	0.0453	0.01	Yes	31	0.0503	0.0211	0	None	No	0.1	Param.
Arsenic (mg/L)	MW-16	0.1311	0.1021	0.01	Yes	31	0.1166	0.0617	0	None	No	0.1	Param.
Arsenic (mg/L)	MW-17	0.0633	0.0538	0.01	Yes	31	0.0585	0.0203	0	None	No	0.1	Param.
Arsenic (mg/L)	MW-32	0.0743	0.0465	0.01	Yes	31	0.0811	0.0665	0	None	No	0.1	NP (normality)

[1] Under corrective action mode, an SSL is rejected when the upper confidence limit lies below the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

MW-12 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.497723206
R Square	0.24772839
Adjusted R Square	0.22178799
Standard Error	0.026151717
Observations	31

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.006531298	0.006531	9.549906	0.00438432
Residual	29	0.019833456	0.000684		
Total	30	0.026364754			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.523365636	0.123374939	4.242074	0.000207	0.27103555	0.775696	0.2710356	0.775695718
X Variable 1	-9.01258E-06	2.91642E-06	-3.090292	0.004384	-1.498E-05	-3.05E-06	-1.498E-05	-3.04784E-06

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
8/6/2008	0.113	0.1659	0.1811	0.1507	0.2128	0.1189
3/6/2009	0.1632	0.1640	0.1783	0.1497	0.2106	0.1173
7/17/2009	0.15	0.1628	0.1765	0.1490	0.2093	0.1162
9/17/2009	0.137	0.1622	0.1757	0.1487	0.2086	0.1158
3/17/2010	0.177	0.1606	0.1734	0.1478	0.2068	0.1143
9/7/2010	0.163	0.1590	0.1711	0.1469	0.2051	0.1129
3/4/2011	0.238	0.1574	0.1689	0.1459	0.2033	0.1115
9/7/2011	0.169	0.1557	0.1665	0.1449	0.2014	0.1100
3/12/2012	0.154	0.1540	0.1643	0.1438	0.1996	0.1084
9/11/2012	0.177	0.1524	0.1621	0.1427	0.1979	0.1069
3/26/2013	0.156	0.1506	0.1598	0.1414	0.1960	0.1052
9/4/2013	0.138	0.1491	0.1580	0.1403	0.1944	0.1039
3/10/2014	0.139	0.1475	0.1559	0.1390	0.1927	0.1022
9/17/2014	0.135	0.1457	0.1539	0.1375	0.1909	0.1006
3/12/2015	0.155	0.1442	0.1522	0.1361	0.1893	0.0990
10/6/2015	0.172	0.1423	0.1503	0.1343	0.1874	0.0971
3/14/2016	0.13	0.1408	0.1489	0.1328	0.1860	0.0957
8/19/2016	0.128	0.1394	0.1476	0.1313	0.1846	0.0942
3/13/2017	0.14	0.1376	0.1460	0.1292	0.1828	0.0923
8/28/2017	0.124	0.1360	0.1448	0.1273	0.1813	0.0908
3/14/2018	0.149	0.1343	0.1434	0.1251	0.1796	0.0889
8/30/2018	0.128	0.1327	0.1423	0.1232	0.1782	0.0873
3/26/2019	0.126	0.1309	0.1411	0.1207	0.1765	0.0853
8/28/2019	0.0702	0.1295	0.1401	0.1188	0.1752	0.0838
4/1/2020	0.104	0.1275	0.1389	0.1161	0.1734	0.0816
8/18/2020	0.0963	0.1263	0.1382	0.1143	0.1723	0.0803
3/25/2021	0.133	0.1243	0.1370	0.1115	0.1705	0.0781
8/23/2021	0.149	0.1229	0.1363	0.1096	0.1693	0.0765
3/30/2022	0.144	0.1210	0.1352	0.1067	0.1676	0.0743
8/30/2022	0.14	0.1196	0.1344	0.1047	0.1664	0.0727
3/23/2023	0.116	0.1177	0.1335	0.1020	0.1649	0.0706

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS with First Order Attenuation
(Assuming Future First Order Attenuation Instead of Linear Decay)

11/21/2127 -4.605 0.01

Projected Year to Completion

11/20/2130

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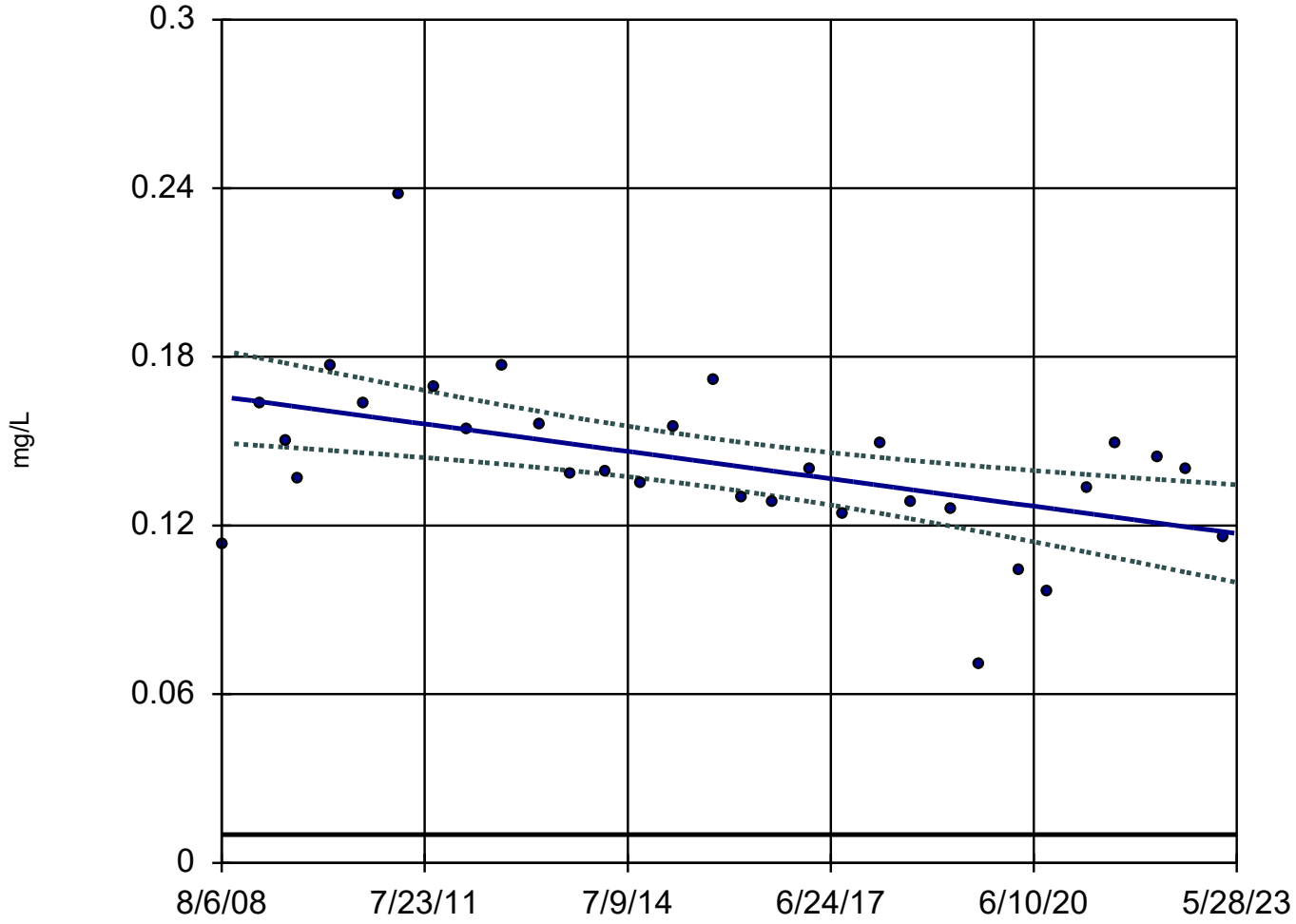
Linear Regression and 90% Confidence Band

MW-12



n = 31

Slope = -0.003292 units/year.

alpha = 0.02
t = -3.09
critical = -2.15

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9412, critical
= 0.902.

GWPS = 0.01.

Constituent: Arsenic Analysis Run 5/22/2023 12:41 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

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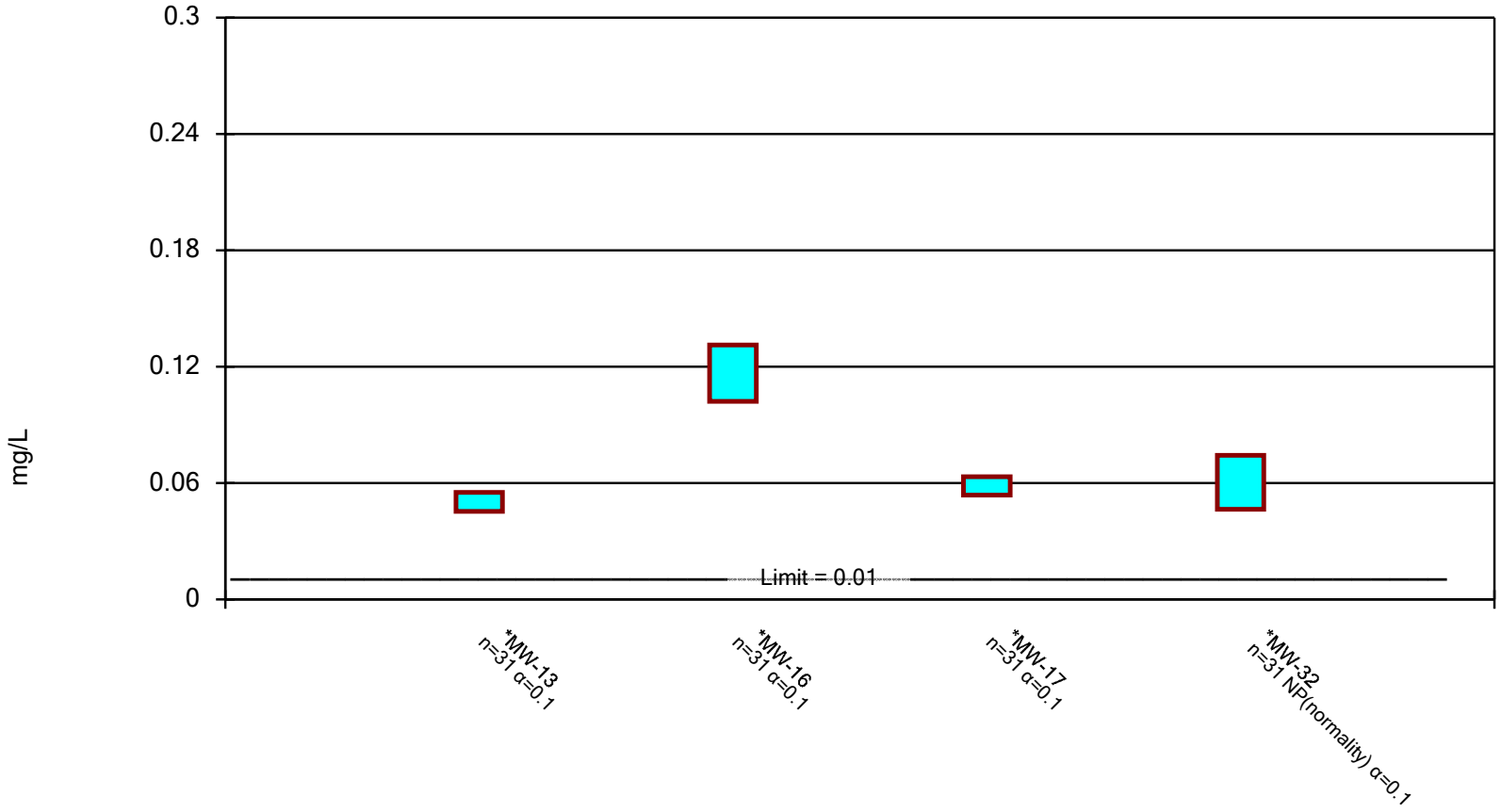
Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/22/2023 1:25 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Spring 2023 Evaluation

Deeper Bedrock

Confidence Interval - Corrective Action Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceeds	N	Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations													
Arsenic (mg/L)	MW-109B	0.0212	0.0178	0.01	Yes	14	0.0195	0.0048	0	None	No	0.1	Param.
Cobalt (mg/L)	MW-109B	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Thallium (mg/L)	MW-109B	0.00511	0.00483	0.002	Yes	14	0.00497	0.00039	0	None	No	0.1	Param.
Corrective Action Monitoring Locations													
Arsenic (mg/L)	MW-14	0.0273	0.0201	0.01	Yes	31	0.030	0.028	0	None	No	0.1	NP (normality)
Arsenic (mg/L)	MW-33	0.0376	0.0335	0.01	Yes	31	0.036	0.009	0	None	No	0.1	Param.

[1] Under corrective action mode, an SSL is rejected when the upper confidence limit lies below the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

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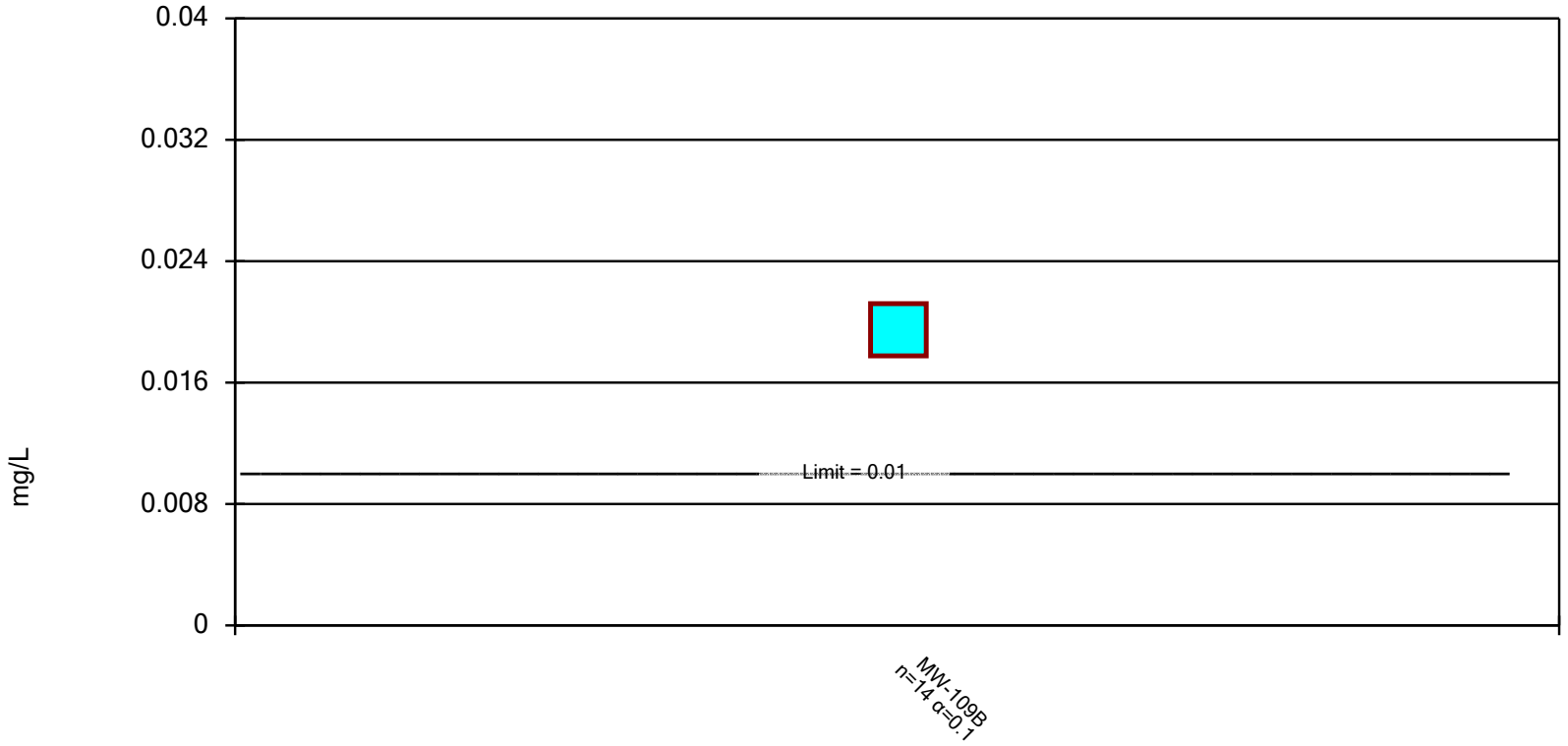
Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/22/2023 1:28 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

MW-109B Cobalt Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.611099748
R Square	0.373442902
Adjusted R Square	0.321229811
Standard Error	0.002412709
Observations	14

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	4.16346E-05	4.163E-05	7.1522848	0.02024635
Residual	12	6.9854E-05	5.821E-06		
Total	13	0.000111489			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.141648402	0.045779649	3.0941347	0.0092907	0.04190312	0.2413937	0.0419031	0.241393688
X Variable 1	-2.78812E-06	1.04253E-06	-2.674376	0.0202464	-5.06E-06	-5.17E-07	-5.06E-06	-5.1664E-07

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
11/27/2017	0.0269	0.02158	0.02352	0.01963	0.02629	0.01686
3/8/2018	0.0191	0.02129	0.02309	0.01950	0.02595	0.01663
6/15/2018	0.0232	0.02102	0.02267	0.01936	0.02563	0.01641
9/4/2018	0.0214	0.02079	0.02234	0.01924	0.02536	0.01622
11/27/2018	0.0192	0.02056	0.02201	0.01911	0.02510	0.01602
4/19/2019	0.016	0.02016	0.02146	0.01885	0.02465	0.01566
8/27/2019	0.0181	0.01980	0.02101	0.01859	0.02426	0.01533
3/31/2020	0.0184	0.01919	0.02034	0.01804	0.02364	0.01474
8/20/2020	0.0194	0.01880	0.01998	0.01761	0.02326	0.01433
3/25/2021	0.018	0.01819	0.01953	0.01685	0.02269	0.01369
8/23/2021	0.0168	0.01777	0.01927	0.01626	0.02233	0.01321
3/31/2022	0.0163	0.01716	0.01895	0.01536	0.02182	0.01250
8/25/2022	0.0191	0.01675	0.01876	0.01473	0.02149	0.01200
3/23/2023	0.0173	0.01616	0.01851	0.01382	0.02106	0.01126

GWPS = 0.0021 mg//L

Projected Year to Attain Compliance with the GWPS with First Order Attenuation
(Assuming Future First Order Attenuation Instead of Linear Decay)

11/28/2064 -6.166 0.0021

Projected Year to Completion

11/28/2067

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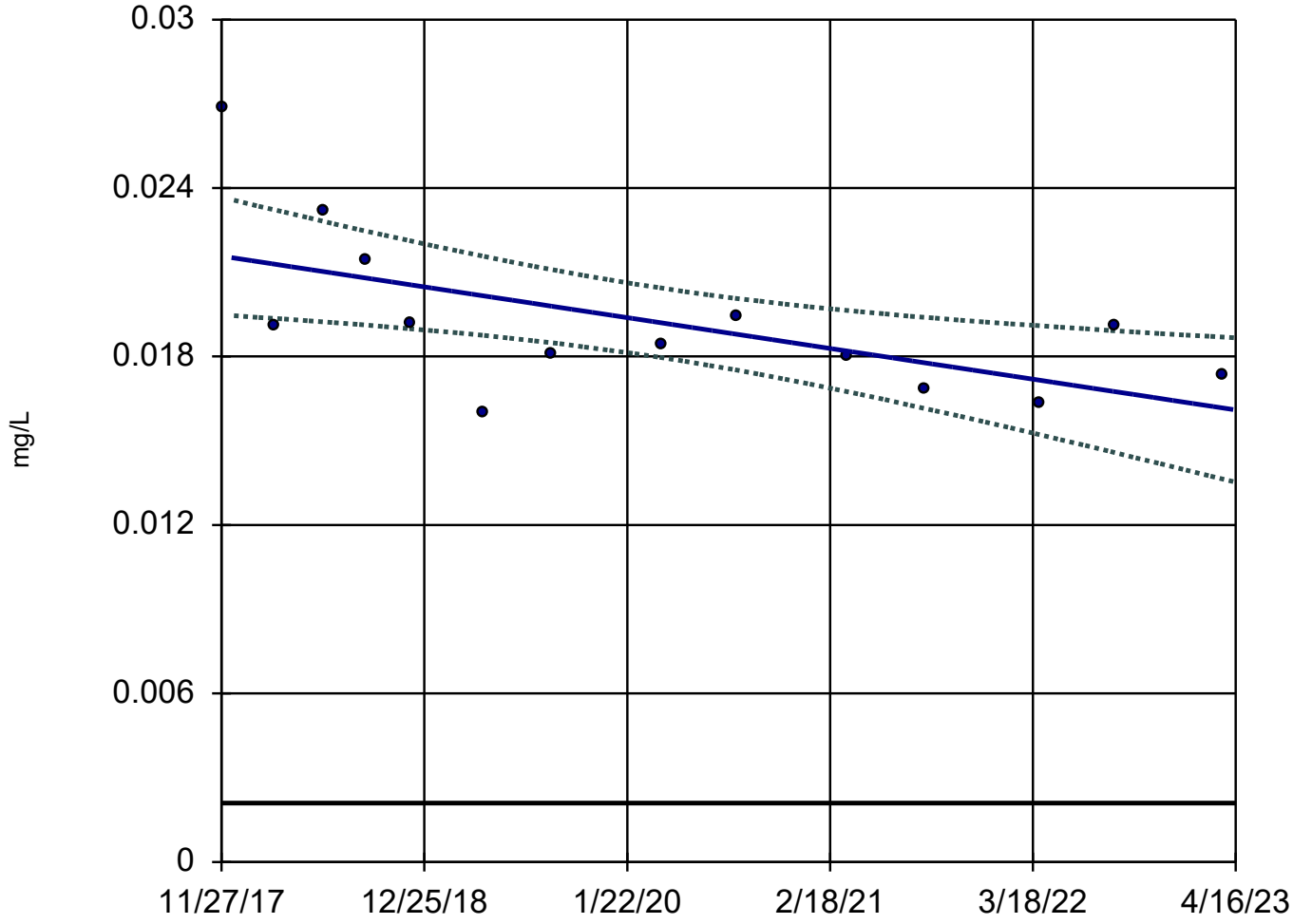
Linear Regression and 90% Confidence Band

MW-109B



n = 14

Slope = -0.001018 units/year.

alpha = 0.02
t = -2.673
critical = -2.303

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9647, critical
= 0.825.

GWPS = 0.0021.

Constituent: Cobalt Analysis Run 5/22/2023 1:14 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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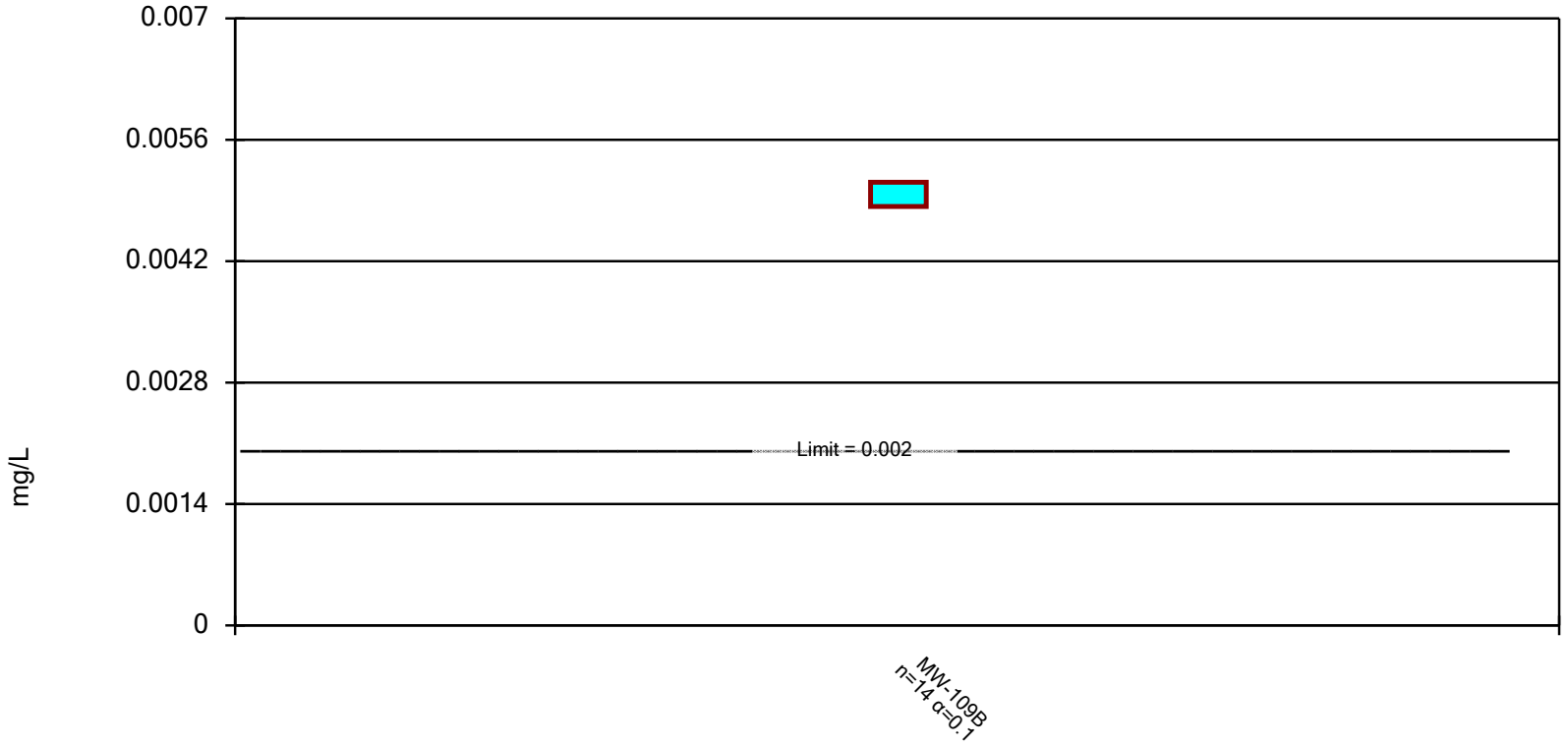
Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 5/22/2023 1:28 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

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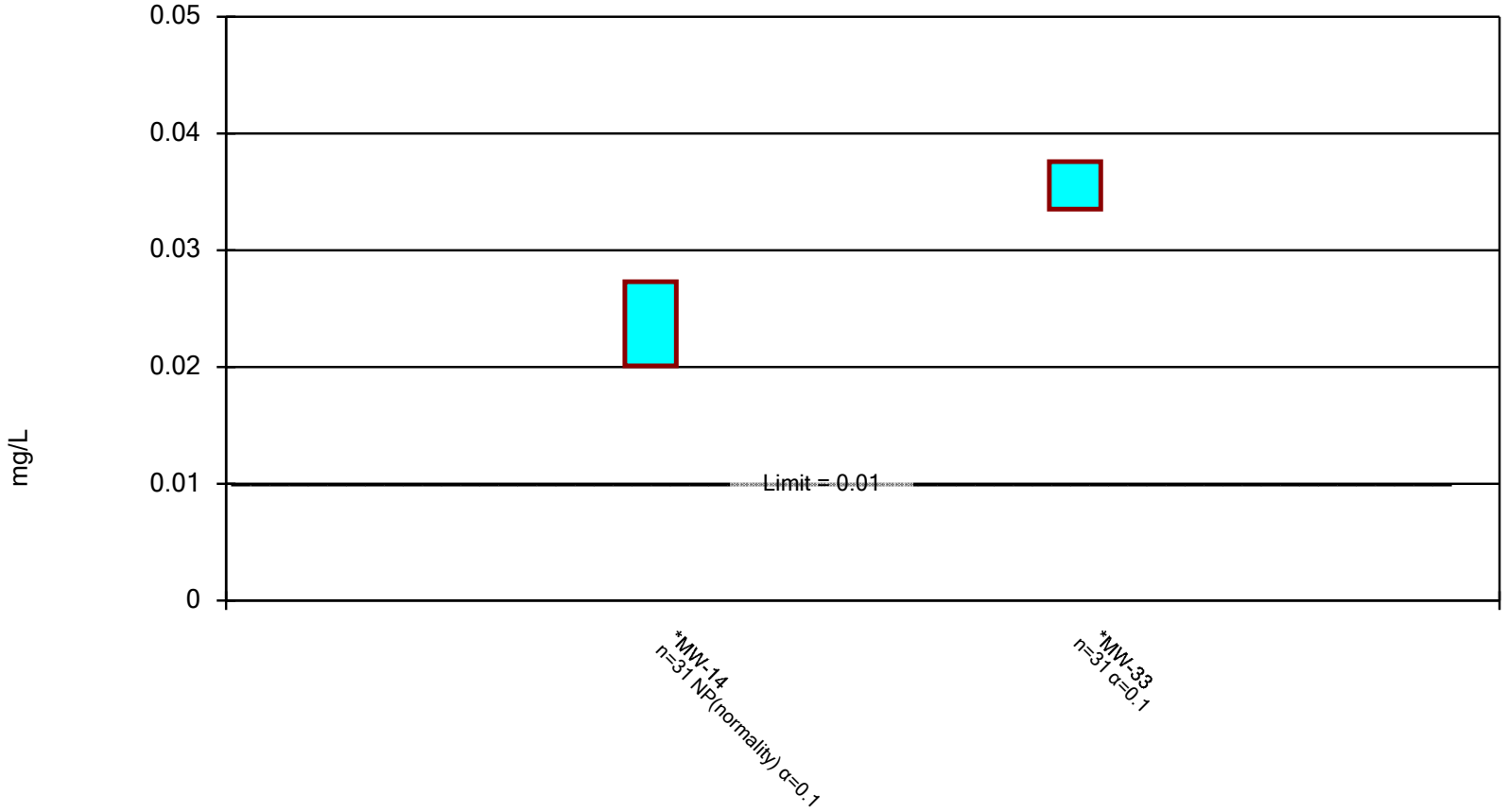
Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/22/2023 3:02 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Spring 2023 Evaluation

Attachment 6

References

References

Foth Infrastructure and Environment (Foth), 2012. *2011 Annual Water Quality Report, Cedar Rapids/Linn County Solid Waste Agency Site No.1, IDNR Permit No. 57-SDP-03-75C, Project ID: 11C050.00*. December 29. [Doc. #68145].

Iowa Department of Natural Resources (Matthew R. Phoenix, P.E.), Letter to Karmin McShane, 12 May 2016. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill (Site #1 – Cedar Rapids), 2015 Annual Water Quality Report and 2015 Statistical Notifications, Permit No. 57-SDP-03-75C." [Doc. #86317].

Iowa Department of Natural Resources (Matthew Graesch), Letter to Karmin McShane, 20 Nov 2017. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, Response to Fall 2017 Statistical Notifications (doc #90813)." [Doc. #90850].

United States Environmental Protection Agency (USEPA), 1997. *The Lognormal Distribution in Environmental Applications*. EPA/600/R97/006. Office of Solid Waste and Emergency Response, Washington, D.C.

USEPA, 2006. *On the Computation of a 95% Upper Confidence Limit of the Unknown Population Mean Based Upon Data Sets with Below Detection Limit Observations*. EPA/600/R-06/022. Office of Research and Development, Washington, D.C.

USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. EPA 530-R-09-007. Office of Resource Conservation and Recovery, Program Implementation and Information Division, Washington, D.C.

Memorandum

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foth.com

November 16, 2023

TO: Iowa Department of Natural Resources

FR: Gina Wilming; Hannah Dubbs; Stephen Lehrke, Ph.D.

RE: Site 1 Statistical Analysis - Fall 2023 Evaluation

1 Memorandum Organization

This memo addresses the statistical analysis of the groundwater monitoring data collected in August 2023. The statistical methods and results are summarized, with the memo organization given as follows:

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Attachment 2 Sanitas Report Output for Prediction Limit Calculations
Attachment 3 Sanitas Report Output for Double Quantification Rule Evaluations
Attachment 4 Sanitas Report Output for Confidence Interval Calculations – Assessment Mode
Attachment 5 Sanitas Report Output for Confidence Interval Calculations and Regression Summary – Corrective Action Mode
Attachment 6 Effective Power and Site-Wide False Positive Rate Discussion
Attachment 7 References

2 Background

The groundwater monitoring locations and status of the Appendix I and II sampling schedules are summarized on Tables 1 and 2. The Appendix I and II analytical results will be provided in Table 14 of the 2023 Annual Water Quality Report (AWQR).

Table 1
Upper Bedrock Monitoring Locations and Schedule
Aug. 2008 – Aug. 2023 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [1] (Aug. 2023)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated	# Events to Complete Baseline Appendix II or Completion Date [113.10(6)b]	Returned to Detection Monitoring (Yes/No)
Downgradient Monitoring Locations							
AW-1	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
AW-2	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
AW-3	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-11
					Mar-12	Sep-12	Mar-14
					Mar-16	Jun-16	No
AW-4	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-12	Sep-12	Mar-14
					Mar-16	Jun-16	No
AW-5	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-12	Sep-12	No
MW-12	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-13	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-16	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-17	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-20	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-11	Sep-11	No
MW-21	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-23	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-24	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-26	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Aug-22
					Jan-23	Mar-23	No
MW-28	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-12	Sep-12	No
MW-30	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-32	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-34	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-35	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
VP-3	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-11	Sep-11	No
VP-4	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-12	Sep-12	No
Background Monitoring Locations							
MW-37	Background	Appendix II	N/A	N/A	Aug-08	Sep-09	---
MW-101A	Background	Appendix II	Sep-13 [2]	Sep-14 [2]	Sep-13 [2]	Sep-14 [2]	---
Delineation Monitoring Locations							
MW-105A	Delineation	Appendix I	Sep-13	Sep-14	---	---	---
MW-106A	Delineation	Appendix I	Sep-13	Sep-14	---	---	---
MW-107A	Delineation	Appendix I	Sep-13	Sep-14	---	---	---
MW-109A	Delineation	Appendix I	Nov-17	Nov-18	---	---	---

N/A = Not applicable. Monitoring points were under routine parameter sampling per 567 IAC 113.2(5) prior to initiation of Appendix II.

[1] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Aug. 2023. Resampling for the full Appendix II list at the assessment, corrective action, and background monitoring wells is conducted every five years.

[2] Six rounds of background monitoring for the Appendix II metals were conducted at MW-101A between Sep. 2013 and Mar. 2015. Background monitoring for the full Appendix II list was conducted in Sep. 2015, Mar. 2016, and Aug. 2020.

Table 2
Deeper Bedrock Monitoring Locations and Schedule
Aug. 2008 – Aug. 2023 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [1] (Aug. 2023)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated	# Events to Complete Baseline Appendix II or Completion Date [113.10(6)b]	Returned to Detection Monitoring (Yes/No)
Downgradient Monitoring Locations							
AW-6	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
CRL-9	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-11	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-14	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-15	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Sep-13	Mar-14	Mar-15
					Jun-16	Aug-16	No
MW-18	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Sep-13	Mar-14	Mar-15
					Jul-15	Sep-15	No
MW-19	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Sep-12	Mar-13	Mar-15
					Jul-15	Sep-15	No
MW-22	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-25	Assessment	Appendix II	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-12	Sep-12	No
MW-31	Detection	Appendix I	N/A	N/A	Aug-08	Sep-09	Sep-10
					Mar-12	Sep-12	Mar-15
MW-33	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
MW-36	Corrective Action	Appendix II	N/A	N/A	Aug-08	Sep-09	No
Background Monitoring Locations							
MW-38	Background	Appendix II	N/A	N/A	Aug-08	Sep-09	---
MW-101B	Background	Appendix II	Sep-13 [2]	Sep-14 [2]	Sep-13 [2]	Sep-14 [2]	---
Delineation Monitoring Locations							
MW-102B	Delineation	Appendix I	Sep-13	Sep-14	---	---	---
MW-104B	Delineation	Arsenic [3]	Sep-13	Sep-14	---	---	---
MW-105B	Delineation	Appendix I	Sep-13	Sep-14	---	---	---
MW-107B	Delineation	Appendix I	Sep-13	Sep-14	---	---	---
MW-108B	Delineation	Appendix I without Cobalt [4]	Nov-17	Nov-18	---	---	---
MW-109B	Delineation	Appendix I	Nov-17	Nov-18	---	---	---

N/A = Not applicable. Monitoring points were under routine parameter sampling per 567 IAC 113.2(5) prior to initiation of Appendix II.

[1] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Aug. 2023. Resampling for the full Appendix II list at the assessment, corrective action, and background monitoring wells is conducted every five years.

[2] Six rounds of background monitoring for the Appendix II metals were conducted at MW-101B between Sep. 2013 and Mar. 2015. Two rounds of background monitoring for the full Appendix II list were conducted in Sep. 2015 and Mar. 2016.

[3] IDNR approved retaining MW-104B as an arsenic delineation monitoring well in the letter dated May 12, 2016 (IDNR, 2016).

[4] IDNR approved the removal of cobalt from the list of analytes at MW-108B in the letter dated Apr. 16, 2019 (IDNR, 2019).

In August 2023, semiannual corrective action, background, and delineation monitoring was conducted at upper bedrock wells MW-12, MW-13, MW-16, MW-17, MW-32, MW-37, and MW-101A and deeper bedrock wells MW-14, MW-33, MW-38, MW-101B, and MW-109B. In accordance with Permit Amendment #16, annual detection, assessment, corrective action, and delineation monitoring was also conducted in August 2023 at upper bedrock wells AW-1, AW-2,

AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-26, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A and deeper bedrock wells AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B. Assessment, corrective action monitoring, and background locations were sampled for the Appendix I and detected Appendix II constituents in August 2023. In accordance with Permit Amendment #6, resampling for the full Appendix II list at the assessment, corrective action, and background monitoring wells is conducted every five years. The next full Appendix II resampling dates will be provided in Table 2 of the 2023 Annual Water Quality Report (AWQR).

Under the detection and assessment monitoring programs of 567 IAC 113.10(5) and 113.10(6), Appendix I and II monitoring results are statistically compared to background levels as given in 567 IAC 113.10(6)e and to the groundwater protection standard (GWPS) as given in 567 IAC 113.10(6)g and h. A well may return to detection monitoring when all Appendix II constituents are "shown to be at or below background values, using the statistical procedures in paragraph 113.10(4)g for two consecutive sampling events." Consequently, to return to detection monitoring in accordance with 567 IAC 113.10(6)e, all Appendix II constituents must be below the interwell prediction limit (for constituents which are detected in the background data set) or below the laboratory reporting limit (for constituents which are not detected in the background data set) during two consecutive sampling events. As mentioned in previous memos, three consecutive sampling events may be utilized to make the determination to return to detection monitoring to limit frequent fluctuation of wells moving between the detection and assessment monitoring programs. Assessment monitoring continues when Appendix II concentrations are above background values but below the GWPS using the statistical procedures in paragraph 113.10(4)g.

If Appendix II constituents are detected at statistically significant levels (SSLs) above the GWPS, characterization [567 IAC 113.10(6)g] is initiated and the owners or operators are required to begin an assessment of corrective measures, select a remedy, and implement a remedy in accordance with 567 IAC 113.10(7), (8), and (9). For remedy completion [567 IAC 113.10(9)e(2)], compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS for a period of three consecutive years or an alternate length of time established by the IDNR.

Based on the August 2008 through August 2023 results, this memo presents an evaluation of statistically significant increases (SSIs) and SSLs under the requirements of paragraphs 113.10(4)g and h of 567 IAC.

3 Statistical Methodology

The statistical methods utilized for locations in detection, delineation, assessment, and corrective action monitoring were consistent with the methods used in previous statistical evaluations. Detailed descriptions of the statistical methods are provided in Attachment 1. Sanitas® v10.0 (Sanitas Technologies) software was utilized to complete the statistical comparisons.

The combined background data sets (MW-37 and MW-101A for the upper bedrock, and MW-38 and MW-101B for the deeper bedrock) were utilized to evaluate SSIs over background.

3.1 Background Data Set Adjustments

3.1.1 Adjustments Associated with Turbidity and Total Suspended Solids

No background data set adjustments are recommended for MW-37, MW-38, MW-101A, and MW-101B based on review of the field turbidity and total suspended solids (TSS) data from the August 2023 sampling event. The August 2023 TSS concentrations at MW-37, MW-38, MW-101A, and MW-101B were below the 5 mg/L limit for acceptable sample quality.

The background data set adjustments previously recommended and incorporated based on review of turbidity data include:

- Removal of the high volume September 2009 through September 2014 metals data at MW-101A (initiated with Fall 2016 statistical evaluation).
- Removal of the high volume September 2009 through September 2014 and the initial low-flow March 2015 metals data at MW-101B (initiated with Fall 2016 statistical evaluation).
- Removal of the March 2019 barium concentration in MW-38 due to elevated TSS and the potential for turbidity to contribute to the higher barium concentration identified (initiated with Spring 2019 statistical evaluation).
- Removal of the March 2023 barium, cadmium, cobalt, copper, nickel, selenium, and vanadium concentrations in MW-101A due to elevated TSS and the potential for turbidity to contribute to the higher concentrations identified (initiated with the Spring 2023 statistical evaluation).

These data set adjustments were maintained in the current statistical evaluation. The removed background data will be listed as crossed out concentrations in Table 14 of the 2023 AWQR.

Note that the historical high-volume data at the downgradient wells continue to be reviewed on a case-by-case basis. The downgradient data set review is discussed in Section 5.1.

3.1.2 Adjustments Associated with Practical Quantitation Limits

Due to lowering of the practical quantitation limits (PQLs), background data set adjustments were approved to remove earlier non-detect data with elevated PQLs for barium, cobalt, copper, and lead in the upper bedrock and for barium, beryllium, cadmium, cobalt, copper, lead, and nickel in the deeper bedrock due to the increased uncertainty the elevated PQLs added. IDNR approved the background dataset adjustments due to elevated PQLs in the letters dated May 12, 2016 and November 20, 2017 (IDNR, 2016 and 2017). These data set adjustments were maintained in the current statistical evaluation.

3.1.3 Review of Single Background Detections

During the September 2015 event, m/p-cresol and phenol were detected above the laboratory reporting limit at upper bedrock background well MW-37. These two constituents have not been detected in either background well prior to or after the September 2015 event. As a result, m/p-cresol and phenol will not be evaluated using prediction limits unless additional background detections are identified. Downgradient m/p-cresol and phenol results will be evaluated using the double quantification rule (DQR).

Single volatile organic compound (VOC) detections were identified for carbon disulfide and toluene in MW-37 in August 2017. In November 2017, retest samples were collected, which did not confirm the November 2017 detections. As a result, it was determined that MW-37 remained suitable as a background well. The only other detections in MW-37 during the August 2017 event were for barium and cobalt. The August 2017 barium and cobalt concentrations were within the range of historical concentrations for these constituents at MW-37. Therefore, the barium and cobalt results were maintained in the background data set for calculating interwell prediction limits. Since VOCs are considered "never detected" constituents, carbon disulfide and toluene were not added as prediction limit constituents. Downgradient carbon disulfide and toluene results continue to be evaluated using the DQR.

Similarly, single VOC detections were identified for benzene, ethylbenzene, toluene, and total xylenes (BTEX) in MW-37 during the Fall 2018 sampling event. The August 2018 detected metals data at MW-37 was removed from the background dataset due to the potential impact indicated by the BTEX detections. A retest sample was collected for BTEX in background well MW-37 in November 2018. The retest results did not confirm the August 2018 BTEX detections; therefore, SSIs were not declared. In addition, the retest results indicated that MW-37 remained suitable for continued use as a background well for the upper bedrock system. Since VOCs are considered "never detected" constituents, the BTEX constituents were not added as prediction limit constituents. Downgradient BTEX results continue to be evaluated using the DQR.

3.2 Corrective Action Constituents

In accordance with the Unified Guidance (USEPA, 2009), corrective action statistics are conducted for analyte/well pairs with previously identified SSLs, as listed in Table 3. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-20 returned to an assessment constituent in Fall 2023 since concentrations were statistically below the GWPS for three consecutive years during the Fall 2022 statistical evaluation. Therefore, arsenic in MW-20 has been removed from Table 3. No corrective action constituents exited corrective action and no new corrective action constituents were added based on the results of the previous Spring 2023 statistical evaluation.

Under corrective action statistics, comparisons to background are not conducted (except for cobalt in the upper bedrock under the corrective action hypothesis, further discussed in Section 5.2); therefore, the analyte/well pairs listed in Table 3 were not included in the Section 4 comparisons to background.

Table 3
Corrective Action Constituents [(1)]

Monitoring Location	Corrective Action Constituents [(2)]
Upper Bedrock Monitoring Locations	
AW-1	Arsenic
AW-2	Arsenic, Thallium
MW-12	Arsenic
MW-13	Arsenic
MW-16	Arsenic
MW-17	Arsenic
MW-20	Thallium
MW-24	Arsenic
MW-30	Arsenic
MW-32	Arsenic

Table 3 Continued
Corrective Action Constituents [1]

Monitoring Location	Corrective Action Constituents [2]
Upper Bedrock Monitoring Locations Continued	
MW-34	Arsenic, Vinyl Chloride
MW-35	Cobalt
MW-105A	Cobalt
MW-106A	Arsenic, Cobalt
Deeper Bedrock Monitoring Locations	
AW-6	Cobalt
CRL-9	Arsenic, Cobalt
MW-14	Arsenic
MW-22	Arsenic, Cobalt
MW-33	Arsenic
MW-36	Arsenic
MW-105B	Cobalt
MW-109B	Arsenic; Cobalt; Thallium

[1] Table 3 lists the analyte/well pairs identified as corrective action constituents regardless of whether the monitoring location was sampled during the current event.
[2] Corrective action constituents are analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS in accordance with 567 IAC 113.10(9)e(2).

4 Comparison to Background Levels

Comparisons to background levels were conducted using interwell prediction limits and the DQR. As noted in Section 3.2, comparisons to background were not conducted for the corrective action constituents listed in Table 3.

4.1 Interwell Prediction Limits

Interwell prediction limits were used for formal statistical assessment of SSIs over background for analytes that have been detected above the reporting limit in the combined background data set (MW-37 and MW-101A for the upper bedrock system; MW-38 and MW-101B for the deeper bedrock system). For the upper bedrock, these analytes included antimony, arsenic, barium, cobalt, copper, lead, nickel, tin, and zinc. For the deeper bedrock, these analytes included antimony, arsenic, barium, bis(2-ethylhexyl)phthalate, cadmium, cobalt, copper, nickel, tin, and zinc.

4.1.1 Upper Bedrock

The upper bedrock prediction limits calculated utilizing August 2008 through August 2023 sample data are summarized in Table 4. The background data set adjustments discussed in Section 3.1 were utilized.

Table 4
Prediction Limit Summary - Upper Bedrock
Aug. 2008 – Aug. 2023 Interwell Data [1]

Chemical Name	Prediction Limit	Units	Prediction Limit Type	Retesting Plan	Prediction Limit Method
Antimony	0.00739	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Arsenic	0.00205	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Barium	0.1166	mg/L	Parametric (Lognormal)	1-of-2	$\exp(\bar{y} + k \cdot s_y)$
Cobalt	0.008	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Copper	0.0225	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Lead	0.00695	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Nickel	0.0522	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Tin [2]	0.152	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Zinc	0.0805	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

[1] Interwell data consists of the Appendix I and II parameters that have been detected in the combined background data set (MW-37 and MW-101A). Note that background data set adjustments were incorporated in accordance with Section 3.1.
[2] Tin was included only for assessment and corrective action monitoring locations.

Non-parametric prediction limits were used for antimony, arsenic, cobalt, copper, lead, nickel, tin, and zinc since either normality assumptions could not be met or there were less than 50% detects in the combined background data. A parametric lognormal prediction limit was used with barium since there were greater than 50% detects in the combined background data set, the assumptions of normality were met with a lognormal transformation, and the lognormal limit was accepted as being representative of the background distribution.

4.1.2 Deeper Bedrock

Deeper bedrock prediction limits calculated from August 2008 through August 2023 sample data are summarized in Table 5. The background data set adjustments discussed in Section 3.1 were utilized.

Table 5
Prediction Limit Summary - Deeper Bedrock
Aug. 2008 – Aug. 2023 Interwell Data [1]

Chemical Name	Prediction Limit	Units	Prediction Limit Type	Retesting Plan	Prediction Limit Method
Antimony	0.0101	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Arsenic	0.00225	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Barium	0.138	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Bis(2-ethylhexyl) phthalate [2]	25.4	ug/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cadmium	0.000824	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cobalt	0.0008831	mg/L	Parametric (Lognormal)	1-of-2	$\exp(\bar{y} + k \cdot s_y)$
Copper	0.0108	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Nickel	0.00735	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Tin [2]	0.109	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Zinc	0.0366	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

[1] Interwell data consists of the Appendix I and II parameters that have been detected in the combined background data set (MW-38 and MW-101B). Note that background data set adjustments were incorporated in accordance with Section 3.1.
[2] Bis(2-ethylhexyl)phthalate and tin were included only for assessment and corrective action monitoring locations.

Non-parametric prediction limits were used for antimony, arsenic, barium, bis(2-ethylhexyl)phthalate, cadmium, copper, nickel, tin, and zinc since either normality assumptions could not be met or there were less than 50% detects in the combined background data. A parametric lognormal prediction limit was used with cobalt since there were greater than 50% detects in the combined background data set, the assumptions of normality were met with a lognormal transformation, and the lognormal limit was accepted as being representative of the background distribution.

4.1.3 Prediction Limit Exceedances

A summary of the monitoring locations exhibiting a prediction limit exceedance during the August 2023 event is given in Table 6 for the upper bedrock system and Table 7 for the deeper bedrock system. Detailed prediction limit output for each analyte/well pair is included in Attachment 2.

Table 6
Aug. 2023 Prediction Limit Exceedances – Upper Bedrock

Prediction Limit	Arsenic (mg/L) 0.00205	Barium (mg/L) 0.1166	Copper (mg/L) 0.0225	Nickel (mg/L) 0.0522	Zinc (mg/L) 0.0805
Delineation Monitoring Locations - Assessment Constituents					
MW-107A		0.131			
MW-109A		0.196			
Assessment Monitoring Locations					
AW-3	0.00513				
AW-4			0.0378		
AW-5	0.0133	0.255			
MW-21	0.0371	0.333		0.0573	
MW-23		0.148			0.1
MW-26		0.139			
MW-28		0.155			
VP-3	0.0089	0.682			
VP-4	0.00296				
Corrective Action Locations – Assessment Constituents					
AW-1		0.153			
AW-2		0.438			
MW-12		0.417		0.0682	
MW-13		0.794			
MW-17		0.134			
MW-20	0.00565	0.150			0.0820
MW-24		0.758			
MW-30		0.203			0.0833
MW-32		0.918			
MW-34		0.373		0.0640	
MW-35	0.00536	0.167			

Table 7
Aug. 2023 Prediction Limit Exceedances - Deeper Bedrock

Prediction Limit	Barium (mg/L) 0.138	Cobalt (mg/L) 0.0008831	Nickel (mg/L) 0.00735
Detection Monitoring Location			
None			
Delineation Monitoring Locations – Assessment Constituents			
MW-102B		0.00105	
MW-105B	0.143		0.0108
MW-107B	0.302	0.00275	0.0126
MW-108B	0.183		
MW-109B	0.747		0.0347
Assessment Monitoring Locations			
MW-15		0.0032	0.0104
MW-19			0.015
MW-25	0.221		
Corrective Action Monitoring Locations – Assessment Constituents			
AW-6	0.178		0.0318
CRL-9	0.518		0.0217
MW-14	0.373		0.0171
MW-22	0.653		0.0314
MW-33	0.819	0.00147	0.00841
MW-36	0.735	0.00126	

4.2 Double Quantification Rule

The DQR was used to evaluate SSIs over background for the remaining Appendix I and II constituents (i.e., constituents which have not been detected above the reporting limit in the combined background data set). The DQR output is included in Attachment 3, with a summary of the August 2023 DQR detections listed in Table 8 for the upper bedrock wells and in Table 9 for the deeper bedrock wells.

Table 8
Upper Bedrock Double Quantification Rule
Aug. 2023 Detections

Well	Constituent(s)
Delineation Monitoring Locations - Assessment Constituents	
None	
Assessment Monitoring Locations	
AW-5	Cadmium; Thallium
MW-21	Chlorobenzene; Thallium
MW-23	Cadmium; Thallium
Corrective Action Monitoring Locations - Assessment Constituents	
AW-1	1,4-Dichlorobenzene; Chlorobenzene; Thallium
AW-2	Chlorobenzene; cis-1,2-Dichloroethene
MW-12	1,1-Dichloroethane; 1,4-Dichlorobenzene; Chlorobenzene; cis-1,2-Dichloroethene; Thallium
MW-13	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Benzene; Chlorobenzene
MW-16	1,1-Dichloroethane; Benzene; Chlorobenzene

Table 8 Continued
Upper Bedrock Double Quantification Rule
Aug. 2023 Detections

Well	Constituent(s)
Corrective Action Monitoring Locations - Assessment Constituents Continued	
MW-24	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Benzene; Chlorobenzene; Thallium
MW-30	1,1-Dichloroethane; Benzene; Chloroethane; cis-1,2-Dichloroethene; Vinyl Chloride
MW-32	1,4-Dichlorobenzene; Benzene; Chlorobenzene
MW-34	1,1-Dichloroethane; 1,4-Dichlorobenzene; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; trans-1,2-Dichloroethene

Table 9
Deeper Bedrock Double Quantification Rule
Aug. 2023 Detections

Well	Constituent(s)
Detection Monitoring Locations	
None	
Delineation Monitoring Locations - Assessment Constituents	
MW-105B	1,1-Dichloroethane
MW-107B	Thallium
MW-109B	Chlorobenzene
Assessment Monitoring Locations	
MW-25	Lead; Thallium
Corrective Action Monitoring Locations (Assessment Constituents)	
AW-6	1,1-Dichloroethane
CRL-9	Benzene
MW-14	1,1-Dichloroethane; 1,4-Dichlorobenzene; Benzene; Chlorobenzene
MW-22	1,1-Dichloroethane; Thallium
MW-33	1,4-Dichlorobenzene; Benzene; Chlorobenzene
MW-36	1,4-Dichlorobenzene; Chlorobenzene

4.3 Summary of Comparison to Background

4.3.1 Detection Monitoring Locations

No wells in the upper bedrock system are in detection monitoring. For the deeper bedrock system, no prediction limit exceedances or DQR detections were identified at MW-31.

4.3.2 Delineation Monitoring Locations – Assessment Constituents

For the upper bedrock system, no prediction limit exceedances or DQR detections were identified at MW-105A and MW-106A. Prediction limit exceedances were identified at MW-107A, and MW-109A as listed in Table 6. As indicated in Table 8, no DQR detections were identified for the delineation monitoring wells in the upper bedrock system. In lieu of retesting for the prediction limit exceedances, SSIs were declared and evaluated for SSLs in Section 5.

For the deeper bedrock system, prediction limit exceedances were identified at MW-102B, MW-105B, MW-107B, MW-108B, and MW-109B as listed in Table 7. A prediction limit exceedance was not identified for arsenic at MW-104B. DQR detections were identified at MW-105B, MW-

107B, and MW-109B as listed on Table 9. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

4.3.3 Assessment Monitoring Locations

For the upper bedrock system, prediction limit exceedances were identified at AW-3, AW-4, AW-5, MW-21, MW-23, MW-26, MW-28, VP-3, and VP-4 as listed in Table 6. DQR detections were identified at AW-5, MW-21, and MW-23 as listed in Table 8. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

For the deeper bedrock system, no prediction limit exceedances or DQR detections were identified at MW-11 and MW-18. Prediction limit exceedances were identified at MW-15, MW-19, and MW-25 as listed in Table 7. DQR detections were identified at MW-25 as listed on Table 9. In lieu of retesting for the prediction limit exceedances and DQR detection, SSIs were declared and evaluated for SSLs in Section 5.

4.3.3.1 Exiting Assessment Monitoring

Table 10 presents a summary of the assessment monitoring locations and statistical comparisons required for exiting assessment monitoring. As discussed in Section 1, assessment monitoring locations will return to detection monitoring when Appendix II constituents fall below the current interwell prediction limit (for constituents which are detected in the background data set) and below the laboratory reporting limit (for constituents which are not detected in the background data set) for three consecutive sampling events. At MW-26, retriggered baseline assessment monitoring was initiated in January 2023. Evaluations to exit assessment monitoring were initiated with the current (Fall 2023) statistical evaluation since three samples have been collected in assessment monitoring. Note that MW-26 was the only upper and deeper bedrock assessment monitoring well that was sampled during the January and March 2023 sampling events.

Table 10
Evaluation to Exit Assessment Monitoring
All Appendix II Constituents Below Background

Monitoring Location	Aug. 2021	Aug. 2022	Jan. 2023	Mar. 2023	Aug. 2023
Upper Bedrock					
AW-3	No	No	N/A	N/A	No
AW-4	No	No	N/A	N/A	No
AW-5	No	No	N/A	N/A	No
MW-21	No	No	N/A	N/A	No
MW-23	No	No	N/A	N/A	No
MW-26	N/A	N/A	No	No	No
MW-28	No	No	N/A	N/A	No
VP-3	No	No	N/A	N/A	No
VP-4	No	No	N/A	N/A	No
Deeper Bedrock					
MW-11	No	No	N/A	N/A	**Yes**
MW-15	No	No	N/A	N/A	No
MW-18	No	No	N/A	N/A	**Yes**
MW-19	No	No	N/A	N/A	No
MW-25	No	No	N/A	N/A	No

N/A = not applicable; location was either not sampled or not included in the evaluation to exit assessment monitoring.

As shown in Table 10, the upper and deeper bedrock assessment monitoring locations have not had all Appendix II constituents below background values for three consecutive sampling events. Therefore, these locations will not exit assessment monitoring at this time.

4.3.4 Corrective Action Monitoring Locations – Assessment Constituents

For the upper bedrock system, prediction limit exceedances were identified at AW-1, AW-2, MW-12, MW-13, MW-17, MW-20, MW-24, MW-30, MW-32, MW-34, and MW-35 as listed on Table 6. DQR detections were identified at AW-1, AW-2, MW-12, MW-13, MW-16, MW-24, MW-30, MW-32, and MW-34 as listed on Table 8. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

For the deeper bedrock system, prediction limit exceedances and DQR detections were identified at AW-6, CRL-9, MW-14, MW-22, MW-33, and MW-36 as listed in Tables 7 and 9. In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

5 Comparison to Groundwater Protection Standard

The prediction limit exceedances and DQR detections listed in Tables 6 through 9 were declared SSIs and evaluated for SSLs over the GWPS per 567 IAC 113.10(6)f and g. Comparisons to the GWPS were evaluated through statistical confidence intervals under the assessment monitoring null hypothesis. SSLs were declared to exist with statistical certainty when the lower confidence limit exceeds the GWPS. Statistical outputs for confidence intervals in assessment mode are included in Attachment 4.

In contrast, corrective action analyte/well pairs (i.e., those where SSLs have been previously declared) were evaluated to determine compliance with the GWPS per 567 IAC 113.10(9)e. A summary of the upper and deeper bedrock corrective action constituents was provided in Table 3. Comparisons to the GWPS in this case were evaluated through statistical confidence intervals under the corrective action monitoring null hypothesis, or in the case of downward trending data, confidence bands (upper 95% confidence limits) placed around the linear trend line. For corrective action constituents, compliance with the GWPS has been achieved with statistical certainty when the UCL or the upper 95% confidence limit on the trend line is lower than the GWPS for a period of three consecutive years or an alternate length of time established by the IDNR. Statistical outputs for regression statistics, confidence bands, and confidence intervals in corrective action mode are included in Attachment 5.

5.1 Compliance Data Set Review for Confidence Intervals

5.1.1 Adjustments Due to Changes in PQLs

Downgradient data set adjustments were approved to remove earlier non-detect data with elevated PQLs for upper bedrock cobalt data at AW-5, MW-13, MW-17, MW-23, and MW-35; to remove earlier non-detect and J-flagged data with elevated PQLs for deeper bedrock cobalt data at AW-6, CRL-9, MW-11, MW-14, MW-15, MW-22, MW-33 MW-36, MW-102B, MW-105B, and MW-107B; and to remove earlier non-detect and J-flagged data with elevated PQLs for the deeper bedrock nickel data at AW-6, CRL-9, MW-14, MW-15, MW-18, MW-19, MW-22, MW-33, and MW-36 due to the increased uncertainty the elevated PQLs added. IDNR approved the downgradient cobalt dataset adjustments due to elevated PQLs in the letters dated May 12, 2016 and November 20, 2017 (IDNR, 2016 and 2017). These data set adjustments were maintained in the current statistical evaluation.

5.1.2 Adjustments Due to Sampling Technique Changes

As noted in Section 3.1, the downgradient metals data sets continued to be reviewed on a case-by-case basis to determine whether data set adjustments are recommended based on the change in sampling technique from high-volume to low-flow sampling methods. In the letter dated November 20, 2017 (IDNR, 2017), IDNR concurred with the strategy to analyze wells on a case-by-case basis for a statistical correlation between newer and older sampling techniques.

No data set adjustments are currently recommended for the SSIs listed in Tables 6 through 9 and the corrective action constituents in Table 3. To date, downgradient data set adjustments include removal of the high-volume August 2008 through September 2014 zinc data at AW-7, MW-20, and MW-30 and removal of the high-volume August 2008 through September 2014 nickel data at MW-13. IDNR approved the zinc and nickel data set adjustments in the letter dated November 20, 2017 (IDNR, 2017). These data set adjustments were maintained in the current statistical evaluation.

5.1.3 Adjustments Due to Exiting Corrective Action

As further detailed in Attachment 1, the historical data prior to when statistical compliance with the GWPS was first achieved will be removed when analyte/well pairs exit corrective action and return to assessment constituents. Nickel in MW-12; cobalt, nickel, and vinyl chloride in MW-13; cobalt in MW-23; and arsenic in VP-3 exited corrective action and returned to assessment constituents during the Fall 2019 or Spring 2020 statistical evaluations. Cobalt in AW-5 and MW-17 exited corrective action and returned to assessment constituents during the Fall 2020 statistical evaluation. Compliance with the GWPS was first achieved in Spring 2015 for nickel in MW-12 and vinyl chloride in MW-13; in Fall 2016 for cobalt and nickel in MW-13 and cobalt in MW-23; in Spring 2017 for arsenic in VP-3; and in Fall 2017 for cobalt in AW-5 and MW-17. The historical data prior to these initial compliance dates have been removed. In addition, arsenic in MW-20 exited corrective action and returned to an assessment constituent during the current statistical evaluation (Fall 2023). Compliance with the GWPS was first achieved in Spring 2020 for arsenic in MW-20; therefore the historical data prior to Spring 2020 was removed during this statistical evaluation.

The following current and previous data set adjustments due to exiting corrective action were made for Site 1:

- Removal of the Sep. 2010 through March 2017 cobalt data in AW-5. Note that earlier non-detect cobalt data had already been removed as discussed in Section 5.1.1.
- Removal of the Aug. 2008 through Sep. 2014 nickel data in MW-12.
- Removal of the Sep. 2009 through Mar. 2016 cobalt data in MW-13.
- Removal of the Mar. 2015 through Mar. 2016 nickel data in MW-13. Note that nickel data prior to Mar. 2015 had already been removed as discussed in Section 5.1.2.
- Removal of the Aug. 2008 through Sep. 2014 vinyl chloride data in MW-13.
- Removal of the Sep. 2009 through March 2017 cobalt data in MW-17. Note that earlier non-detect cobalt data had already been removed as discussed in Section 5.1.1.
- Removal of the Aug. 2008 through Aug. 2019 arsenic data in MW-20.
- Removal of the Sep. 2010 through Mar. 2016 cobalt data in MW-23. Note that earlier non-detect cobalt data had already been removed as discussed in Section 5.1.1.
- Removal of the Aug. 2008 through Aug. 2016 arsenic data in VP-3.

5.2 Background as the Cobalt GWPS

Background cobalt concentrations in the upper bedrock data set exceeded the 567 IAC Chapter 137 Statewide Standard. Therefore, pursuant to 567 IAC 113.10(6)h, the GWPS for cobalt becomes background. The GWPS for cobalt in corrective action monitoring was evaluated with the statistical methods described in Attachment 1 and as recommended in the Unified Guidance (USEPA, 2009). Both the prediction limit (i.e., *two-sample*) and confidence interval (i.e., *one-sample*) methods were evaluated. Where concentration shifts were detected in the data, the *one-sample* confidence interval method was evaluated utilizing the linear trend line approach further detailed in Section 5.3 below. With background as the GWPS, the upper confidence limit is compared to the background upper tolerance limit with 95% confidence and 95% coverage (discussed in detail in Attachment 1).

Statistical outputs for the prediction limit and confidence interval methods with background as the GWPS for cobalt in upper bedrock wells MW-35, MW-105A, and MW-106A are included in Attachment 5. Note that the confidence interval method for cobalt in MW-35 and MW-105A was evaluated as 90% confidence bands placed around the linear trend line due to statistically significant decreasing trends identified at these locations, as further discussed in Section 5.3 below.

5.3 Data Concentration Shifts During Corrective Action

Statistically significant decreasing linear trends continued to be identified for arsenic in AW-1 (since 2008), in MW-12 (since 2008), in MW-24 (since 2012), in MW-30 (since 2014), in MW-34 (since 2011), and in MW-106A (since 2014); for cobalt in MW-35 (since 2012), in MW-105A (since 2013), and in MW-109B (since 2017); for thallium in AW-2 (since 2013) and MW-20 (since 2012); and for vinyl chloride in MW-34 (since 2008). In addition, a statistically significant decreasing linear trend was also identified for arsenic in MW-17 (since 2018) starting with the current statistical evaluation (Fall 2023). Consistent with previous memos, 90% confidence bands (upper 95% confidence limits) placed around the linear trend line were used since significantly decreasing linear trends were identified for these well/analyte pairs.

With this method for upper bedrock cobalt, the GWPS was calculated as the background upper tolerance limit with 95% confidence and 95% coverage. Regression statistics and confidence band outputs for these analyte/well pairs are provided in Attachment 5.

The upper 95% confidence limit remained below the GWPS for cobalt in MW-35. Conversely, the upper 95% confidence limits were above the GWPS for arsenic in AW-1, MW-12, MW-17, MW-24, MW-30, MW-34, and MW-106A, for cobalt in MW-105A and MW-109B, for thallium in AW-2 and MW-20, and for vinyl chloride in MW-34.

5.4 First Order Regression Calculations

Table 11 of the AWQR lists a projected year to completion for each analyte/well pair in corrective action (i.e., those listed in Table 3 of this memo). As initiated with the Fall 2019 statistical evaluation, remedy completion timeframes were estimated for the individual analyte/well pairs in corrective action for inclusion in Table 11 of the 2023 AWQR.

For the corrective action constituents that have achieved compliance with the GWPS (i.e., cobalt in MW-35), first order regression calculations were not utilized. The projected year to completion is three years after compliance with the GWPS was first statistically achieved and

will remain that date as long as concentrations remain statistically below the GWPS during the interim statistical evaluations.

For the remaining corrective constituents (i.e., those that have not achieved compliance with the GWPS), the projected year to completion was based on the first order regression calculations for each individual analyte/well pair. The projected years to completion are three years after the first order regression calculations projected initial compliance with the GWPS. For the corrective action constituents with decreasing trends, the first order regression calculations and projected year to completion are included on the regression statistics output in Attachment 5. The first order regression calculations for the remaining corrective action constituents are included on "Sample Values and Corresponding 1st-Order Regression Calculations for Date to Completion" table in Attachment 5.

5.5 SSL Summary

Confidence interval output for the upper and deeper bedrock assessment constituents is included in Attachment 4, and for the upper and deeper bedrock corrective action constituents is included in Attachment 5. The results for the upper bedrock are summarized in Table 11 and the results for the deeper bedrock are summarized in Table 11.

Table 11
Upper Bedrock SSL Summary
Aug. 2008 – Aug. 2023 Appendix II Data

Chemical Name	Wells with SSL (1)	SSL Not Identified or Rejected (1)	GWPS (2)
Delineation Monitoring Locations - Assessment Constituents			
Barium (mg/L)		MW-107A, MW-109A	2
Assessment Monitoring Locations			
Arsenic (mg/L)		AW-3, AW-5, MW-21, VP-3, VP-4	0.01
Barium (mg/L)		AW-5, MW-21, MW-23, MW-26, MW-28, VP-3	2
Cadmium (mg/L)		AW-5, MW-23	0.005
Chlorobenzene (ug/L)		MW-21	100
Copper (mg/L)		AW-4	1.3
Nickel (mg/L)		MW-21	0.1
Thallium (mg/L)		AW-5, MW-21, MW-23	0.002
Zinc (mg/L)		MW-23	0.002
Corrective Action Monitoring Locations - Assessment Constituents			
1,1-Dichloroethane (ug/L)		MW-12, MW-16, MW-30, MW-34	140
1,2-Dichlorobenzene (ug/L)		MW-13, MW-24	600
1,4-Dichlorobenzene (ug/L)		AW-1, MW-12, MW-13, MW-24, MW-32, MW-34	75
Arsenic (mg/L)		MW-20, MW-35	0.01
Barium (mg/L)		AW-1, AW-2, MW-12, MW-13, MW-17, MW-20, MW-24, MW-30, MW-32, MW-34, MW-35	2
Benzene (ug/L)		MW-13, MW-16, MW-24, MW-30, MW-32, MW-34	5
Chlorobenzene (ug/L)		AW-1, AW-2, MW-12, MW-13, MW-16, MW-24, MW-32, MW-34	100
Chloroethane (ug/L)		MW-30	2800

Table 11 Continued
Upper Bedrock SSL Summary
Aug. 2008 – Aug. 2023 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Corrective Action Monitoring Locations - Assessment Constituents Continued			
cis-1,2-Dichloroethene (ug/L)		AW-2, MW-12, MW-30, MW-34	70
Nickel (mg/L)		MW-12, MW-34	0.1
Thallium (mg/L)		AW-1, MW-12, MW-24	0.002
trans-1,2-Dichloroethene (ug/L)		MW-34	100
Vinyl Chloride (ug/L)		MW-30	2
Zinc (mg/L)		MW-20, MW-30	2
Corrective & Delineation Action Monitoring Locations – Corrective Action Constituents Continued			
Arsenic (mg/L)	AW-1, AW-2, MW-12, MW-13, MW-16, MW-17, MW-24, MW-30, MW-32, MW-34, MW-106A		0.01
Cobalt (mg/L)	MW-105A (Confidence Interval Method Only), MW-106A (Both Methods)	MW-35 (Both Methods), MW-105A (Prediction Limit Method Only)	0.008 [3]
Thallium (mg/L)	AW-2, MW-20		0.002
Vinyl Chloride (ug/L)	MW-34		2

[1] Under the assessment null hypothesis, an SSL is indicated when the lower confidence limit exceeds the GWPS. Under corrective action null hypothesis, an SSL remains when the upper confidence limit exceeds the GWPS.
[2] Values are the 40 CFR Part 141 Safe Drinking Water Act MCL or the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source.
[3] GWPS for cobalt is background. The hypothesis was evaluated through the both the two-sample prediction limit method (GWPS = 0.008 mg/L) and the *one-sample* confidence limit method where the fixed GWPS was based on the background upper tolerance limit with 95% confidence and 95% coverage (GWPS = 0.008 mg/L).

Table 12
Deeper Bedrock SSL Summary
Aug. 2008 – Aug. 2023 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Delineation Monitoring Locations – Assessment Constituents			
1,1-Dichloroethane (ug/L)		MW-105B	140
Barium (mg/L)		MW-105B, MW-107B, MW-108B, MW-109B	2
Chlorobenzene (ug/L)		MW-109B	100
Cobalt (mg/L)		MW-102B, MW-107B	0.0021
Nickel (mg/L)		MW-105B, MW-107B, MW-109B	0.1
Thallium (mg/L)		MW-107B	0.002
Assessment Monitoring Locations			
Barium (mg/L)		MW-25	2
Cobalt (mg/L)		MW-15	0.0021
Lead (mg/L)		MW-25	0.015
Nickel (mg/L)		MW-15, MW-19	0.1
Thallium (mg/L)		MW-25	0.002
Corrective Action Monitoring Locations – Assessment Constituents			
1,1-Dichloroethane (ug/L)		AW-6, MW-14, MW-22	140
1,4-Dichlorobenzene (ug/L)		MW-14, MW-33, MW-36	75

Table 12 Continued
Deeper Bedrock SSL Summary
Aug. 2008 – Aug. 2023 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Corrective Action Monitoring Locations – Assessment Constituents Continued			
Barium (mg/L)		AW-6, CRL-9, MW-14, MW-22, MW-33, MW-36	2
Benzene (ug/L)		CRL-9, MW-14, MW-33	5
Chlorobenzene (ug/L)		MW-14, MW-33, MW-36	100
Cobalt (mg/L)		MW-33, MW-36	0.0021
Nickel (mg/L)		AW-6, CRL-9, MW-14, MW-22, MW-33	0.1
Thallium (mg/L)		MW-22	0.002
Corrective & Delineation Action Monitoring Locations – Corrective Action Constituents			
Arsenic (mg/L)	CRL-9, MW-14, MW-22, MW-33, MW-36, MW-109B		0.01
Cobalt (mg/L)	AW-6, CRL-9, MW-22, MW-105B, MW-109B		0.0021
Thallium (mg/L)	MW-109B		0.002

[1] Under the assessment null hypothesis, an SSL is indicated when the lower confidence limit exceeds the GWPS. Under corrective action null hypothesis, an SSL remains when the upper confidence limit exceeds the GWPS.
[2] Values are the 40 CFR Part 141 Safe Drinking Water Act MCL or the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source.

5.6 Summary of Comparison to Groundwater Protection Standard

5.6.1 Delineation Monitoring Locations

No SSLs were identified for the assessment constituents in the upper bedrock delineation monitoring locations. Cobalt in MW-105A and arsenic and cobalt in MW-106A were evaluated as corrective action constituents. SSLs continued to be identified for these analyte/well pairs; therefore, compliance with the GWPS has not been achieved. Note that statistically significant decreasing trends were identified for cobalt in MW-105A and arsenic in MW-106A.

No SSLs were identified for the assessment constituents in the deeper bedrock delineation monitoring locations. Cobalt in MW-105B and arsenic, cobalt, and thallium in MW-109B were evaluated as corrective action constituents. SSLs continued to be identified for these analyte/well pairs; therefore, compliance with the GWPS has not been achieved. Note that a statistically significant decreasing trend was identified for cobalt in MW-109B.

5.6.2 Assessment Monitoring Locations

No SSLs were identified in the upper or deeper bedrock assessment monitoring locations.

5.6.3 Corrective Action Monitoring Locations

No SSLs were identified for the assessment constituents in the upper and deeper bedrock corrective action monitoring locations.

For the upper bedrock corrective action constituents listed in Table 3, SSLs over the GWPS remained for arsenic in AW-1, AW-2, MW-12, MW-13, MW-16, MW-17, MW-24, MW-30, MW-32, and MW-34; for thallium in AW-2 and MW-20; and for vinyl chloride in MW-34. While compliance with the GWPS was not achieved, statistically significant decreasing trends were identified for

arsenic in AW-1, MW-12, MW-17, MW-24, MW-30, and MW-34; thallium in AW-2 and MW-20; and vinyl chloride in MW-34.

Compliance with the GWPS was achieved for cobalt in MW-35 starting with the Fall 2022 statistical evaluation and remained during the current statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), cobalt in MW-35 will return to an assessment constituent in 2025 as long as concentrations remain statistically below the GWPS during interim statistical evaluations.

For the deeper bedrock corrective action constituents listed in Table 3, SSLs continued to be identified for arsenic in CRL-9, MW-14, MW-22, MW-33, and MW-36; and for cobalt in AW-6, CRL-9, and MW-22.

6 Effective Power and Site-Wide False Positive Rate

Statistical power calculations, effective power curves for the 1-of-2 prediction limit plan, and the current site-wide false positive rate (SWFPR) are discussed in detail in Attachment 6. Based on the power curves, the parametric and non-parametric prediction limits have good power. The current cumulative annual SWFPR for the plan is approximately 28%. The current annual SWFPR is higher than the Unified Guidance target 10% false positive rate due to moving from a 1-of-3 to the 1-of-2 prediction plan starting with the Spring 2021 statistical evaluation and the relatively large number of downgradient comparisons with non-parametric prediction limits. Given the number of non-parametric prediction limit evaluations, a background sample size of approximately 80-90 is needed to reduce the SWFPR once again to the 10% target level.

Statistical power calculations for confidence limits compared to the GWPS under assessment monitoring (or assessment mode under corrective action) are included in the confidence interval output of Attachment 4. Details regarding the purpose and procedures for these calculations are provided in Attachment 1. Confidence limits are calculated to meet statistical power levels of 50% for increases in the true concentration mean of 1.5 times a fixed standard, and 80% for increases in the true concentration mean of 2.0 times a fixed standard, as discussed in Unified Guidance Chapter 22 (USEPA, 2009).

7 Conclusions

The methodology described in Attachment 1 was utilized to conduct the statistical evaluations for the upper and deeper bedrock locations in the delineation and corrective action monitoring programs.

In August 2023, semiannual corrective action, background, and delineation monitoring was conducted at upper bedrock wells MW-12, MW-13, MW-16, MW-17, MW-32, MW-37, and MW-101A and deeper bedrock wells MW-14, MW-33, MW-38, MW-101B, and MW-109B. In accordance with Permit Amendment #16, annual detection, assessment, corrective action, and delineation monitoring was also conducted in August 2023 at upper bedrock wells AW-1, AW-2, AW-3, AW-4, AW-5, MW-20, MW-21, MW-23, MW-24, MW-26, MW-28, MW-30, MW-34, MW-35, VP-3, VP-4, MW-105A, MW-106A, MW-107A, and MW-109A and deeper bedrock wells AW-6, CRL-9, MW-11, MW-15, MW-18, MW-19, MW-22, MW-25, MW-31, MW-36, MW-102B, MW-104B, MW-105B, MW-107B, and MW-108B.

7.1 Upper Bedrock Monitoring Locations

A summary of the Fall 2023 statistical evaluation results for the upper bedrock system is presented in Table 13.

Table 13
Summary of the Fall 2023 Evaluation - Upper Bedrock

Monitoring Location	Monitoring Program	Current Schedule [1] (Aug. 2023)	Current SSIs	Corrective Action Constituents		Retesting Parameter	Monitoring Program Changes
				Current SSLs [2]	Achieved Compliance with GWPS		
Downgradient Monitoring Locations							
AW-1	Corrective Action	Appendix II	1,4-Dichlorobenzene; Barium, Chlorobenzene, Thallium	Arsenic			
AW-2	Corrective Action	Appendix II	Barium; Chlorobenzene; cis-1,2-Dichloroethene	Arsenic; Thallium			
AW-3	Assessment	Appendix II	Arsenic				
AW-4	Assessment	Appendix II	Copper				
AW-5	Assessment	Appendix II	Arsenic; Barium; Cadmium; Thallium				
MW-12	Corrective Action	Appendix II	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Chlorobenzene; cis-1,2-Dichloroethene; Nickel; Thallium	Arsenic			
MW-13	Corrective Action	Appendix II	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene	Arsenic			
MW-16	Corrective Action	Appendix II	1,1-Dichloroethane; Benzene; Chlorobenzene	Arsenic			
MW-17	Corrective Action	Appendix II	Barium	Arsenic			
MW-20	Corrective Action	Appendix II	Arsenic; Barium; Zinc	Thallium			
MW-21	Assessment	Appendix II	Arsenic; Barium; Chlorobenzene; Nickel; Thallium				
MW-23	Assessment	Appendix II	Barium; Cadmium; Thallium; Zinc				
MW-24	Corrective Action	Appendix II	1,2-Dichlorobenzene; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; Thallium	Arsenic			
MW-26	Assessment	Appendix II	Barium				
MW-28	Assessment	Appendix II	Barium				
MW-30	Corrective Action	Appendix II	1,1-Dichloroethane; Barium; Benzene; Chloroethane; cis-1,2-Dichloroethene; Vinyl Chloride; Zinc	Arsenic			
MW-32	Corrective Action	Appendix II	1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene	Arsenic			
MW-34	Corrective Action	Appendix II	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; cis-1,2-Dichloroethene; Nickel; trans-1,2-Dichloroethene	Arsenic; Vinyl Chloride			
MW-35	Corrective Action	Appendix II	Arsenic; Barium		Cobalt		

Table 13 Continued
Summary of the Fall 2023 Evaluation - Upper Bedrock

Monitoring Location	Monitoring Program	Current Schedule [1] (Aug. 2023)	Current SSIs	Corrective Action Constituents		Retesting Parameter	Monitoring Program Changes
				Current SSLs [2]	Achieved Compliance with GWPS		
Downgradient Monitoring Locations Continued							
VP-3	Assessment	Appendix II	Arsenic; Barium				
VP-4	Assessment	Appendix II	Arsenic				
Background Monitoring Locations							
MW-37	Background	Appendix II					
MW-101A	Background	Appendix II					
Delineation Monitoring Locations							
MW-105A	Delineation	Appendix I		Cobalt			
MW-106A	Delineation	Appendix I		Arsenic; Cobalt			
MW-107A	Delineation	Appendix I	Barium				
MW-109A	Delineation	Appendix I	Barium				

[1] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Aug. 2023.

[2] Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).

7.1.1 Delineation Monitoring

In August 2023, annual delineation monitoring for the Appendix I list was conducted at MW-105A, MW-106A, MW-107A, and MW-109A. The SSIs identified for the assessment constituents in the upper bedrock delineation monitoring locations are summarized in Table 13. No SSLs were identified for the assessment constituents in the upper bedrock delineation monitoring locations.

Cobalt in MW-105A and arsenic and cobalt in MW-106A were evaluated as corrective action constituents due to previously identified SSLs for these analyte/well pairs. The GWPS for cobalt was taken as background since background cobalt concentrations exceeded the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source. Both the *two-sample* prediction limit and the *one-sample* confidence interval or confidence band on the linear trend line testing methods were utilized to compare cobalt in MW-105A and MW-106A to the background GWPS. SSLs continued to be identified for cobalt in MW-105A and arsenic and cobalt in MW-106A; therefore, compliance with the GWPS has not been achieved. Note statistically significant decreasing trends were identified for cobalt in MW-105A and arsenic in MW-106A.

Annual delineation monitoring for the Appendix I list will be conducted at MW-105A, MW-106A, MW-107A, and MW-109A in Fall 2024.

7.1.2 Assessment Monitoring

In August 2023, annual assessment monitoring for Appendix I and detected Appendix II constituents was conducted at AW-3, AW-4, AW-5, MW-21, MW-23, MW-26, MW-28, VP-3, and VP-4.

The SSIs identified at the upper bedrock assessment monitoring locations are summarized in Table 13. No SSLs were identified for the upper bedrock assessment monitoring locations.

The Fall 2023 statistical evaluation did not identify upper bedrock assessment monitoring locations with all Appendix II constituents below the interwell prediction limit or laboratory reporting limit for three consecutive sampling events. As a result, none of the upper bedrock locations may exit assessment monitoring at this time.

Annual assessment monitoring for Appendix I and detected Appendix II constituents will be conducted at AW-3, AW-4, AW-5, MW-21, MW-23, MW-26, MW-28, VP-3, and VP-4 in Fall 2024. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted at AW-3, AW-4, AW-5, MW-21, MW-23, MW-28, VP-3, and VP-4 in Fall 2025 and at MW-26 in Fall 2028.

7.1.3 Corrective Action Monitoring

In August 2023, semiannual corrective action monitoring was conducted at MW-12, MW-13, MW-16, MW-17, and MW-32 and annual corrective action monitoring was conducted at AW-1, AW-2, MW-20, MW-24, MW-30, MW34, and MW-35 for the Appendix I and detected Appendix II constituents. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-20 returned to an assessment constituent in Fall 2023 since concentrations were statistically below the GWPS for three consecutive years during the Fall 2022 statistical evaluation.

The SSIs identified for the assessment constituents in the upper bedrock corrective action monitoring locations are summarized in Table 13. No SSLs were identified for the assessment constituents in the upper bedrock corrective action monitoring locations.

For the upper bedrock corrective action constituents listed in Table 3, SSLs over the GWPS remained for arsenic in AW-1, AW-2, MW-12, MW-13, MW-16, MW-17, MW-24, MW-30, MW-32, and MW-34; for thallium in AW-2 and MW-20; and for vinyl chloride in MW-34. While compliance with the GWPS was not achieved, statistically significant decreasing trends were identified for arsenic in AW-1, MW-12, MW-17, MW-24, MW-30, and MW-34; thallium in AW-2 and MW-20; and vinyl chloride in MW-34.

Compliance with the GWPS was achieved for cobalt in MW-35 starting with the Fall 2022 statistical evaluation and remained during the current statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), cobalt in MW-35 will return to an assessment constituent in 2025 as long as concentrations remain statistically below the GWPS during interim statistical evaluations.

Semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-12, MW-13, MW-16, MW-17, and MW-32 in Spring and Fall 2024. Annual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at AW-1, AW-2, MW-20, MW-24, MW-30, MW-34, and MW-35 in Fall 2024. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted at the corrective action monitoring locations in Fall 2025.

7.1.4 Background Monitoring

Semiannual background monitoring for the Appendix I and detected Appendix II constituents was conducted at MW-37 and MW-101A in August 2023. Semiannual background monitoring for the Appendix I and detected Appendix II constituents will be continued at MW-37 and MW-101A in Spring and Fall 2024.

7.2 Deeper Bedrock Monitoring Locations

A summary of the Fall 2023 statistical evaluation results for the deeper bedrock system is presented in Table 14.

Table 14
Summary of the Fall 2023 Evaluation - Deeper Bedrock

Monitoring Location	Monitoring Program	Current Schedule [1] (Aug. 2023)	Current SSIs	Corrective Action Constituents		Retesting Parameter	Monitoring Program Changes
				Current SSLs [2]	Achieved Compliance with GWPS		
Downgradient Monitoring Locations							
AW-6	Corrective Action	Appendix II	1,1-Dichloroethane; Barium; Nickel	Cobalt			
CRL-9	Corrective Action	Appendix II	Barium; Benzene; Nickel	Arsenic; Cobalt			
MW-11	Assessment	Appendix II					
MW-14	Corrective Action	Appendix II	1,1-Dichloroethane; 1,4-Dichlorobenzene; Barium; Benzene; Chlorobenzene; Nickel	Arsenic			
MW-15	Assessment	Appendix II	Cobalt; Nickel				
MW-18	Assessment	Appendix II					
MW-19	Assessment	Appendix II	Nickel				
MW-22	Corrective Action	Appendix II	1,1-Dichloroethane; Barium; Nickel; Thallium	Arsenic; Cobalt			
MW-25	Assessment	Appendix II	Barium; Lead; Thallium				
MW-31	Detection	Appendix I					
MW-33	Corrective Action	Appendix II	1,4-Dichlorobenzene ; Barium; Benzene; Chlorobenzene; Cobalt; Nickel	Arsenic			
MW-36	Corrective Action	Appendix II	1,4-Dichlorobenzene; Barium; Chlorobenzene; Cobalt	Arsenic			
Background Monitoring Locations							
MW-38	Background	Appendix II					
MW-101B	Background	Appendix II					
Delineation Monitoring Locations							
MW-102B	Delineation	Appendix I	Cobalt				
MW-104B	Delineation	Arsenic, TSS					
MW-105B	Delineation	Appendix I	1,1-Dichloroethane; Barium; Nickel	Cobalt			
MW-107B	Delineation	Appendix I	Barium; Cobalt; Nickel; Thallium				
MW-108B	Delineation	Appendix I without Cobalt [3]	Barium				
MW-109B	Delineation	Appendix I	Barium; Chlorobenzene; Nickel	Arsenic; Cobalt; Thallium			

[1] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Aug. 2023.

[2] Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).

7.2.1 Detection Monitoring

Annual detection monitoring for the Appendix I constituents was conducted at MW-31 in August 2023. No SSIs were identified at MW-31. The next annual detection monitoring for the Appendix I list will be conducted at MW-31 in Fall 2024.

7.2.2 Delineation Monitoring

In August 2023, semiannual delineation monitoring was conducted at MW-109B for the Appendix I constituents. In addition, annual delineation monitoring was conducted at MW-102B, MW-105B, and MW-107B for the Appendix I list, at MW-104B for arsenic, and at MW-108B for the Appendix I list without cobalt.

The SSIs identified for the assessment constituents in the deeper bedrock delineation monitoring locations are summarized in Table 14. No SSLs were identified for the assessment constituents in the deeper bedrock delineation monitoring locations.

Confidence intervals in corrective action mode were utilized to evaluate cobalt in MW-105B and arsenic, cobalt, and thallium in MW-109B (i.e., the corrective action constituents). SSLs continued to be identified for these analyte/well pairs; therefore, compliance with the GWPS has not been achieved. While compliance with the GWPS was not achieved, a statistically significant decreasing trend was identified for cobalt in MW-109B.

Semiannual delineation monitoring for the Appendix I constituents will be conducted at MW-109B in Spring and Fall 2024. In Fall 2024, annual delineation monitoring will be conducted at MW-102B, MW-105B, and MW-107B for the Appendix I list, at MW-104B for arsenic, and at MW-108B for the Appendix I list without cobalt.

7.2.3 Assessment Monitoring

In August 2023, annual assessment monitoring for Appendix I and detected Appendix II constituents was conducted at MW-11, MW-15, MW-18, MW-19, and MW-25.

The SSIs identified at the deeper bedrock assessment monitoring locations are summarized in Table 14. No SSLs were identified in the deeper bedrock assessment monitoring locations.

The Fall 2023 statistical evaluation did not identify deeper bedrock assessment monitoring locations with all Appendix II constituents below the interwell prediction limit or laboratory reporting limit for three consecutive sampling events. As a result, none of the deeper bedrock locations may exit assessment monitoring at this time.

Annual assessment monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-11, MW-15, MW-18, MW-19, and MW-25 in Fall 2024. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted at the assessment monitoring locations in Fall 2025.

7.2.4 Corrective Action Monitoring

In August 2023, semiannual corrective action monitoring was conducted at MW-14 and MW-33, and annual corrective action monitoring was conducted at AW-6, CRL-9, MW-22, and MW-36 for the Appendix I and detected Appendix II constituents.

The SSIs identified for the assessment constituents in the deeper bedrock corrective action monitoring locations are summarized in Table 14. No SSLs were identified for the assessment constituents in the deeper bedrock corrective action monitoring locations.

For the deeper bedrock corrective action constituents listed in Table 3, SSLs continued to be identified for arsenic in CRL-9, MW-14, MW-22, MW-33, and MW-36; and for cobalt in AW-6, CRL-9, and MW-22.

Semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-14 and MW-33 in Spring and Fall 2024. Annual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at AW-6, CRL-9, MW-22, and MW-36 in Fall 2024. In accordance with Permit Amendment #6, the next five-year resampling for the full Appendix II list will be conducted at the corrective action monitoring locations in Fall 2025.

7.2.5 Background Monitoring

Semiannual background monitoring for the Appendix I and detected Appendix II constituents was conducted at MW-38 and MW-101B in August 2023. Semiannual background monitoring for the Appendix I and detected Appendix II constituents will be continued at MW-38 and MW-101B in Spring and Fall 2024.

Attachment 1
Detailed Discussion of Statistical Methods

Foth

Memorandum

Statistical Methodology

1. Comparison to Background

For determining which parameters will need a formal statistical treatment, the Unified Guidance (USEPA, 2009) suggests splitting monitoring parameters into three distinct groups: a) reliable indicators selected for formal testing; b) other analytes which are monitored for general groundwater quality information but not statistically tested; and c) those meeting the "never-detected" criteria. Only those parameters with some historically detected presence in background need to be included in the first group and treated with a formal statistical test. Any parameter that has never been detected in background is eligible for the third group of "never-detected" constituents. Constituents with detections below the reporting limit (J-flagged data) will be considered "never-detected." As a means of evaluating the third group, the Unified Guidance suggests the Double Quantification Rule (DQR). The DQR is stated in the Unified Guidance as:

"A confirmed exceedance is registered if any well-constituent pair in the '100% non-detect' group exhibits quantified measurements [i.e., at or above the reporting limit (RL)] in two consecutive sample and resample events."

The Unified Guidance also recommends establishing background sample sizes as large as feasible. The guidance recognizes that small sample sizes in background can be "particularly" troublesome, especially in controlling statistical test false positive and negative rates. With parametric tests (such as parametric prediction limits), the false positive rate may be controlled, but at the expense of statistical power. With non-parametric tests (such as non-parametric prediction limits or the "quasi-statistical" DQR), the false positive rate may be unacceptably high. The Unified Guidance suggests that generally at least 8 to 10 separate background measurements be available, recognizing that statistical power continues to increase with larger sample sizes.

In reports prior to the *2011 Annual Water Quality Report* (Foth, 2012), the ANOVA and a "2x2 contingency table" methods were used to evaluate statistically significant increases (SSIs) over background. These methods met the criteria of 567 Iowa Administrative Code (IAC) 113.10(4)g and h. The ANOVA and "2x2 contingency table" methods were used to maximize the statistical power while minimizing potentially large false positive rates as a result of the smaller sample sizes.

Starting with the *2011 Annual Water Quality Report* (Foth, 2012), the statistical analysis methods utilized for comparison to background were the DQR and "1-of-3" interwell prediction limits as recommended in the Unified Guidance (USEPA, 2009). Note that a "1-of-2" retesting plan was not selected as it would have resulted in a 'low' effective statistical power level for the site based on USEPA reference power curves as defined in the Unified Guidance.

Starting with the Spring 2021 statistical evaluation, the interwell prediction limit retesting plan was modified to a "1-of-2" plan. With increases in the number of background samples, a "1-of-2" plan was able to achieve a 'good' effective statistical power level for the site based on the USEPA reference power curves.

Expansion of the Background Data Set

The background data set was modified in 2013 to add MW-101A and MW-101B to the upper bedrock and deeper bedrock background data sets, respectively. The statistical analysis methods continued the DQR and "1-of-2" interwell prediction limits as recommended in the Unified Guidance (USEPA, 2009), utilizing the pooled data from MW-37 and MW-101A for the upper bedrock system and MW-38 and MW-101B for the deeper bedrock system.

Double Quantification Rule

The DQR will be used to evaluate SSIs over background for the Appendix I and II constituents that were not detected above the reporting limit in the background data sets. An SSI will be indicated for any well-constituent pair with quantified measurements at or above the reporting limit noted for two consecutive sample and resample events. If applicable, the resample will be collected prior to next semiannual sampling event.

Interwell Prediction Limits

Interwell prediction limits will be used to statistically evaluate SSIs over background for the Appendix I and II constituents which have been detected above the reporting limit in the background data set. A "1-of-2" retesting plan will be utilized on individual sample results. The 1-of-2 retesting plan as defined in the Unified Guidance concludes that an SSI has occurred when two out of two sample results exceed the prediction limit, while no SSI is concluded if 1-of-2 are below the limit. If applicable, the resample will be collected prior to next semiannual sampling event. The prediction limit for each constituent will be recalculated semiannually.

For interwell constituents with less than or equal to 50% detects in the background data set, a non-parametric prediction limit will be utilized. The non-parametric prediction limit will be taken as the maximum order statistic (maximum value) of the background data.

For interwell constituents with greater than 50% detects in the background data set, normality assumptions will be verified using the Shapiro-Wilk normality test. If the background data is not normally distributed, a non-parametric prediction limit will be utilized (as described in the paragraph above). If the background data is normally distributed or can be fit to a normal distribution utilizing a normalizing transformation, then a normal-based parametric prediction limit will be applied.

When considering a lognormal prediction limit, a comparison will be made to the maximum order statistic for the background data set. Lognormal prediction limits can be sensitive to smaller departures from lognormality. That is, if data are not truly lognormal, but also not rejected as lognormal, the prediction limit may be inflated because of the transformation. In choosing a lognormal limit, in addition to the percent detections and lognormal goodness of fit criteria, an additional convention will be applied. If the lognormal limit exceeds the level of twice the maximum background concentration, it is assumed that the lognormal model does not adequately fit the background distribution and a non-parametric prediction limit will be selected.

For interwell constituents with 50% to 85% detects in the background data set, Kaplan-Meier estimation will be applied to manage statistical bias introduced by non-detects. For interwell constituents with over 85% detects in the background data set, half the reporting limit will be used for non-detect data. These estimation methods follow Unified Guidance recommendations and are given in detail in Unified Guidance Chapter 15 (USEPA, 2009).

The parametric prediction limit will be calculated as:

$$PL = \bar{x} + k \cdot s$$

where $\bar{x}$ is the sample mean of the August 2008 through current event background data, *s* is the sample standard deviation, and *k* is the multiplier obtained from the Unified Guidance Table 19-1 (USEPA, 2009) for 1-of-2 interwell prediction limits on observations. In determining *k*, the number of constituents of concern (COCs) for formal statistical evaluation along with the number of downgradient wells need to be identified. Per the basic subdivision discussion presented in Section 19.2.1 of the Unified Guidance, along with the discussion regarding the use of the appendix tables for parametric retesting plans given on pages 19-13 through 19-15 of the Unified Guidance (USEPA, 2009), the *k*-multiplier is chosen based on the number of constituents, wells, and evaluations performed annually. When an exact well and COC configuration is not given in the appendix tables, the *k*-multiplier is linearly interpolated as described on page 19-14 of the Unified Guidance (USEPA, 2009).

Sanitas® v10.0. software (Sanitas Technologies) will be used to check distributional assumptions, perform Kaplan-Meier in the case of 50% to 85% detects in the background data set, and calculate the *k*-multipliers and subsequent prediction limits.

Intrawell Prediction Limits

Intrawell prediction limits are calculated in a similar manner to that described above for the interwell case. A main difference between the two methods is the intrawell limit is calculated from a collection of background measurements within the compliance well. A minimum of eight compliance well background samples will be used when calculating the limit.

A second difference is for the parametric prediction limit, in which the *k*-multiplier is modified from the interwell case, as given in Appendix D Tables 19-10 through 19-18 of the Unified Guidance (USEPA, 2009).

Updating intrawell background is performed periodically. The Unified Guidance (Section 5.3.2) recommends that 4 to 8 new compliance observations be collected prior to updating the background dataset. The guidance also states that "a potential update is predicated on there being no statistically significant increase [SSI] recorded for that well constituent, including since the last update." A two-sample t-test or Wilcoxon rank-sum test between existing intrawell background data and the potential set of newer background data is performed, and a non-significant result (α = 0.05) implies that the newer compliance data can be re-classified as background measurements.

For Wilcoxon rank-sum tests, non-detect results cannot be ranked with certainty and the problem is compounded with multiple PQLs and/or J-flagged values (USEPA, 2009). In comparisons where a substantial fraction of non-detect and/or J-flagged measurements or changing PQLs occur, professional judgment will be utilized for evaluating significant differences between the existing intrawell background data and the potential newer set of background data. Consideration will be given to whether significant differences are due to artificial variation introduced by censored data.

2. Comparison to Groundwater Protection Standard – Assessment Monitoring

According to 567 IAC 113.10(6)f and g, under the assessment monitoring program Appendix II results which have been determined to be statistically above background are also statistically compared to the GWPS. If "Appendix II constituents are detected at statistically significant levels above the GWPS" a notice is placed in the operating record and characterization is begun.

Under 567 IAC 113.10(6)h, the GWPS is the maximum contaminant level (MCL) promulgated under Section 1412 of the Safe Drinking Water Act in 40 Code of Federal Regulations (CFR) Part 141. If no MCL exists, or if background concentrations are higher than the MCL, the GWPS is defined as background. Also, per 567 IAC 113.10(6)i, an alternative GWPS may be established by the department for constituents for which there is no MCL such as the "health-based concentrations that comply with the statewide standards for groundwater established pursuant to 567 IAC Chapter 137."

When the GWPS is background concentrations, the statistical methods discussed in the above "1. Comparison to Background" are used. When the GWPS is the MCL or an alternative health-based concentration, per the Unified Guidance (USEPA, 2009), "confidence intervals are the recommended general statistical strategy in compliance/assessment or corrective action monitoring." In the case of normally distributed data, a normal-based parametric confidence interval is used. If the data are not normally distributed a non-parametric confidence interval on the median is used. A lower 99% confidence limit falling above the GWPS implies that concentrations are detected at statistically significant levels above the GWPS with an α-level of 0.01, which is the minimum RCRA regulatory limit from §264.97(i)(2) for an individual test false positive error rate.

The Unified Guidance recognizes that statistical power is also of prime concern to USEPA and that there "should be a high probability that the statistical test will positively identify concentrations that have exceeded a fixed regulatory standard." In compliance/assessment monitoring, instead of pre-specifying the false positive rate prior to computing confidence interval limits, the Unified Guidance suggests the desired level of power (1-β) should be set as an initial target.

For compliance/assessment monitoring purposes, the Unified Guidance (Chapter 22) suggests evaluating increases in the true concentration mean of 1.5 and 2.0 times a fixed standard. (This is similar in concept to the critical power targets in detection monitoring, i.e., 55-60% power at 3σ above background and 80-85% power at 4σ over background). As a general guide, the Unified Guidance suggests there should be at least 70-80% statistical power for detecting increases of 2 times a fixed standard. Specifically, the Unified Guidance recommends there be 50% power of detecting increases in the true concentration mean of 1.5 times a fixed standard (risk ratio of 1.5) and 80% power of detecting increases in the true concentration mean of 2.0 times a fixed standard (risk ratio of 2.0).

To meet these levels of statistical power, α is chosen based on either Unified Guidance Equation 22.1:

$$1 - \beta = G_{T,n-1}\left(t_{1-\alpha,n-1}\middle|\Delta - \sqrt{n}(R-1)\right);$$

where R is the desired risk ratio, $t_{(1-\alpha,n-1)}$ is the (1−α) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter Δ;

or Unified Guidance Equation 22.2:

$$\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right);$$

where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{(1-\beta,n-1)}$ is the (1−β) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

The first equation (Unified Guidance Equation 22.1) assumes a coefficient of variation (CV) =1. This version is used if only poorer estimates of the true CV are available. In practice, a convention has been adopted with the statistical updates to utilize Unified Guidance Equation 22.2 in all cases where a parametric confidence interval is calculated and use Unified Guidance Equation 22.1 when non-parametric confidence intervals are calculated. Since a non-parametric confidence interval is based on the median, it is not as sensitive to departures from normality, and the assumption of a CV=1 in Unified Guidance Equation 22.1 should provide a conservative estimate.

Since 0.01 is the minimum RCRA regulatory limit for α, it is never set lower than this. Conversely, the Unified Guidance recognizes the "difficulty of simultaneously attaining the recommended level of power while controlling the false positive rate, especially for small sample sizes and highly variable data." The Unified Guidance suggests a maximum false positive rate of α=0.2 is a reasonable upper bound.

Finally, like the need for defining a SWFPR under detection monitoring, the Unified Guidance (Chapter 7) recognizes there may be concern about the "use of relatively high individual test-wise false positive rates (α) in order to meet a pre-specified power, especially when considering the cumulative false positive error rate across multiple wells and/or constituents." However, "the Unified Guidance considers computation of cumulative SWFPRs in compliance/assessment testing to be problematic, and reliance on individual test false positive rates preferable." Notwithstanding, if several confidence limit calculations are compared to the GWPS with high α-levels, caution should be taken in the interpretation.

For calculation of confidence intervals, Sanitas® v10.0 software is again used to check distributional assumptions, perform Kaplan-Meier estimation in the case of 50% to 85% detects, and calculate either parametric or nonparametric confidence limits.

3. Comparison to Groundwater Protection Standard – Corrective Action Monitoring

As stated above, if "Appendix II constituents are detected at statistically significant levels above the GWPS" a notice is placed in the operating record and characterization is begun. Owners or operators are required to initiate an assessment of corrective measures, select a remedy, and implement a remedy in accordance with 567 IAC 113.10(7), (8), and (9). For remedy completion in accordance with 567 IAC 113.10(9)e(2), compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS

for a period of three consecutive years or an alternate length of time established by the Department.

Starting with the Fall 2019 statistical evaluation, individual analyte/well pairs may return to assessment constituents (at the corrective action monitoring location) once compliance with the GWPS has been achieved for a period of 3 years. Note that monitoring wells will not move out of the corrective action monitoring program until all Appendix II constituents have achieved compliance with the GWPS for a period of three consecutive years.

Confidence Intervals in Corrective Action Mode

In the case of the GWPS being a fixed standard as either the 40 CFR Part 141 Safe Drinking Water Act MCL or the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source, "confidence intervals are the recommended general statistical strategy in compliance/assessment or corrective action monitoring" (USEPA, 2009). However, a primary difference between confidence intervals as used under assessment monitoring and confidence intervals used under corrective action is reversal of the null hypothesis. As detailed in Section 7.2 of the Unified Guidance (USEPA, 2009), the hypothesis testing structure under assessment monitoring is to presume compliance point concentrations do not to exceed the fixed standard unless sampling data indicates otherwise. As a formal statistical hypothesis, this is written as:

$$H_0: \Theta \leq G \quad \text{vs.} \quad H_A: \Theta > G$$

In corrective action mode, the hypothesis is reversed. Namely, compliance point concentrations are presumed to exceed the fixed standard and evidence must be presented to demonstrate regulatory compliance. In the case of corrective action, the statistical hypothesis is written as:

$$H_0: \Theta > G \quad \text{vs.} \quad H_A: \Theta \leq G$$

For testing under assessment monitoring, a lower confidence limit (LCL) is compared to the compliance standard *G*. If the LCL is larger than the standard *G*, it is concluded that the compliance standard has been violated.

However, under corrective action monitoring, the upper confidence limit (UCL) is compared to the compliance standard G. In this case, the UCL should lie below the standard to accept the alternative hypothesis that concentration levels are in compliance.

The UCL α-level under corrective action monitoring is set so that a high degree of confidence is achieved in declaring successful remediation. Per the Unified Guidance (Section 7.4.2) "USEPA's overriding concern in corrective action is that remediation efforts are not declared successful without sufficient statistical proof." The Unified Guidance "recommends the use of a reasonably low, fixed test-wide false positive rate (e.g., α = 0.05 or 0.10)." In this case, α = 0.10 corresponds to a 90% UCL.

GWPS as Background

Pursuant to 567 IAC 113.10(6)h, when background concentrations of an analyte exceed the applicable MCL or 567 IAC Statewide Standard for a Protected Groundwater Source, the GWPS is the background concentration. In this case, the GWPS is not a fixed standard but based on a distribution of background sample results.

Section 7.5 of the Unified Guidance (USEPA, 2009) details statistical hypothesis testing under corrective action when the GWPS is background. The Unified Guidance offers two alternative statistical approaches to hypothesis testing in this case. These alternatives are as follows:

A. The first represents a *two-sample* test of two distinct populations, namely the compliance well to background populations. Similar to the statistical tests used under detection and assessment monitoring, with this alternative under corrective action, the Unified Guidance states that "one highly recommended statistical test approach is a prediction limit." The Unified Guidance also states, "whatever the critical value for a selected background test, it becomes the GWPS under compliance/assessment or corrective action monitoring." Further, "the only allowable hypothesis test structure for the two-sample approach follows that of detection and compliance monitoring. Once exceeded and in corrective action, a return to compliance is through evidence that future samples lie below the GWPS using the same hypothesis structure." Therefore, with this approach in corrective action, prediction limits are calculated similarly as in assessment monitoring. Compliance well concentrations below a prediction limit indicate a return to concentrations below the background GWPS.

B. The second involves computation of a fixed statistic from the background data as the GWPS. The Unified Guidance recommendation in this case is to define a fixed GWPS based on a background upper tolerance limit with 95% confidence and 95% coverage. This is designed to be a "reasonable maximum on the likely range of background concentrations." This upper tolerance limit based on background data is then used as a fixed standard in statistical comparisons with 90% or 95% UCLs from compliance wells as discussed previously. Also, with the UCL method, the null hypothesis is reversed from that of assessment monitoring, assuming contamination is above the GWPS. A UCL falling below the background GWPS offers evidence of a return to concentrations below the GWPS. The Unified Guidance refers to this approach as a *single-sample* testing method, since the compliance well population is tested against a defined fixed standard.

The Unified Guidance discusses tradeoffs between the two approaches and does not necessarily prescribe either approach over the other. The Unified Guidance suggests that both approaches may be used, where "the background GWPS would be a range based on the two testing methods rather than a single value."

Normality

For calculation of confidence intervals, Sanitas® v10.0 software is again used to check distributional assumptions, perform Kaplan-Meier estimation in the case of 50% to 85% detects, and calculate either parametric or nonparametric confidence limits. "Corrective Action Mode" is selected for this analysis.

Non-Corrective Action Constituents

As recommended in the Unified Guidance (USEPA, 2009), confidence intervals in corrective action mode will be utilized to evaluate only constituents and monitoring locations with previously identified SSLs over the GWPS. Other compliance constituents (i.e., those without SSLs over the GWPS during prior statistical evaluations) will continue to be evaluated using the "1. Comparison to Background" and "2. Comparison to Groundwater Protection Standard – Assessment Monitoring" methods described above.

Note: The Unified Guidance (USEPA, 2009) states: "it should be recognized that once corrective action or remediation activities are initiated, there will be a considerable time during which the GWPS may still be exceeded. As provided in the RCRA regulations, it is at the conclusion of remediation activities that formal corrective action monitoring evaluation is appropriate. However, in the intervening period of remedial activity, well constituents can still be monitored, and the relative efficacy of remediation measures tracked. The same corrective action hypothesis can be assumed for the targeted constituents; techniques such as trend testing may be appropriate interim applications." Given the statement above and the intentions of 567 IAC 113.10(6)g, as soon as an SSL is identified for an assessment monitoring constituent/location, then the next statistical evaluation will utilize corrective action monitoring (confidence intervals in corrective action mode).

Data Concentration Shifts During Corrective Action

Confidence intervals assume that the population is stable over time. As a result, confidence intervals may not accurately represent the current well concentrations if increasing or decreasing trends are observed (i.e., during a release or under active remediation). Per the Unified Guidance (USEPA, 2009), lower or upper confidence limits constructed on accumulated data may be overly wide (due to high sample variability caused by combining pre- and post-shift data) and may not be reflective of more recent upward/downward shifts in the contaminant distribution.

Alternative procedures may be applied to data sets with shifting distributions. For example, where trends tests are significant, pre-shift data may be removed from the well/parameter data set for the purposes of constructing the confidence interval. "The reduction in sample size will often be more than offset by the gain in statistical power. More recent measurements may exhibit less variation around the shifted mean value, resulting in a shorter confidence interval" (USEPA, 2009).

Another alternative is to construct confidence bands around the trend line to track progress towards exceeding or meeting a fixed standard. As suggested in the Unified Guidance (Chapter 22), if a trend is present, a 90% confidence band (upper 95% confidence limit) is placed on the linear trend line. If the upper 95% confidence limit on the trend line falls below the GWPS, the well is found to have reduced to levels statistically below the GWPS.

As the discussed in the Unified Guidance, "inferences concerning a linear regression are generally appropriate when two conditions hold: 1) the residuals from the regression are approximately normal or at least reasonably symmetric in distribution; and 2) a plot of residuals versus concentrations indicates a scatter cloud of essentially uniform vertical thickness or width." These conditions are assessed through normal probability plots of the regression residuals and plots of residuals against the predicted concentrations.

Data Adjustments Due to Exiting Corrective Action

When analyte/well pairs exit corrective action and return to assessment constituents, the hypothesis testing structure is reversed again. In corrective action mode, compliance point concentrations were presumed to exceed the GWPS, and evidence must be presented to demonstrated regulatory compliance (i.e., UCLs below the GWPS for three consecutive years). With the return to assessment constituents, analyte/well pairs have demonstrated regulatory compliance. The hypothesis testing structure reverts to the assessment monitoring structure where compliance point concentrations are presumed to not exceed the GWPS unless sampling

data indicates otherwise (i.e., LCL is above the GWPS). With this reversion in hypothesis, the focus shifts to evaluating concentration changes in the analyte/well pair that would indicate an increase over the GWPS and re-trigger corrective action. For constituents with historical SSLs, earlier concentrations that had previously triggered corrective action are no longer providing useful information regarding the current assessment monitoring hypothesis. Retaining the historical data during the timeframe in which the GWPS was exceeded will result in the regression or confidence interval methods being slower to respond to new increases. As a result, the historical data prior to when statistical compliance with the GWPS was first achieved will be removed when analyte/well pairs exit corrective action and return to assessment constituents.

Attachment 2
Sanitas Report Output for Prediction Limit Calculations

Upper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	MW-105A	0.00739	8/23/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-106A	0.00739	8/22/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-107A	0.00739	8/22/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-109A	0.00739	8/24/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-105A	0.00205	8/23/2023	0.00142J	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-107A	0.00205	8/22/2023	0.001ND	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-109A	0.00205	8/24/2023	0.00055J	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-105A	0.1166	8/23/2023	0.0734	No	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-106A	0.1166	8/22/2023	0.11	No	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-107A	0.1166	8/22/2023	0.131	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-109A	0.1166	8/24/2023	0.196	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-107A	0.008	8/22/2023	0.00063	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-109A	0.008	8/24/2023	0.000296J	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Copper (mg/L)	MW-105A	0.0225	8/23/2023	0.00876	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-106A	0.0225	8/22/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-107A	0.0225	8/22/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-109A	0.0225	8/24/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-105A	0.00695	8/23/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-106A	0.00695	8/22/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-107A	0.00695	8/22/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-109A	0.00695	8/24/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-105A	0.0522	8/23/2023	0.0134	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-106A	0.0522	8/22/2023	0.0168	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-107A	0.0522	8/22/2023	0.0109	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-109A	0.0522	8/24/2023	0.0025ND	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-105A	0.0805	8/23/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-106A	0.0805	8/22/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-107A	0.0805	8/22/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-109A	0.0805	8/24/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Assessment Monitoring Locations													
Antimony (mg/L)	AW-3	0.00739	8/23/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	AW-4	0.00739	8/22/2023	0.00104J	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	AW-5	0.00739	8/28/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-21	0.00739	8/28/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-23	0.00739	8/28/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-26	0.00739	8/30/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-28	0.00739	8/30/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	VP-3	0.00739	8/22/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	VP-4	0.00739	8/22/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	AW-3	0.00205	8/23/2023	0.00513	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	AW-4	0.00205	8/22/2023	0.00163J	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	AW-5	0.00205	8/28/2023	0.0133	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-21	0.00205	8/28/2023	0.0371	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-23	0.00205	8/28/2023	0.000545J	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-26	0.00205	8/30/2023	0.00112J	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-28	0.00205	8/30/2023	0.001ND	No	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	VP-3	0.00205	8/22/2023	0.0089	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2

Upper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations Continued													
Arsenic (mg/L)	VP-4	0.00205	8/22/2023	0.00296	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Barium (mg/L)	AW-3	0.1166	8/23/2023	0.0619	No	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	AW-4	0.1166	8/22/2023	0.103	No	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	AW-5	0.1166	8/28/2023	0.255	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-21	0.1166	8/28/2023	0.333	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-23	0.1166	8/28/2023	0.148	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-26	0.1166	8/30/2023	0.139	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-28	0.1166	8/30/2023	0.155	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	VP-3	0.1166	8/22/2023	0.682	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	VP-4	0.1166	8/22/2023	0.0677	No	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	AW-3	0.008	8/23/2023	0.00025ND	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	AW-4	0.008	8/22/2023	0.00282	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	AW-5	0.008	8/28/2023	0.00292	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-21	0.008	8/28/2023	0.00424	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-23	0.008	8/28/2023	0.00234	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-26	0.008	8/30/2023	0.00025ND	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-28	0.008	8/30/2023	0.00025ND	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	VP-3	0.008	8/22/2023	0.000232J	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	VP-4	0.008	8/22/2023	0.00025ND	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Copper (mg/L)	AW-3	0.0225	8/23/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	AW-4	0.0225	8/22/2023	0.0378	Yes	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	AW-5	0.0225	8/28/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-21	0.0225	8/28/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-23	0.0225	8/28/2023	0.0021J	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-26	0.0225	8/30/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-28	0.0225	8/30/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	VP-3	0.0225	8/22/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	VP-4	0.0225	8/22/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Lead (mg/L)	AW-3	0.00695	8/23/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	AW-4	0.00695	8/22/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	AW-5	0.00695	8/28/2023	0.00076	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-21	0.00695	8/28/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-23	0.00695	8/28/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-26	0.00695	8/30/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-28	0.00695	8/30/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	VP-3	0.00695	8/22/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	VP-4	0.00695	8/22/2023	0.000288J	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Nickel (mg/L)	AW-3	0.0522	8/23/2023	0.0025ND	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	AW-4	0.0522	8/22/2023	0.0223	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	AW-5	0.0522	8/28/2023	0.0083	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-21	0.0522	8/28/2023	0.0573	Yes	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-23	0.0522	8/28/2023	0.0291	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-26	0.0522	8/30/2023	0.0025ND	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-28	0.0522	8/30/2023	0.0025ND	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	VP-3	0.0522	8/22/2023	0.0025ND	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	VP-4	0.0522	8/22/2023	0.0025ND	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Tin (mg/L)	AW-3	0.152	8/23/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2

Upper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations Continued													
Tin (mg/L)	MW-21	0.152	8/28/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-23	0.152	8/28/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-26	0.152	8/30/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	AW-3	0.0805	8/23/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	AW-4	0.0805	8/22/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	AW-5	0.0805	8/28/2023	0.00717J	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-21	0.0805	8/28/2023	0.0627	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-23	0.0805	8/28/2023	0.1	Yes	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-26	0.0805	8/30/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-28	0.0805	8/30/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	VP-3	0.0805	8/22/2023	0.00734J	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	VP-4	0.0805	8/22/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Corrective Action Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	AW-1	0.00739	8/28/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	AW-2	0.00739	8/22/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-12	0.00739	8/24/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-13	0.00739	8/22/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-16	0.00739	8/23/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-17	0.00739	8/29/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-20	0.00739	8/28/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-24	0.00739	8/30/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-30	0.00739	8/29/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-32	0.00739	8/29/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-34	0.00739	8/24/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-35	0.00739	8/28/2023	0.001ND	No	48	n/a	n/a	81	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-20	0.00205	8/28/2023	0.00565	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-35	0.00205	8/28/2023	0.00536	Yes	49	n/a	n/a	80	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Barium (mg/L)	AW-1	0.1166	8/28/2023	0.153	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	AW-2	0.1166	8/22/2023	0.438	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-12	0.1166	8/24/2023	0.417	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-13	0.1166	8/22/2023	0.794	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-16	0.1166	8/23/2023	0.0678	No	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-17	0.1166	8/29/2023	0.134	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-20	0.1166	8/28/2023	0.15	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-24	0.1166	8/30/2023	0.758	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-30	0.1166	8/29/2023	0.203	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-32	0.1166	8/29/2023	0.918	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-34	0.1166	8/24/2023	0.373	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Barium (mg/L)	MW-35	0.1166	8/28/2023	0.167	Yes	45	-3.099	0.4083	0	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	AW-1	0.008	8/28/2023	0.00202	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	AW-2	0.008	8/22/2023	0.00177	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-12	0.008	8/24/2023	0.00393	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-13	0.008	8/22/2023	0.00155	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-16	0.008	8/23/2023	0.00182	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-17	0.008	8/29/2023	0.00649	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-20	0.008	8/28/2023	0.00176	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-24	0.008	8/30/2023	0.000395J	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2

Upper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents Continued													
Cobalt (mg/L)	MW-30	0.008	8/29/2023	0.00074	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-32	0.008	8/29/2023	0.00238	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-34	0.008	8/24/2023	0.00377	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Copper (mg/L)	AW-1	0.0225	8/28/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	AW-2	0.0225	8/22/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-12	0.0225	8/24/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-13	0.0225	8/22/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-16	0.0225	8/23/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-17	0.0225	8/29/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-20	0.0225	8/28/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-24	0.0225	8/30/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-30	0.0225	8/29/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-32	0.0225	8/29/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-34	0.0225	8/24/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-35	0.0225	8/28/2023	0.0025ND	No	48	n/a	n/a	94	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Lead (mg/L)	AW-1	0.00695	8/28/2023	0.000974	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	AW-2	0.00695	8/22/2023	0.00201	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-12	0.00695	8/24/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-13	0.00695	8/22/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-16	0.00695	8/23/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-17	0.00695	8/29/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-20	0.00695	8/28/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-24	0.00695	8/30/2023	0.00058	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-30	0.00695	8/29/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-32	0.00695	8/29/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-34	0.00695	8/24/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-35	0.00695	8/28/2023	0.00025ND	No	47	n/a	n/a	77	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Nickel (mg/L)	AW-1	0.0522	8/28/2023	0.0332	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	AW-2	0.0522	8/22/2023	0.0145	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-12	0.0522	8/24/2023	0.0682	Yes	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-13	0.0522	8/22/2023	0.0132	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-16	0.0522	8/23/2023	0.0452	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-17	0.0522	8/29/2023	0.013	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-20	0.0522	8/28/2023	0.0218	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-24	0.0522	8/30/2023	0.00782	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-30	0.0522	8/29/2023	0.0118	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-32	0.0522	8/29/2023	0.02	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-34	0.0522	8/24/2023	0.064	Yes	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-35	0.0522	8/28/2023	0.0249	No	48	n/a	n/a	58	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-12	0.152	8/24/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-20	0.152	8/28/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-24	0.152	8/30/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-30	0.152	8/29/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-32	0.152	8/29/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-34	0.152	8/24/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-35	0.152	8/28/2023	0.0025ND	No	50	n/a	n/a	96	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	AW-1	0.0805	8/28/2023	0.0261	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2

Upper Bedrock

Interwell Prediction Limit [(1)]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents Continued													
Zinc (mg/L)	AW-2	0.0805	8/22/2023	0.0312	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-12	0.0805	8/24/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-13	0.0805	8/22/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-16	0.0805	8/23/2023	0.0537	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-17	0.0805	8/29/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-20	0.0805	8/28/2023	0.082	Yes	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-24	0.0805	8/30/2023	0.0138J	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-30	0.0805	8/29/2023	0.0833	Yes	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-32	0.0805	8/29/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-34	0.0805	8/24/2023	0.01ND	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-35	0.0805	8/28/2023	0.0324	No	50	n/a	n/a	86	n/a	n/a	0.0007026	NP Inter (NDs) 1 of 2

[(1)] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-37 and MW-101A data set. Note that background data set adjustments were incorporated in accordance with Section 3.1 of the Fall 2023 Statistical Evaluation memo.

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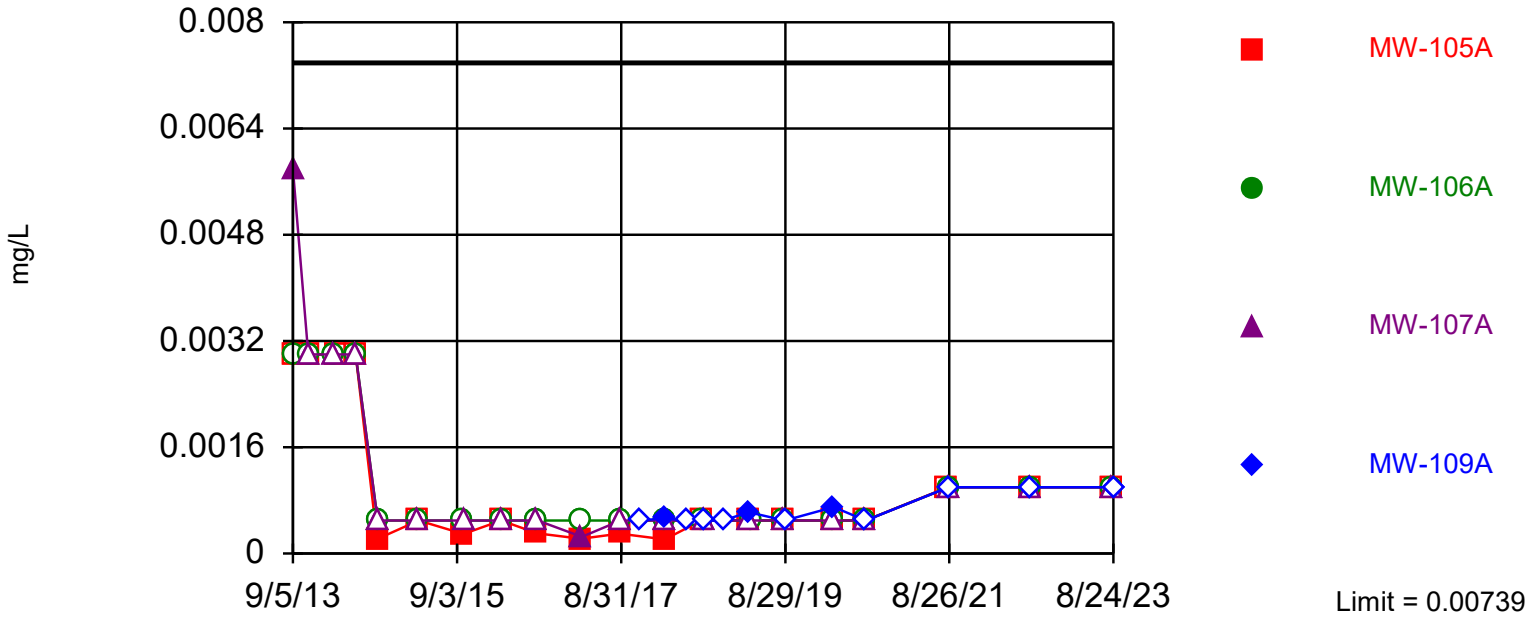
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring

Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 81.25% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Antimony Analysis Run 11/10/2023 2:51 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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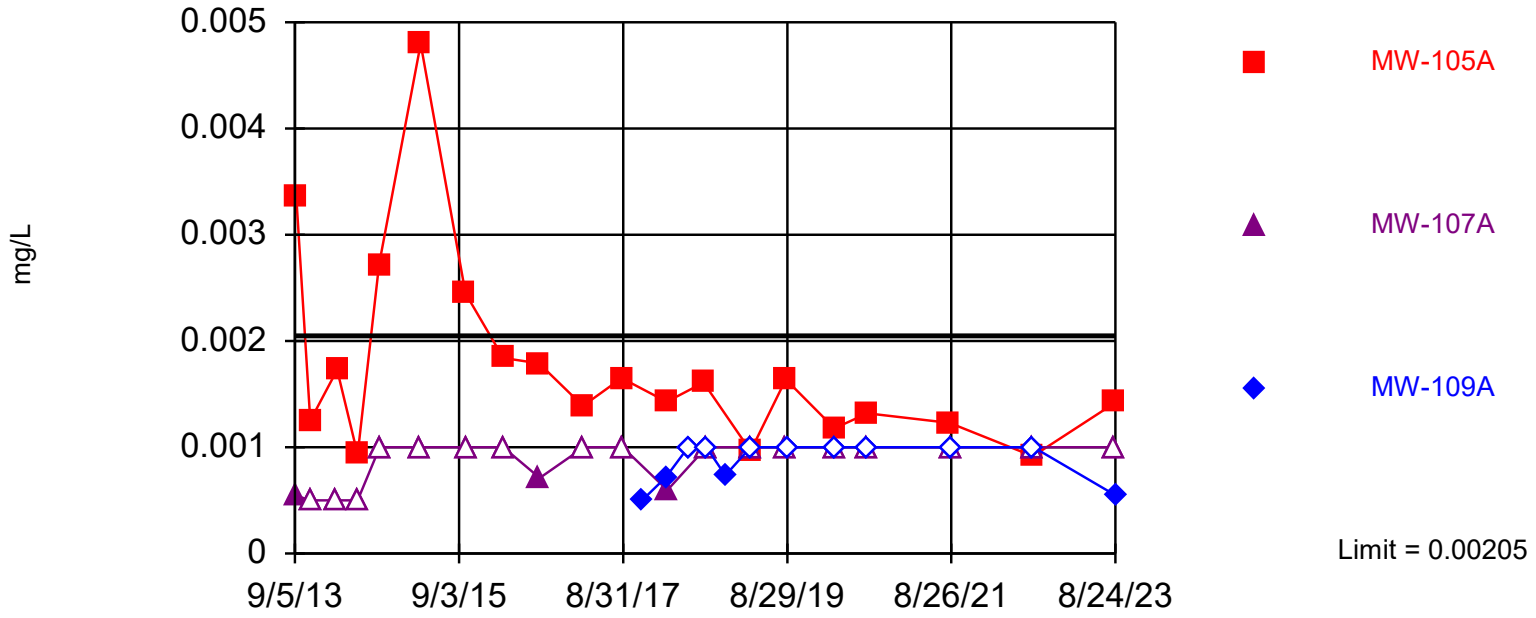
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring
Interwell Non-parametric - Assessment Contituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 79.59% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/10/2023 2:51 PM

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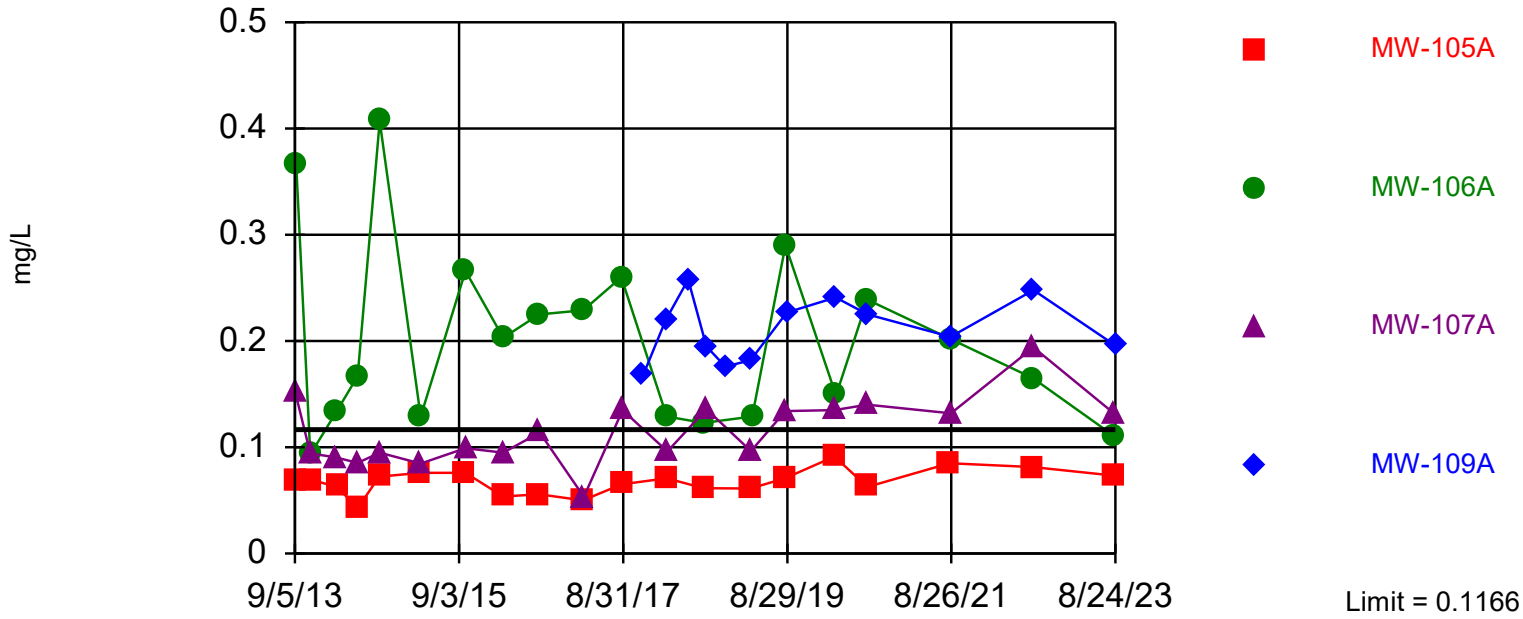
Exceeds Limit: MW-107A, MW-109A

Prediction Limit - Delineation Monitoring

Interwell Parametric - Assessment Constituents



Background Data Summary (based on natural log transformation): Mean=-3.099, Std. Dev.=0.4083, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.926. Kappa = 2.326 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 11/10/2023 2:51 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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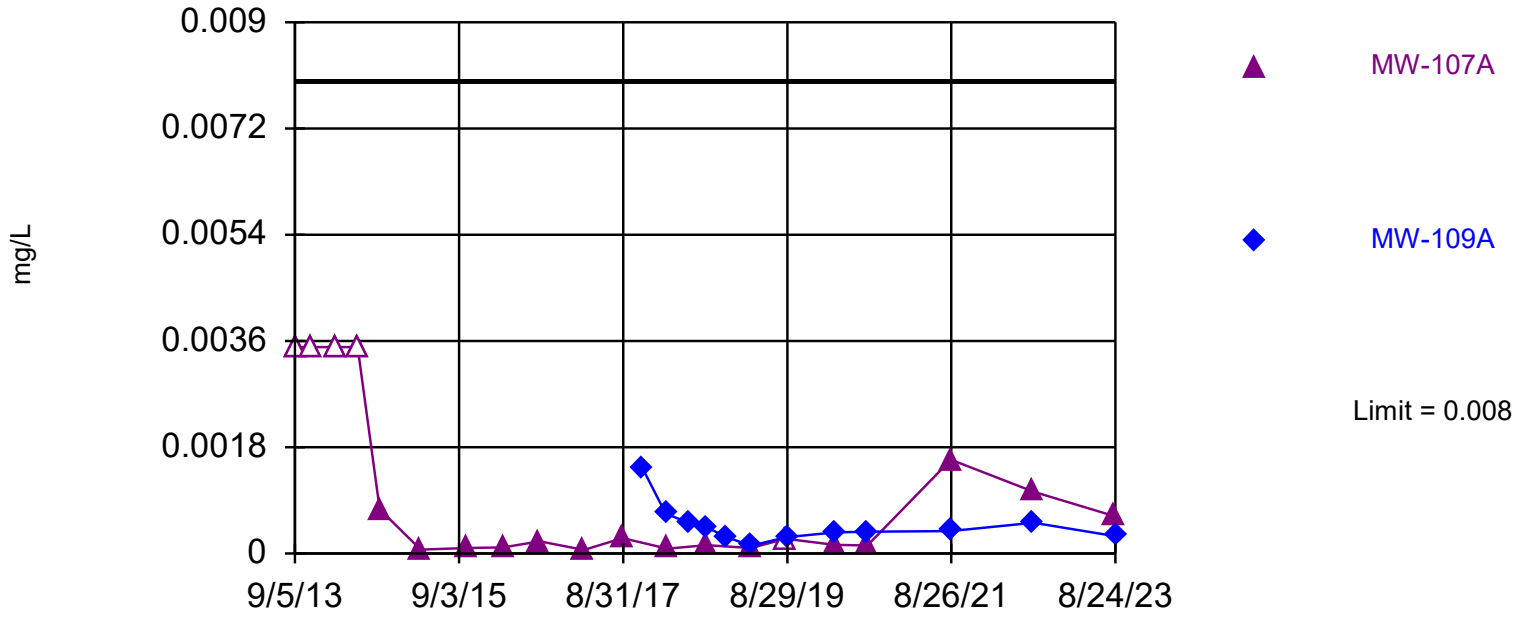
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring
Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/10/2023 2:51 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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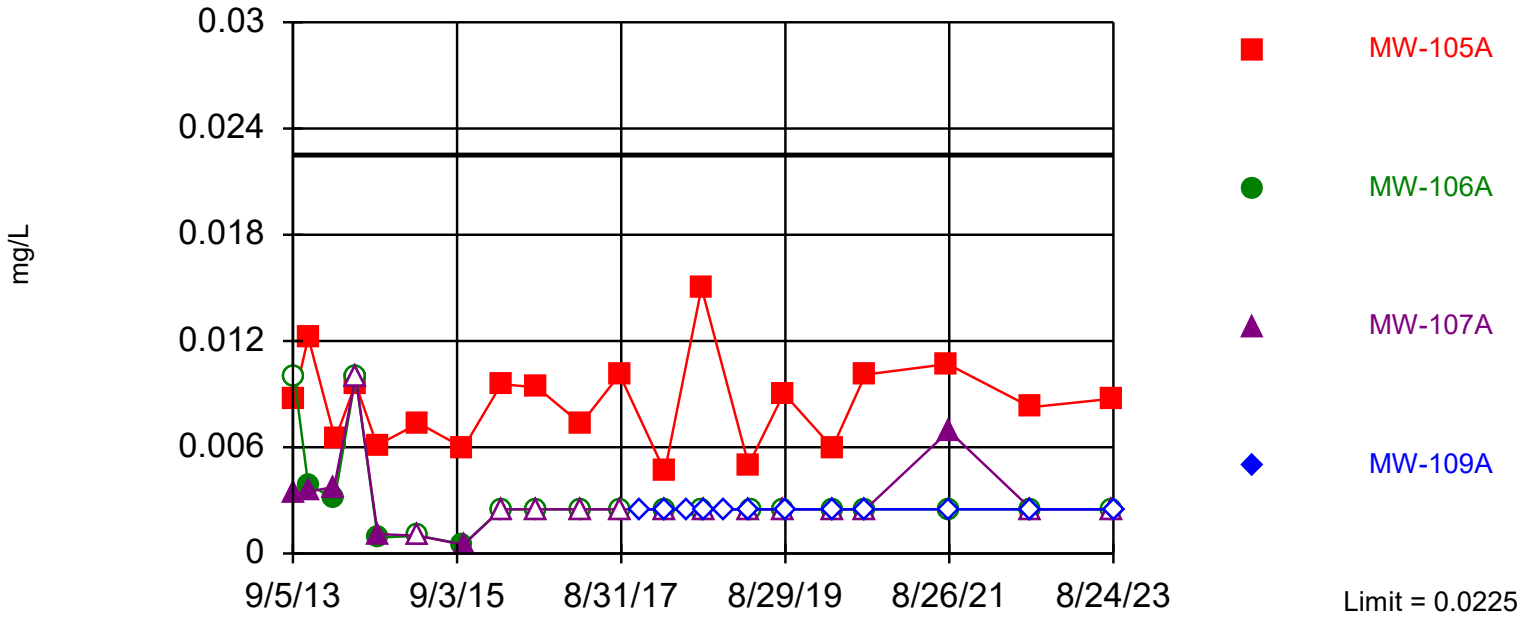
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring

Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 93.75% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/10/2023 2:51 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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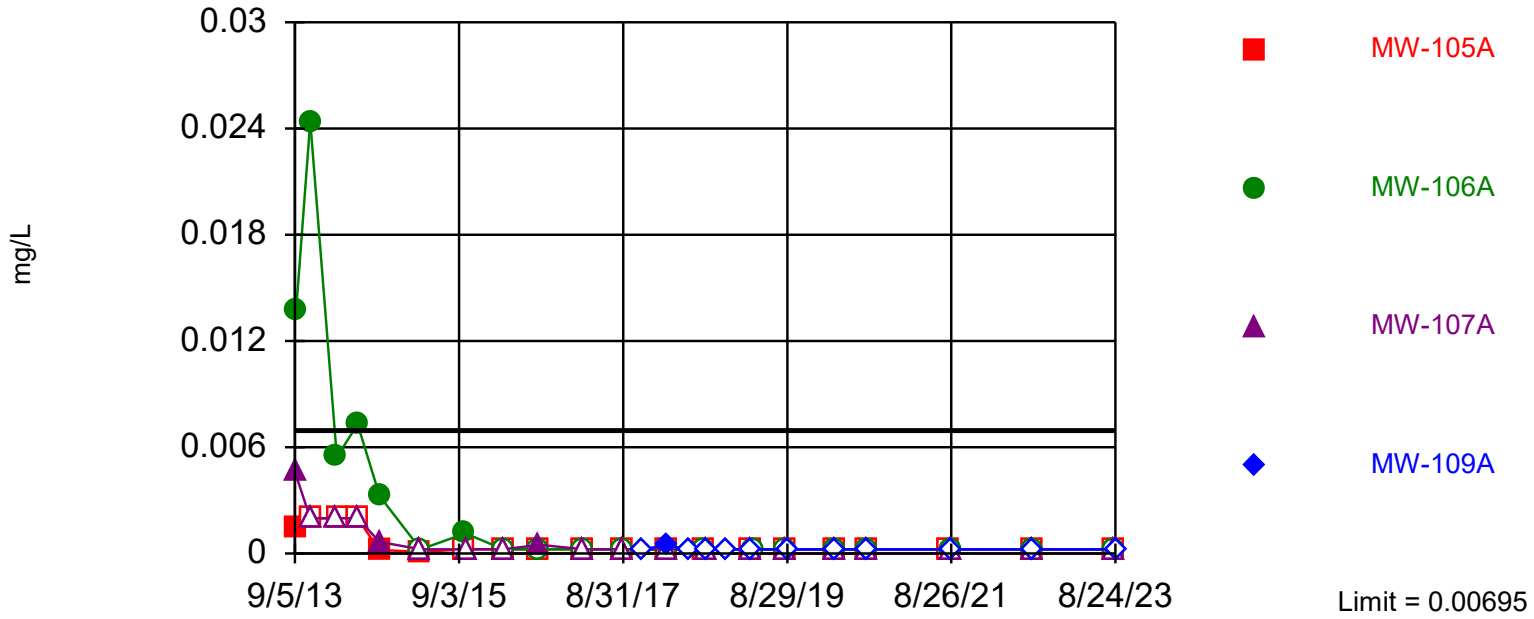
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring

Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 76.6% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Lead Analysis Run 11/10/2023 2:51 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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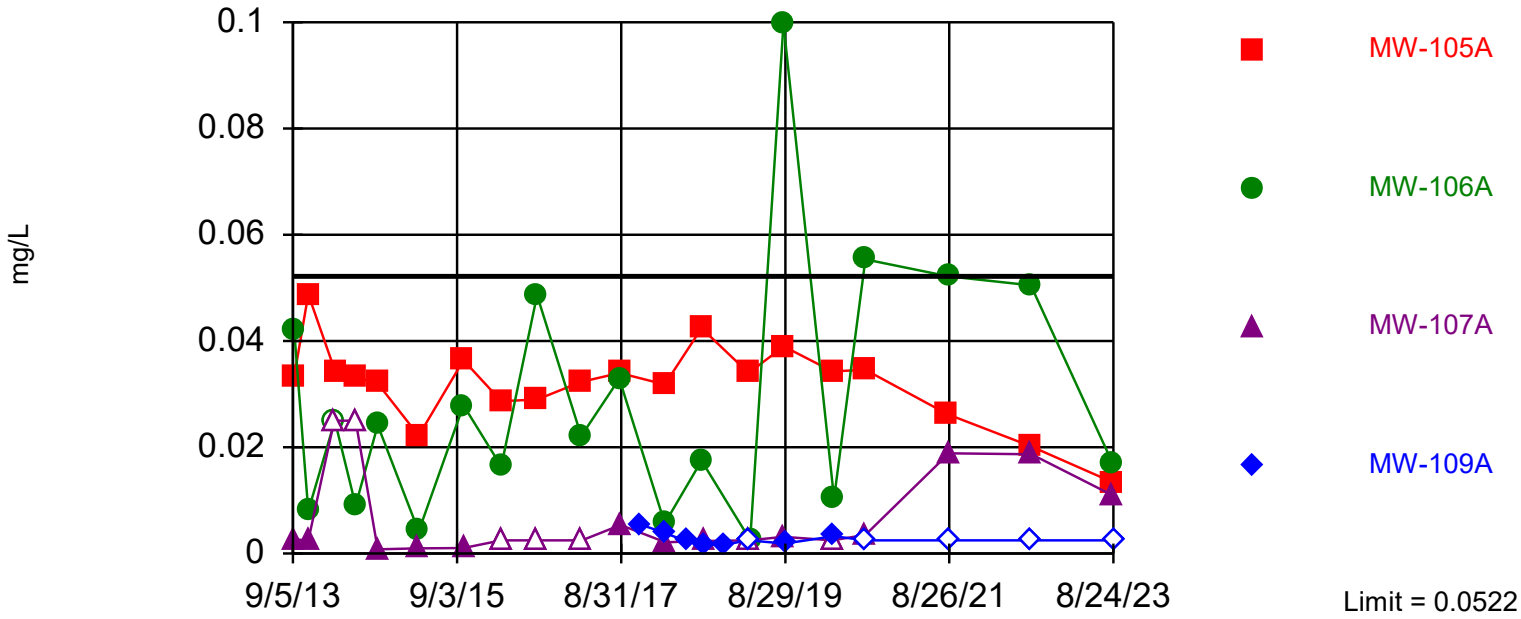
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring

Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 58.33% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Nickel Analysis Run 11/10/2023 2:51 PM

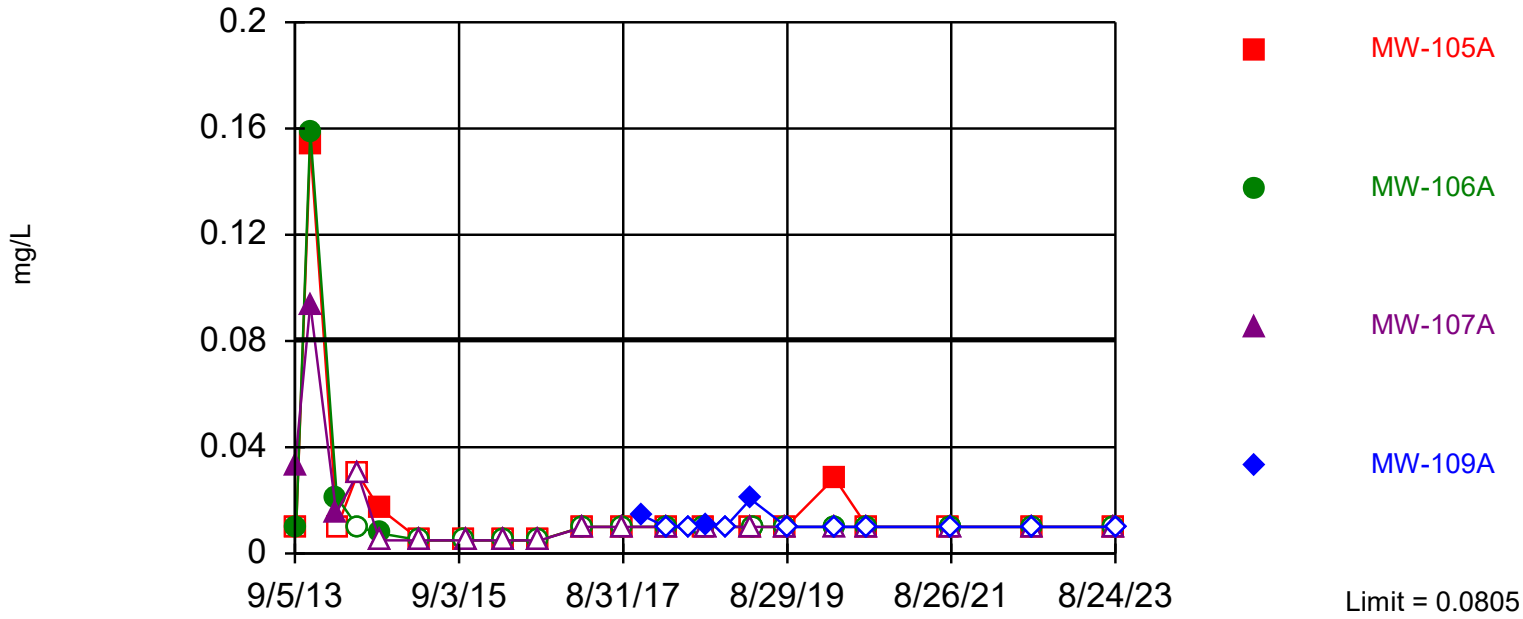
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring

Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 86% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Zinc Analysis Run 11/10/2023 2:51 PM

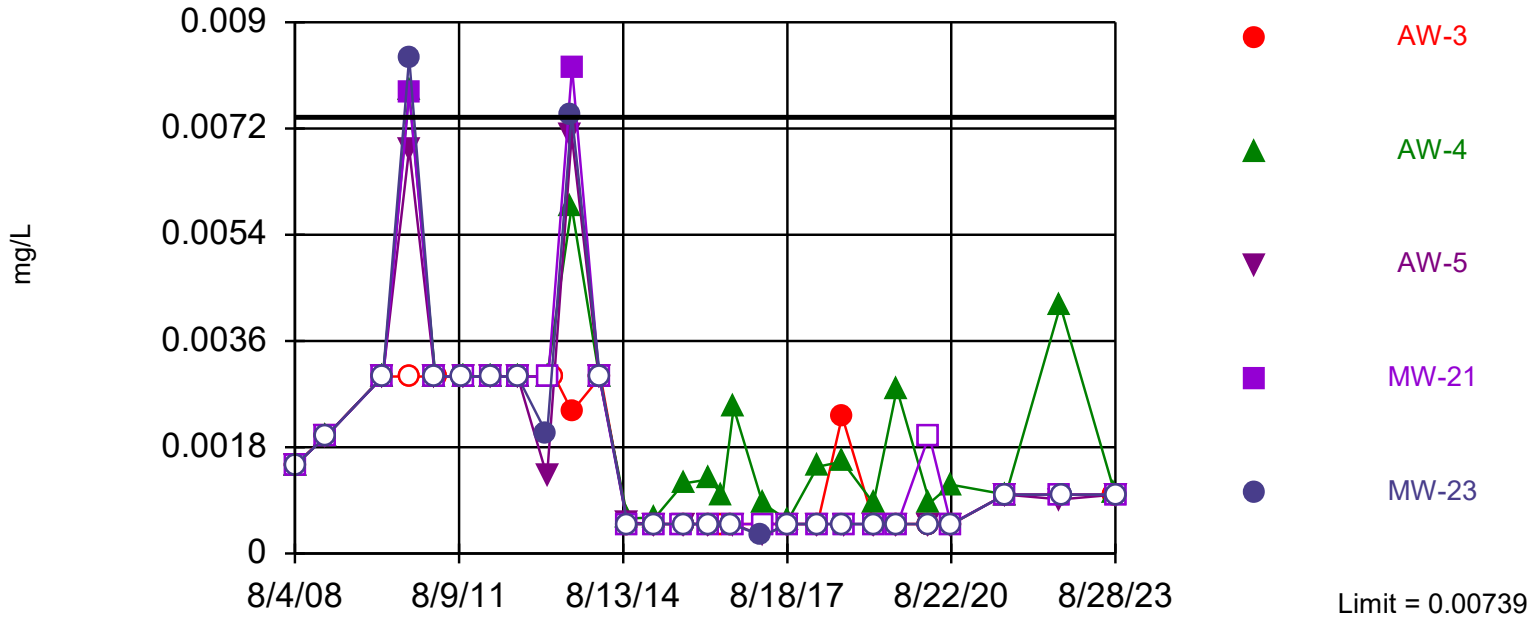
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 81.25% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Antimony Analysis Run 11/10/2023 12:59 PM

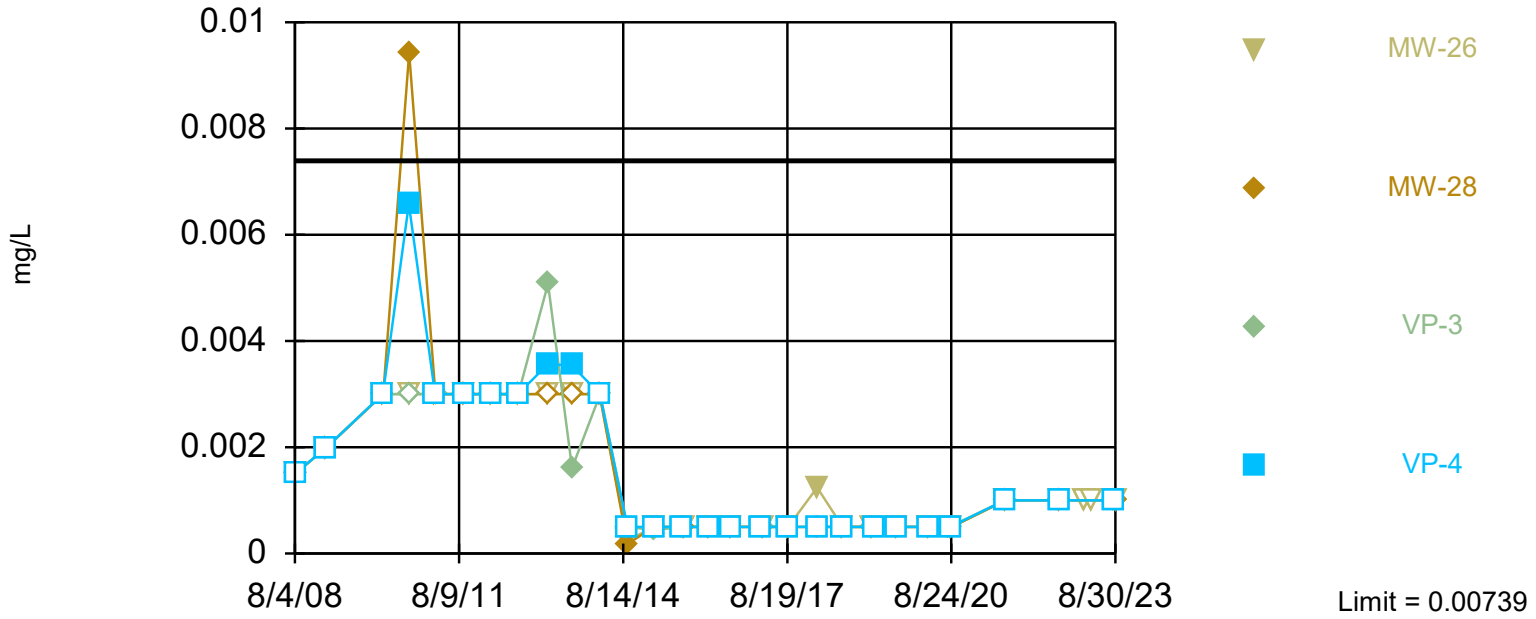
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 81.25% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Antimony Analysis Run 11/10/2023 1:01 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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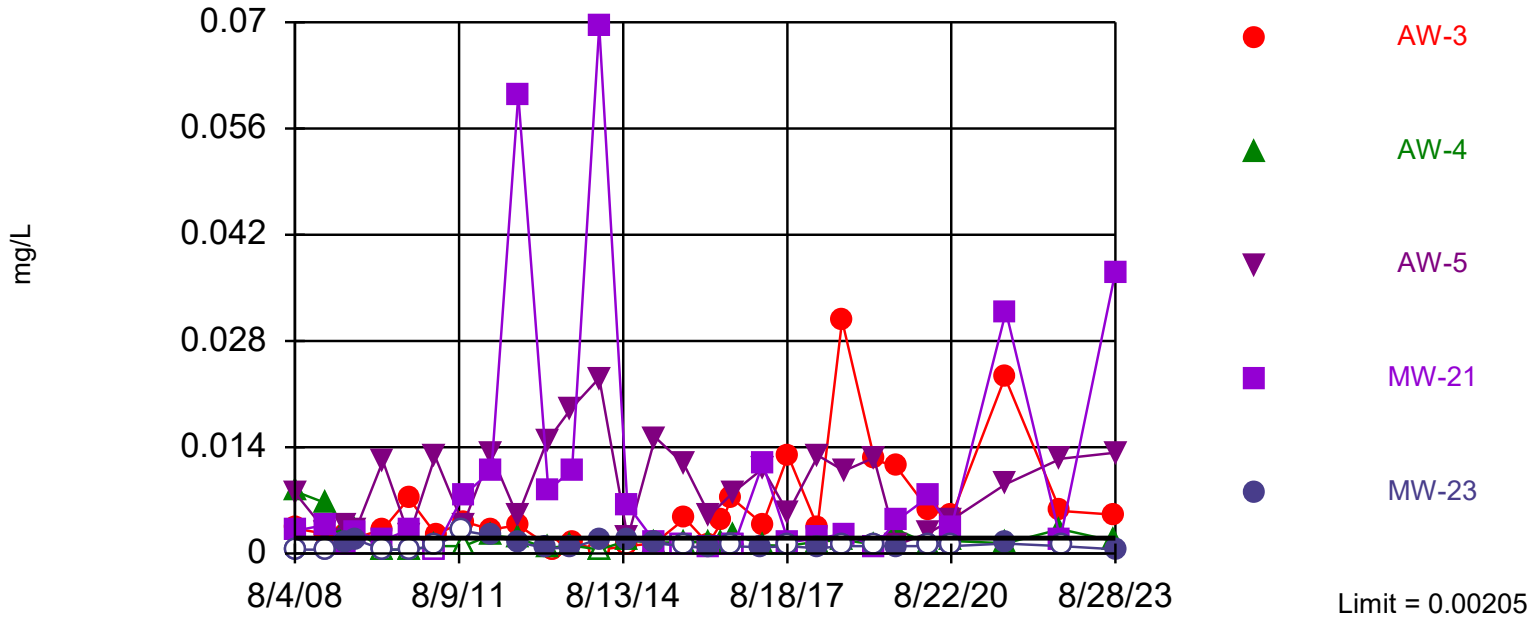
Hollow symbols indicate censored values.

Exceeds Limit: AW-3, AW-5, MW-21

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 79.59% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/10/2023 12:59 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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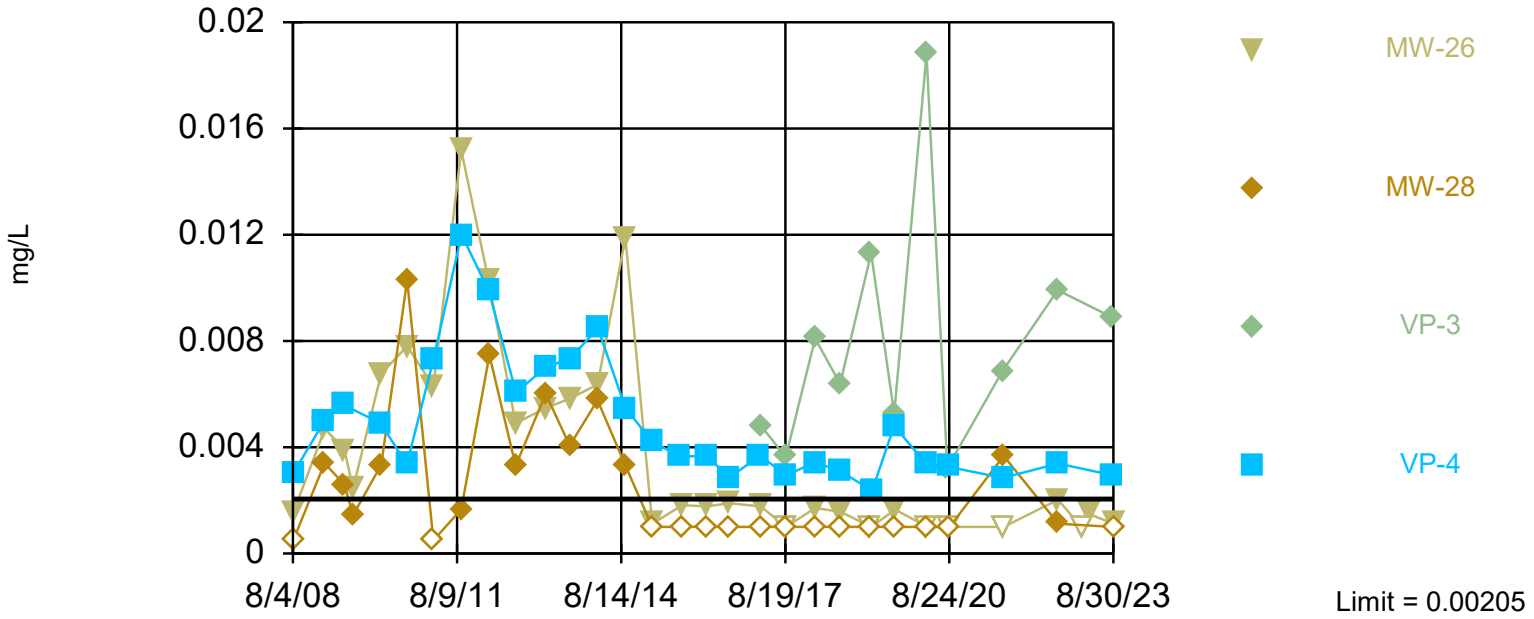
Hollow symbols indicate censored values.

Exceeds Limit: VP-3, VP-4

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 79.59% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/10/2023 1:01 PM

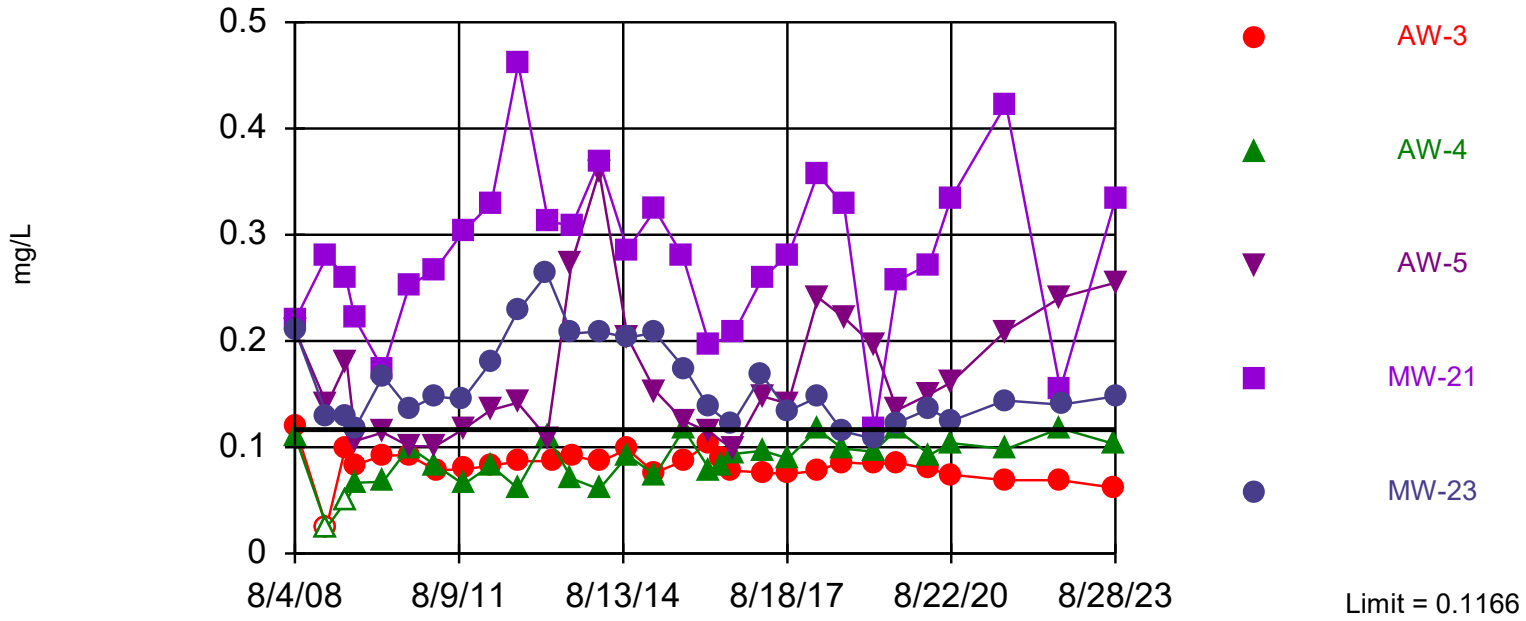
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Exceeds Limit: AW-5, MW-21, MW-23

Prediction Limit - Assessment Monitoring

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.099, Std. Dev.=0.4083, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.926. Kappa = 2.326 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 11/10/2023 12:59 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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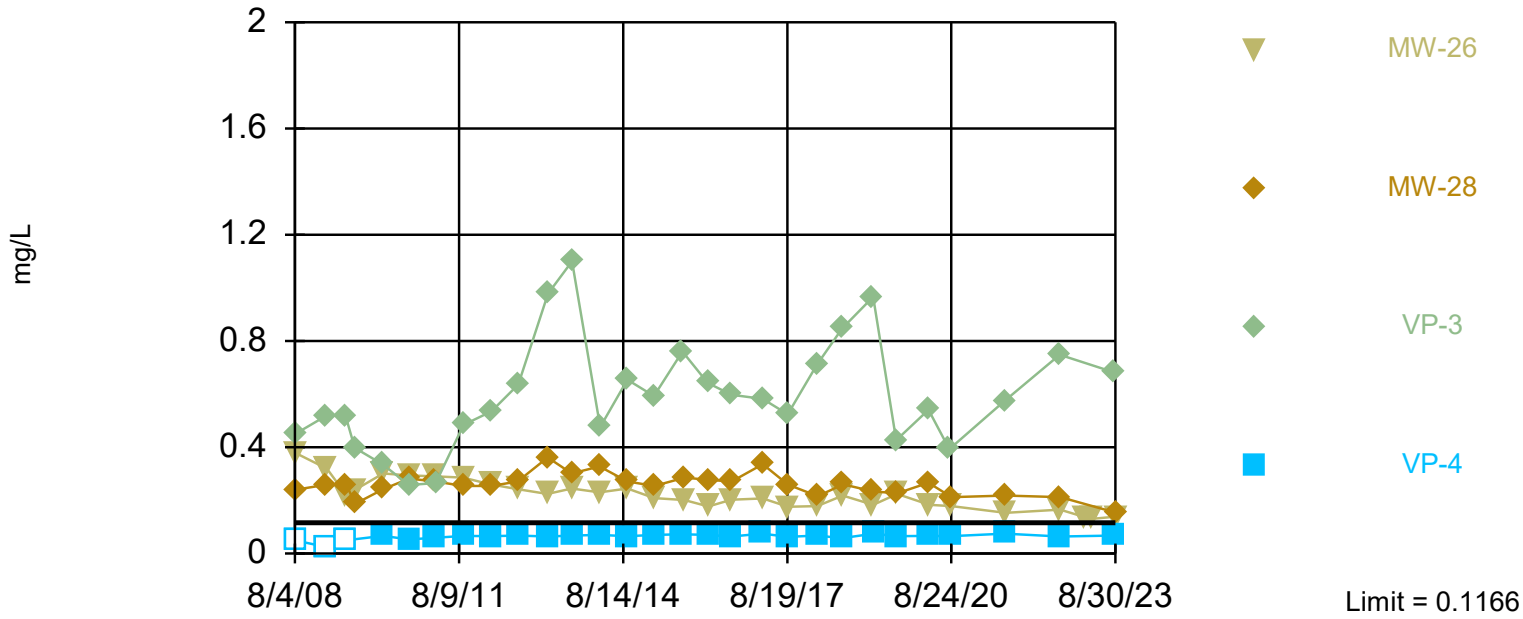
Hollow symbols indicate censored values.

Exceeds Limit: MW-26, MW-28, VP-3

Prediction Limit - Assessment Monitoring

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.099, Std. Dev.=0.4083, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.926. Kappa = 2.326 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 11/10/2023 1:01 PM

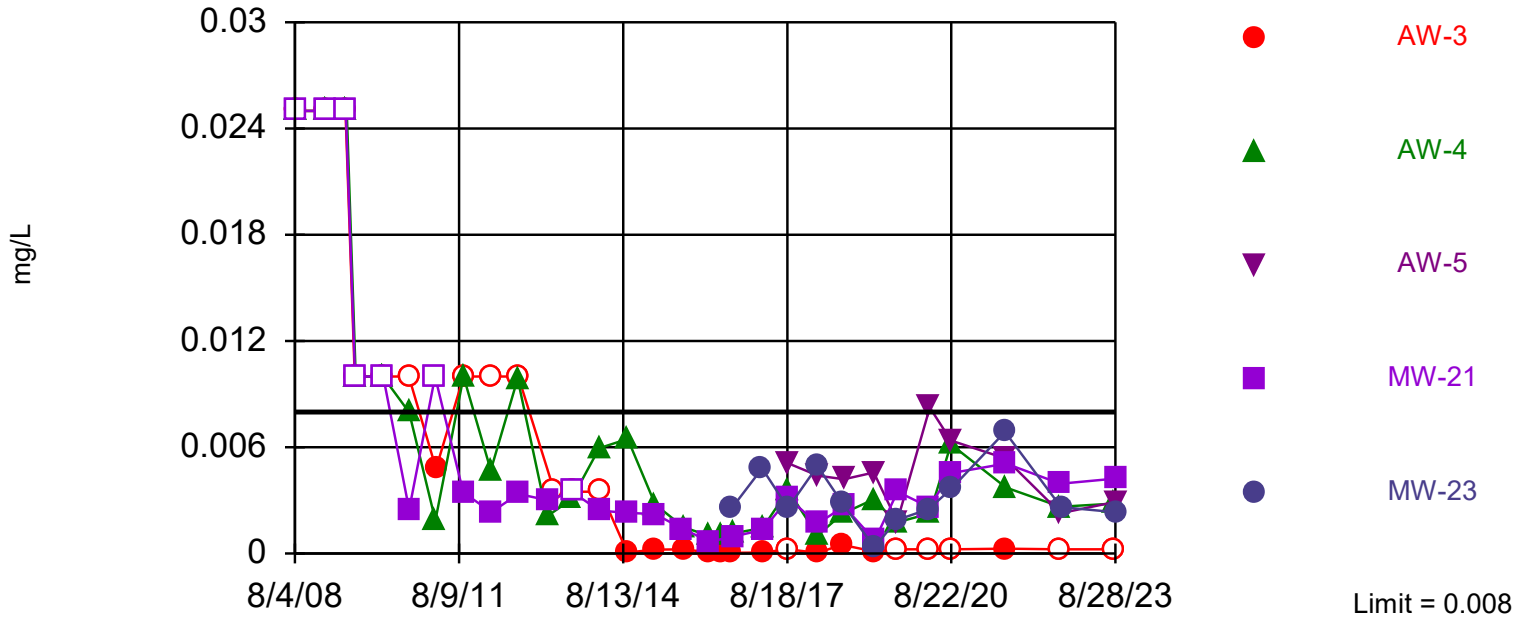
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/10/2023 12:59 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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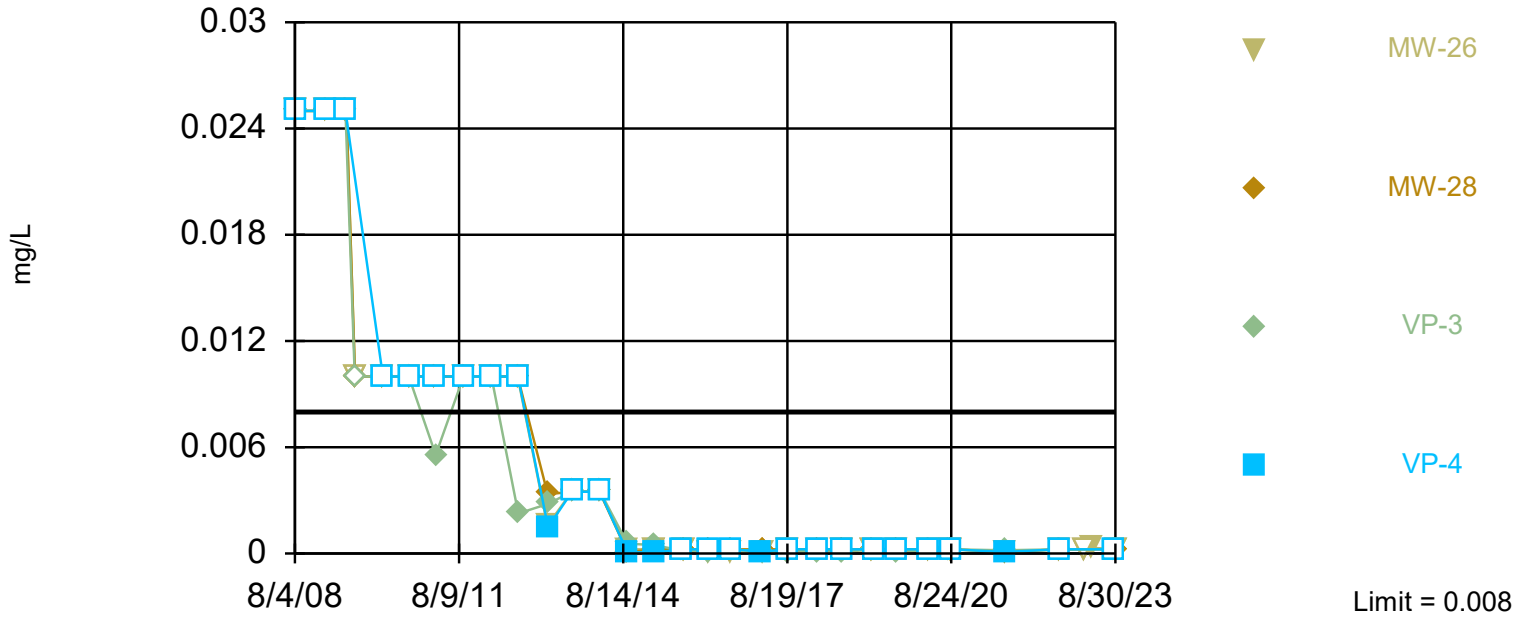
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/10/2023 1:01 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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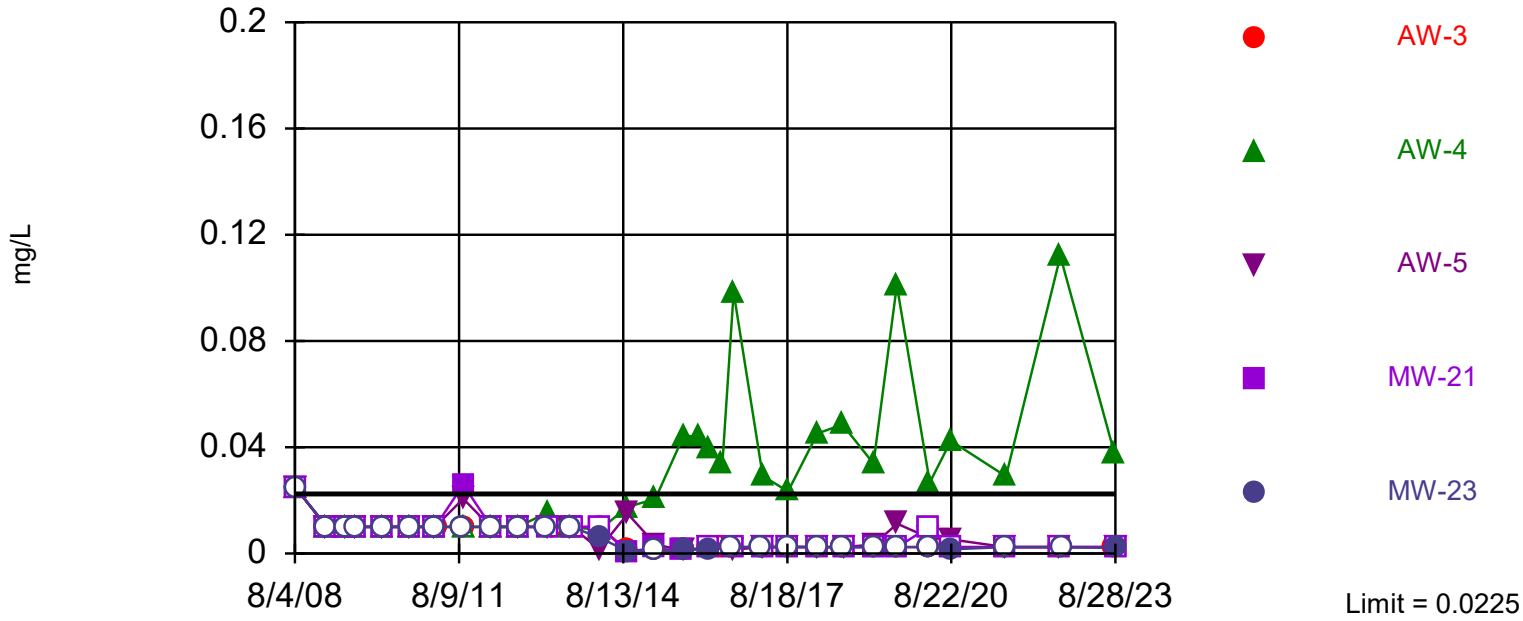
Hollow symbols indicate censored values.

Exceeds Limit: AW-4

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 93.75% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/10/2023 12:59 PM

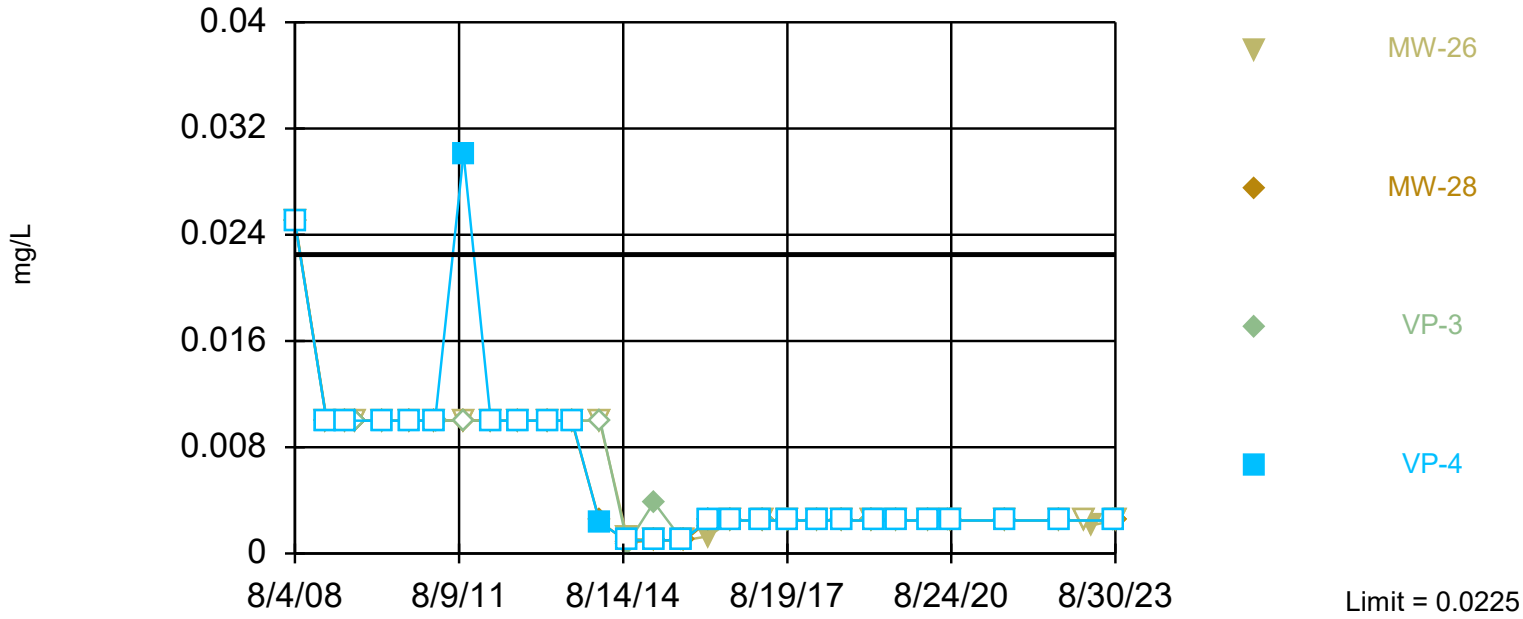
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 93.75% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/10/2023 1:01 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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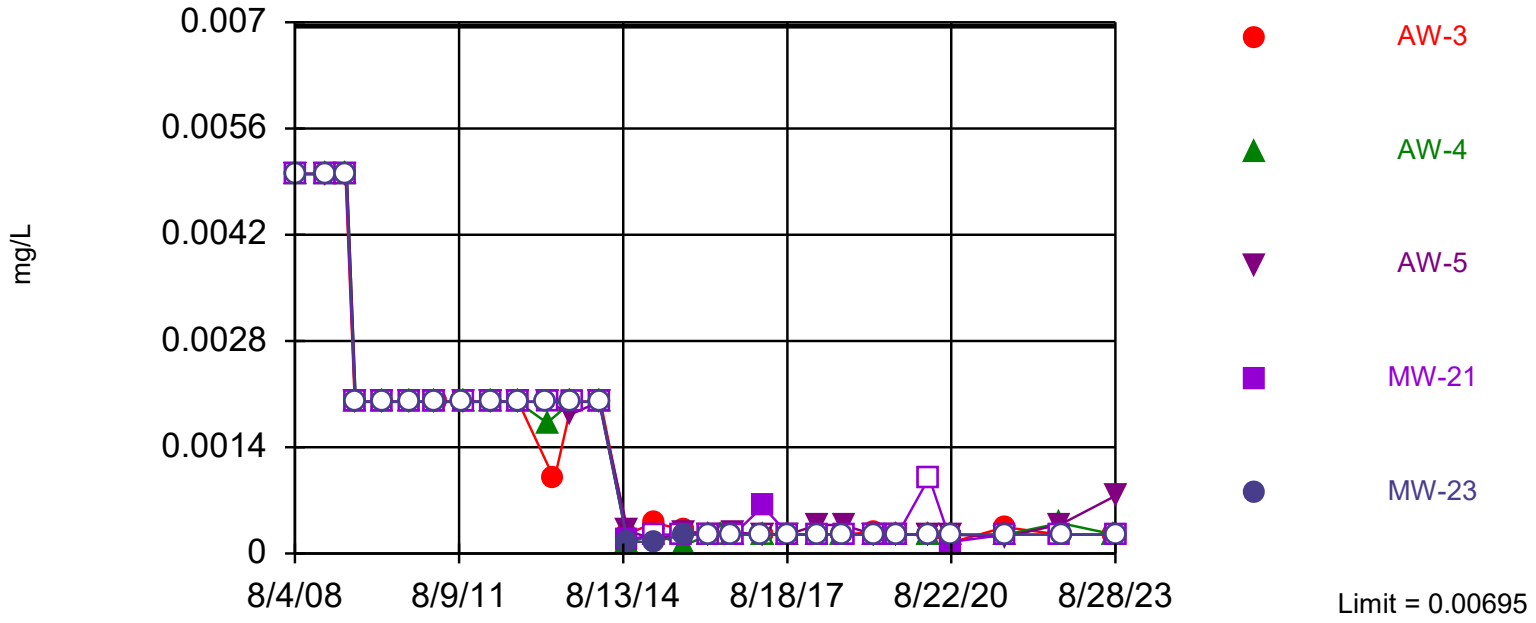
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 76.6% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Lead Analysis Run 11/10/2023 12:59 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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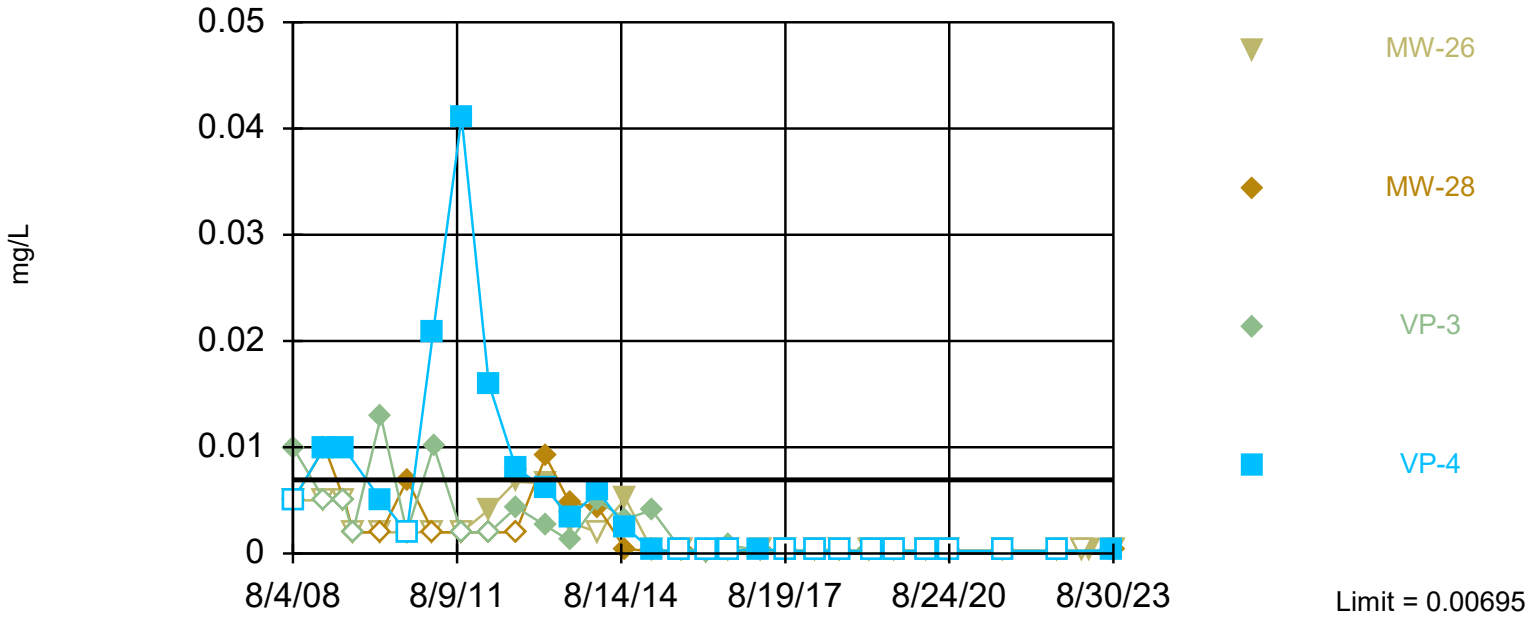
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 76.6% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Lead Analysis Run 11/10/2023 1:01 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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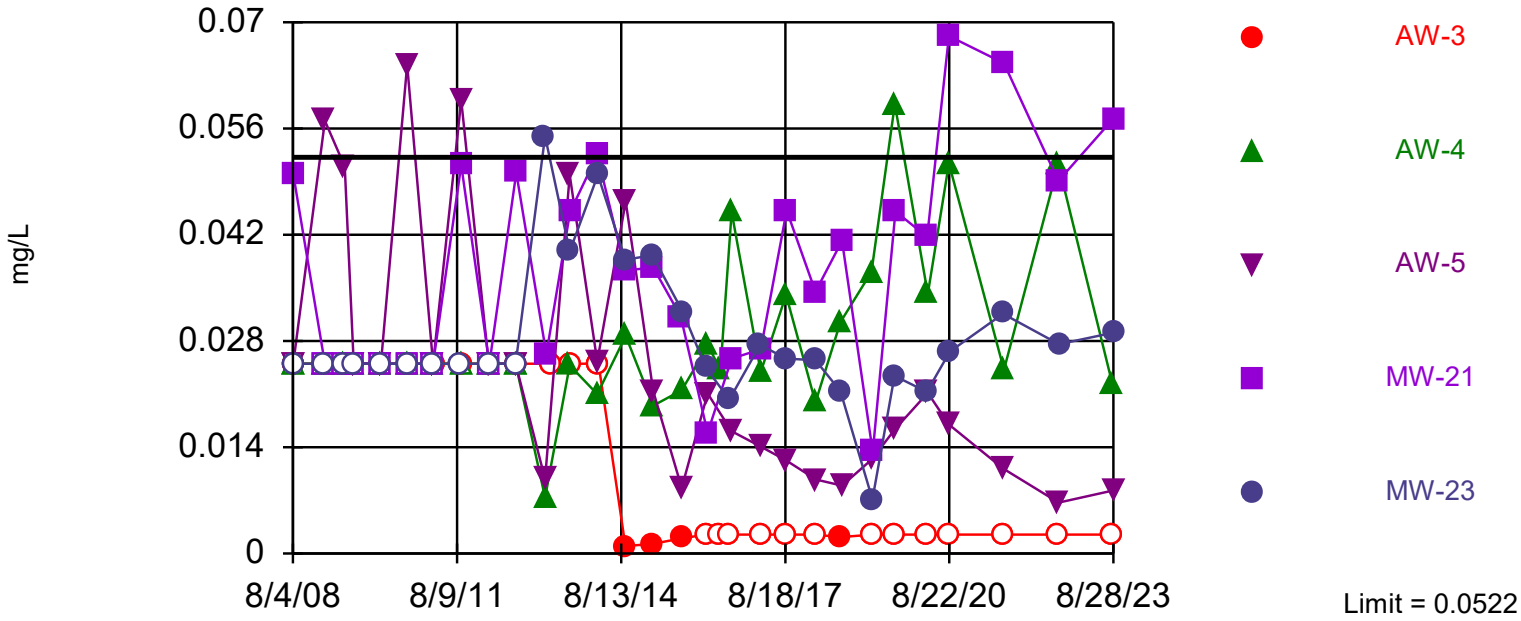
Hollow symbols indicate censored values.

Exceeds Limit: MW-21

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 58.33% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Nickel Analysis Run 11/10/2023 12:59 PM

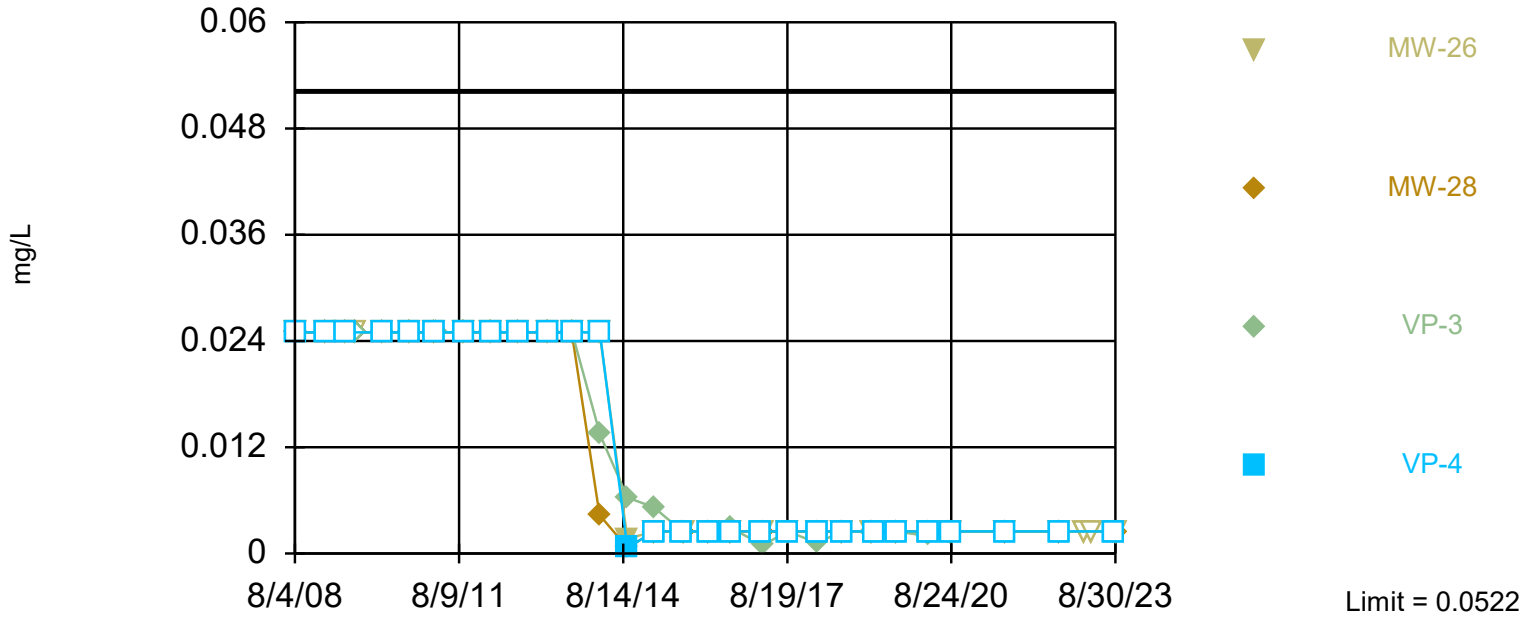
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 58.33% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Nickel Analysis Run 11/10/2023 1:01 PM

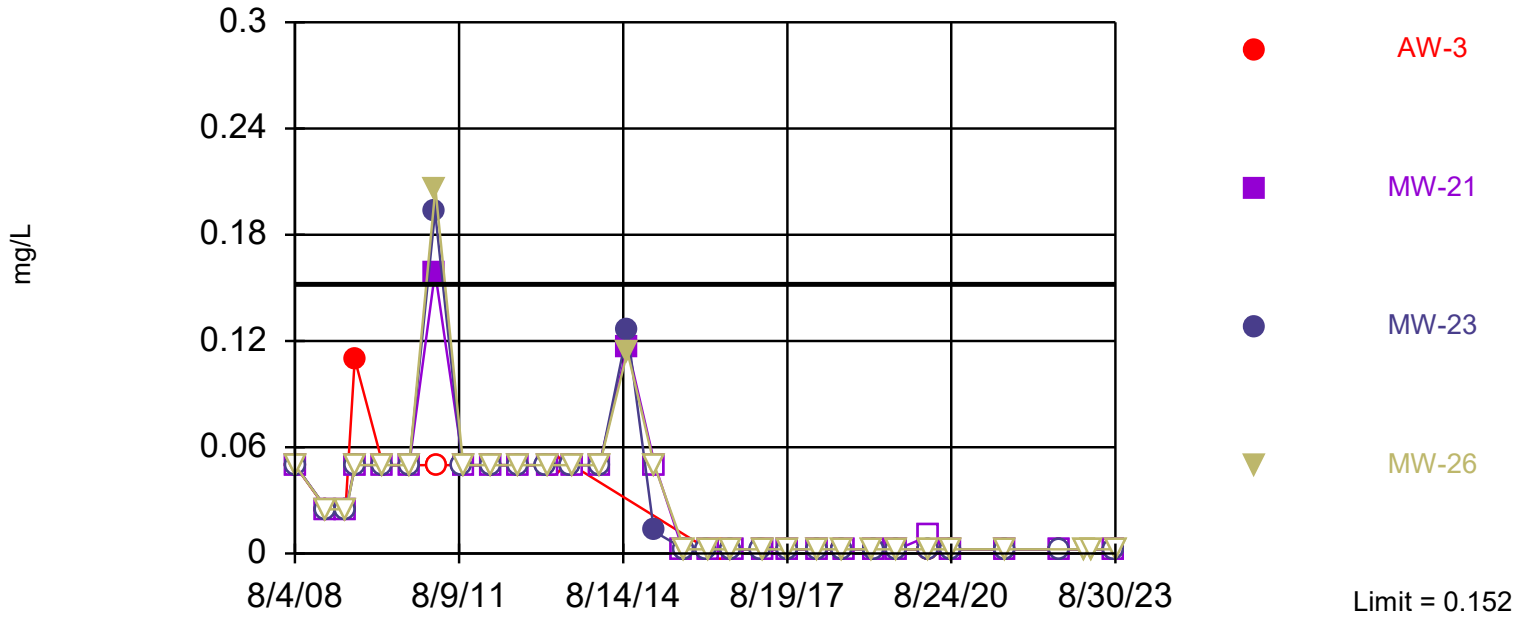
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 96% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Tin Analysis Run 11/10/2023 12:59 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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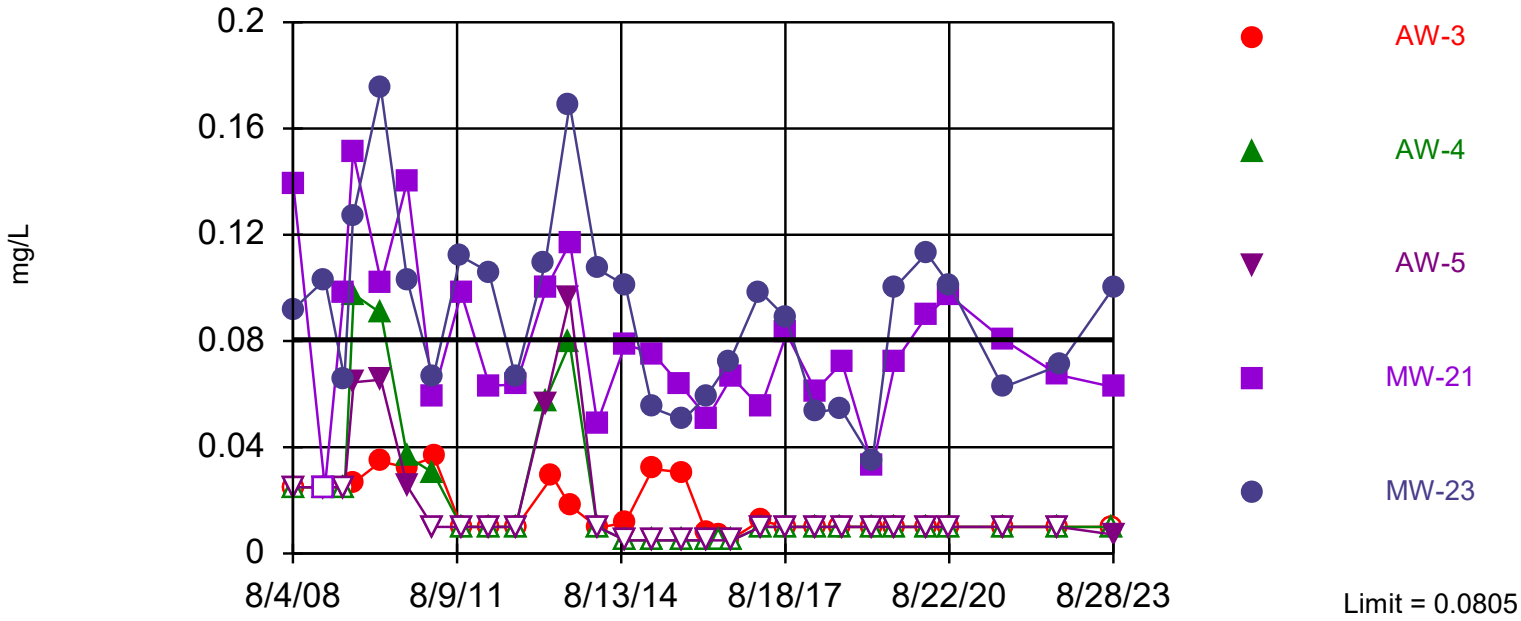
Hollow symbols indicate censored values.

Exceeds Limit: MW-23

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 86% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Zinc Analysis Run 11/10/2023 12:59 PM

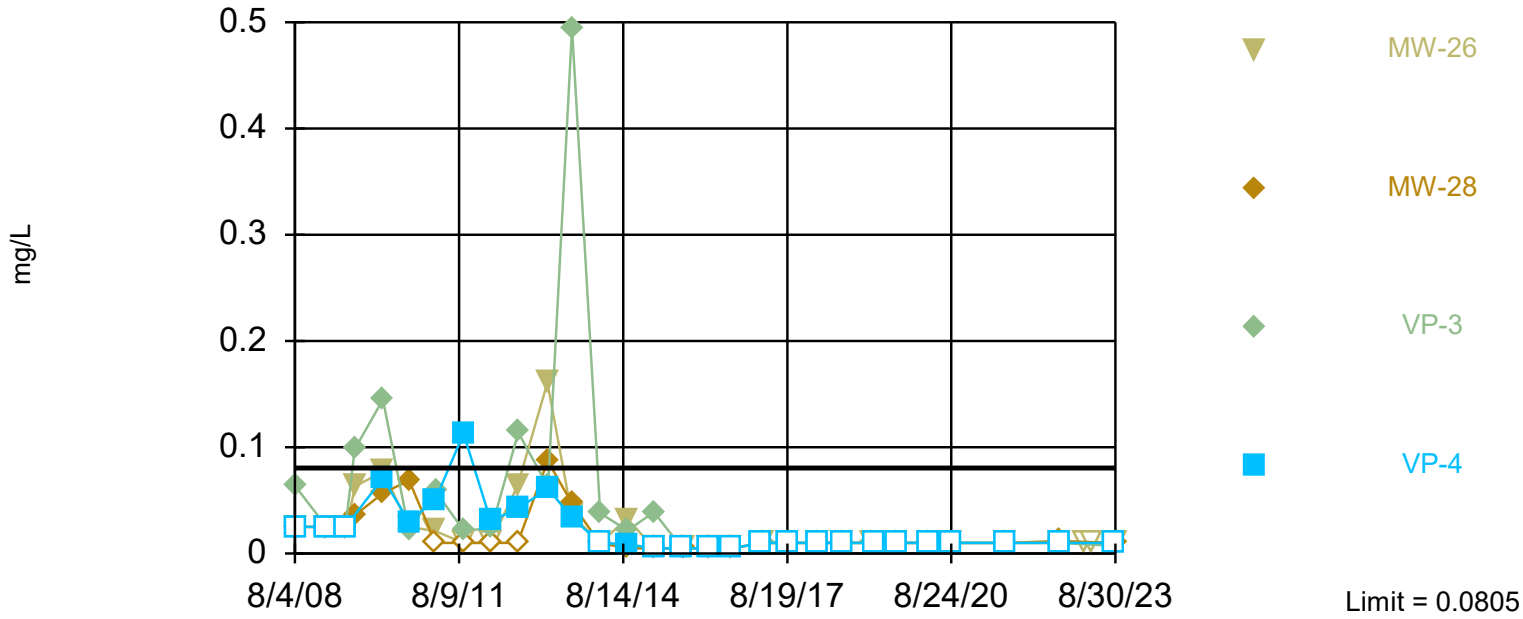
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 86% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Zinc Analysis Run 11/10/2023 1:01 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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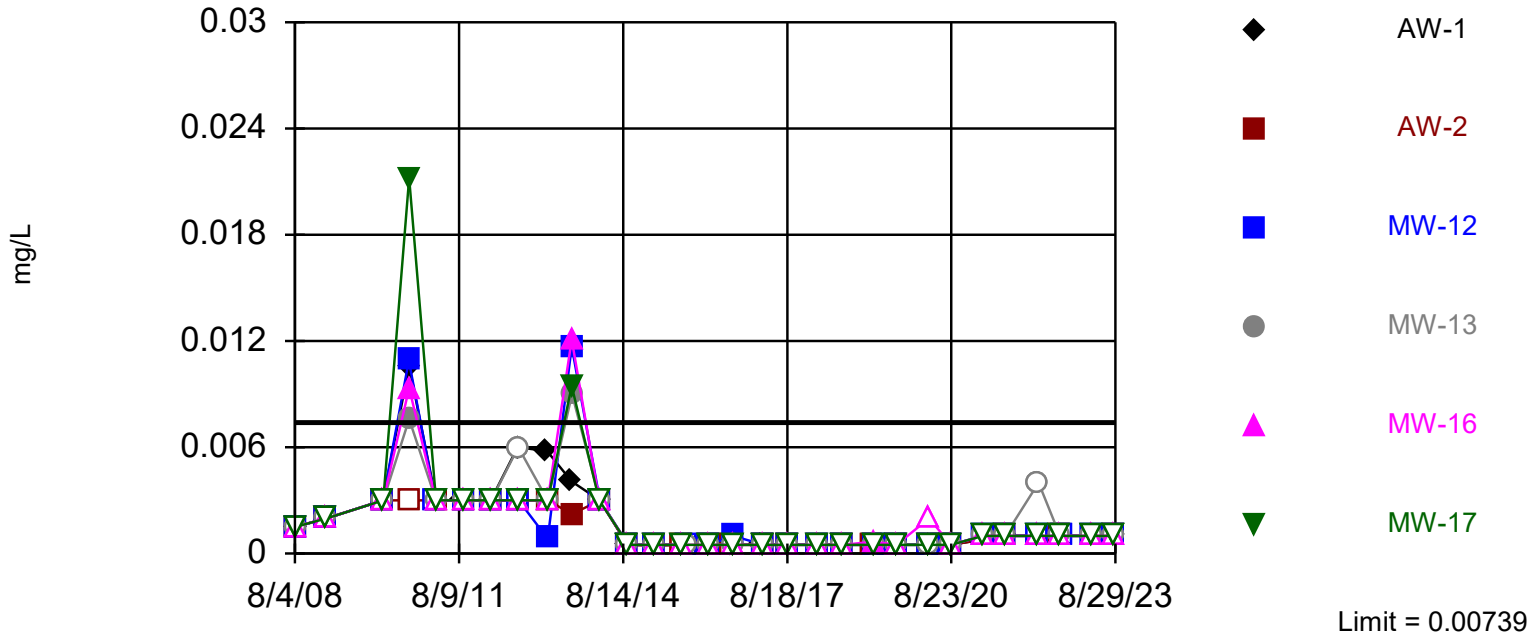
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 81.25% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Antimony Analysis Run 11/10/2023 4:08 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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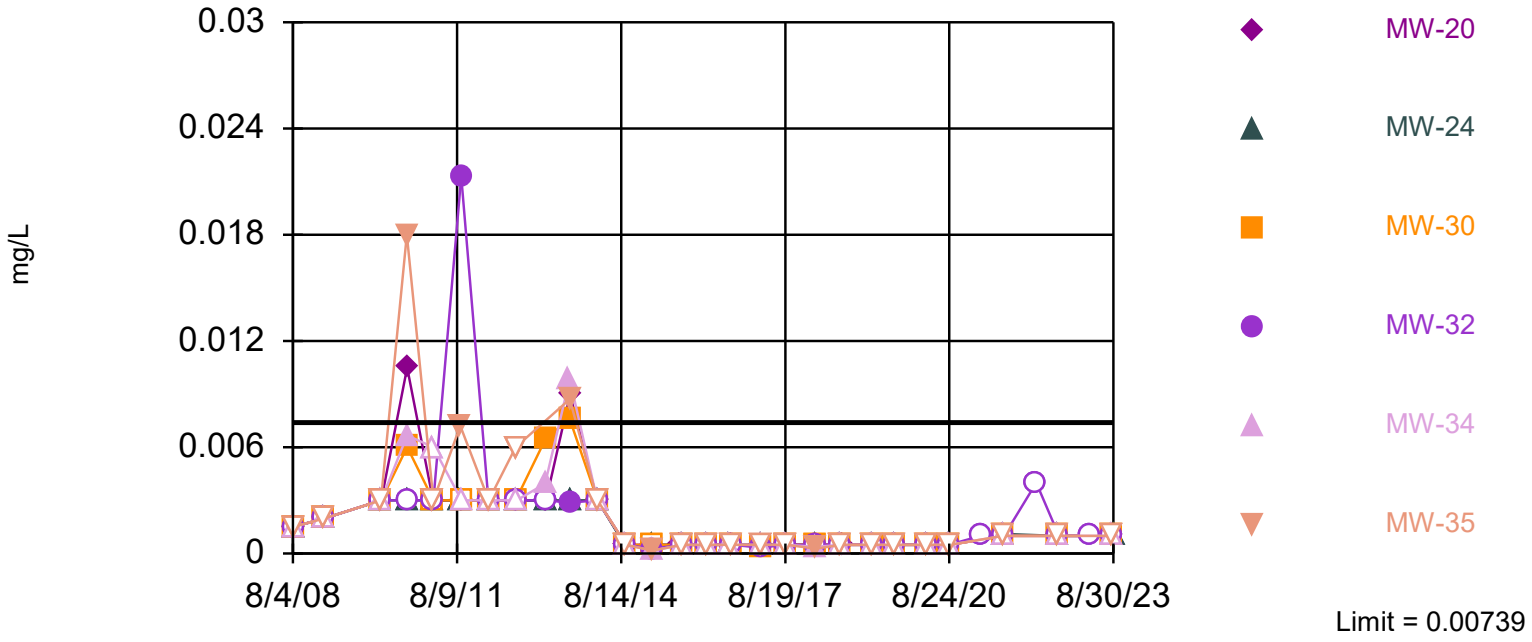
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 81.25% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Antimony Analysis Run 11/10/2023 4:12 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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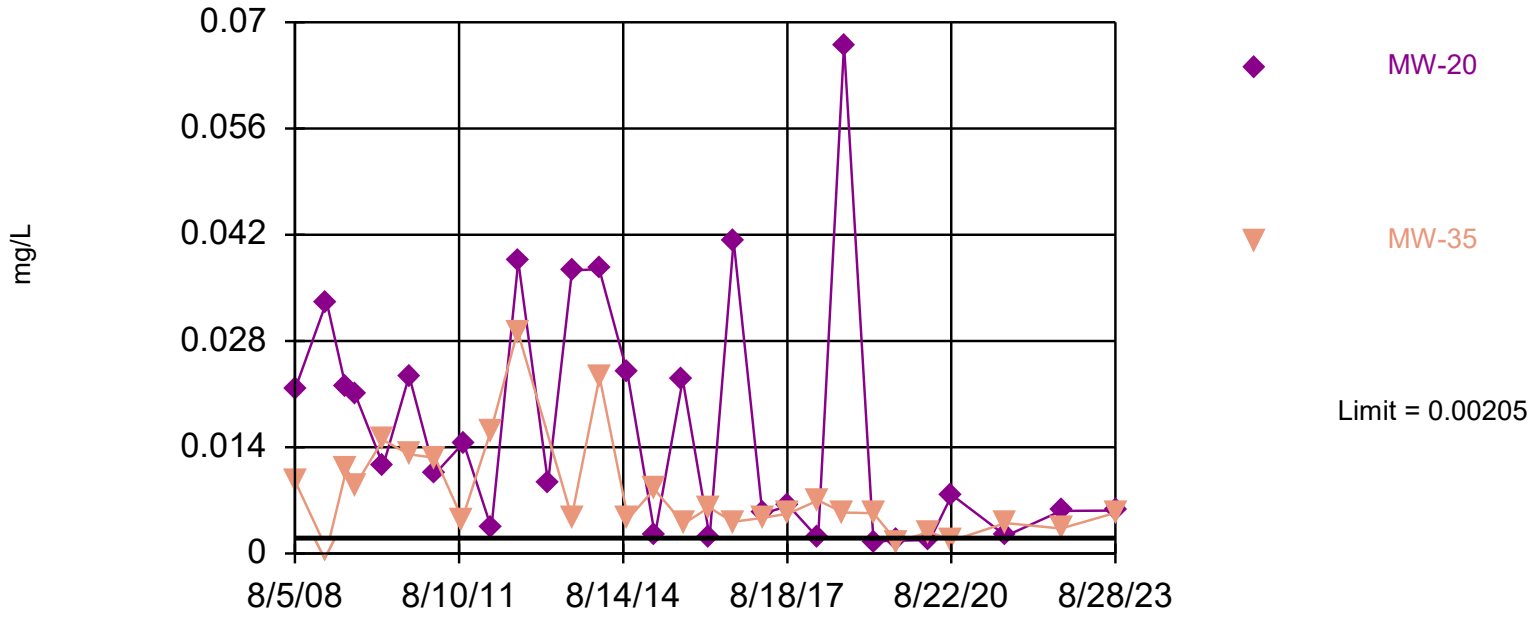
Hollow symbols indicate censored values.

Exceeds Limit: MW-20, MW-35

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 79.59% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/10/2023 7:25 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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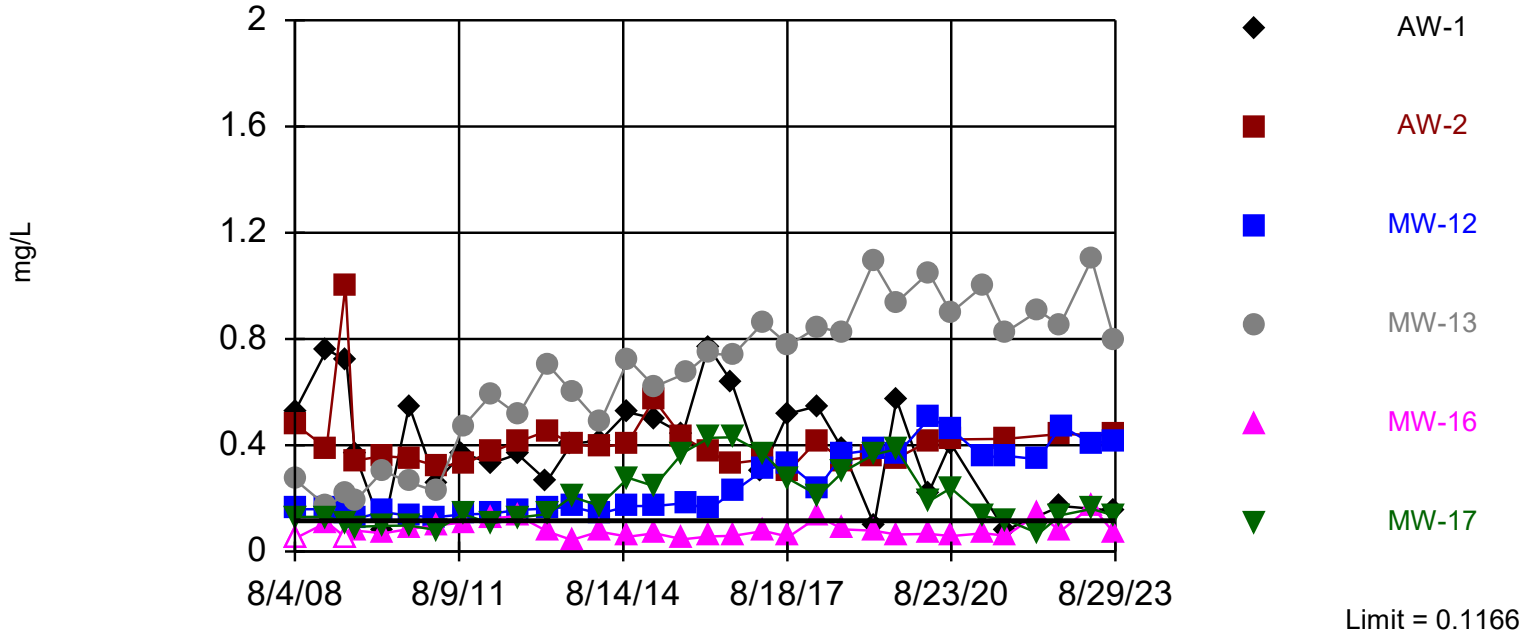
Hollow symbols indicate censored values.

Exceeds Limit: AW-1, AW-2, MW-12, MW-13, MW-17

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.099, Std. Dev.=0.4083, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.926. Kappa = 2.326 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 11/10/2023 4:08 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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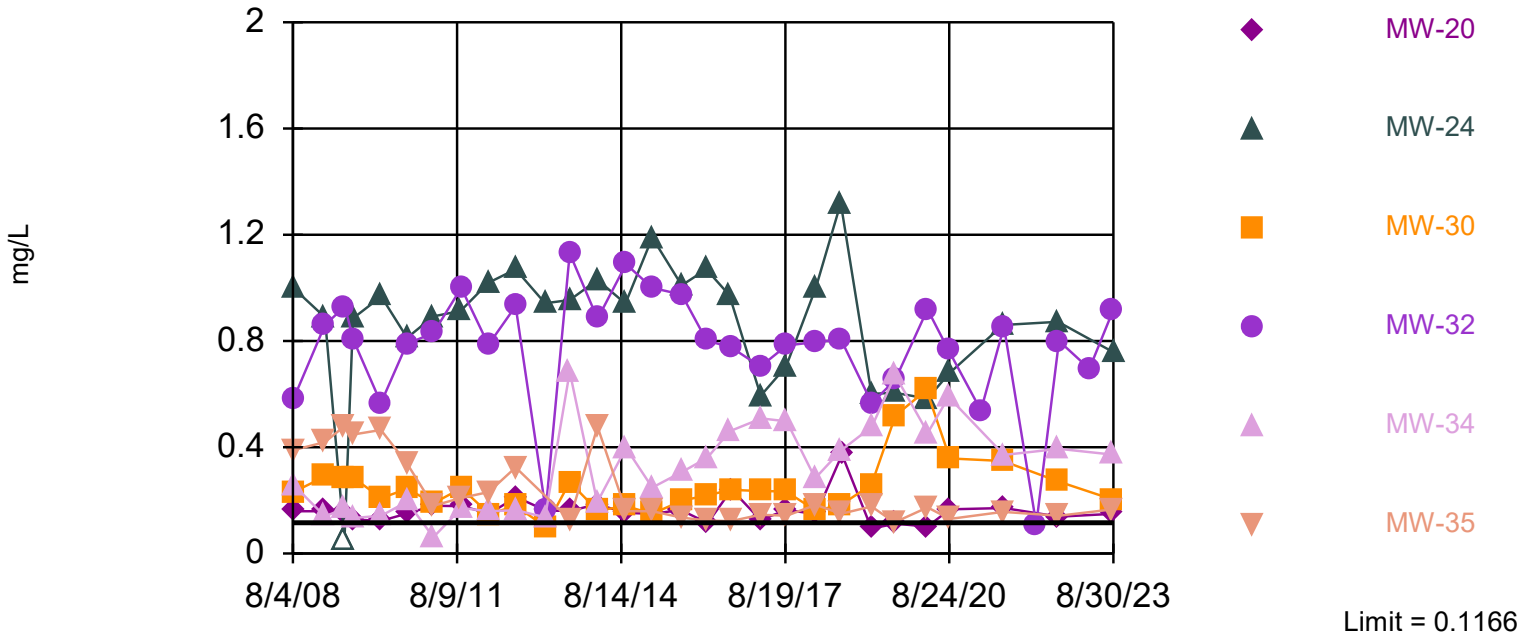
Hollow symbols indicate censored values.

Exceeds Limit: MW-20, MW-24, MW-30, MW-32, MW-34, MW-35

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.099, Std. Dev.=0.4083, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.935, critical = 0.926. Kappa = 2.326 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Barium Analysis Run 11/10/2023 4:13 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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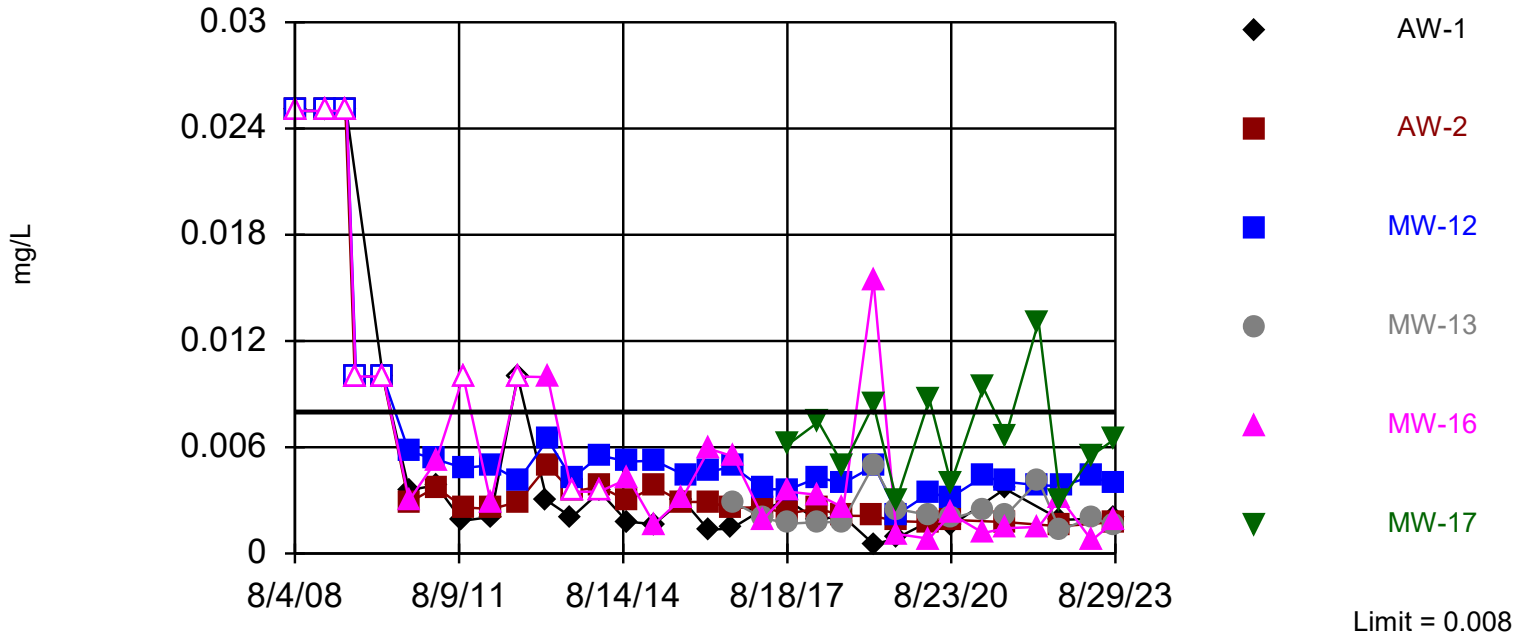
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/10/2023 4:08 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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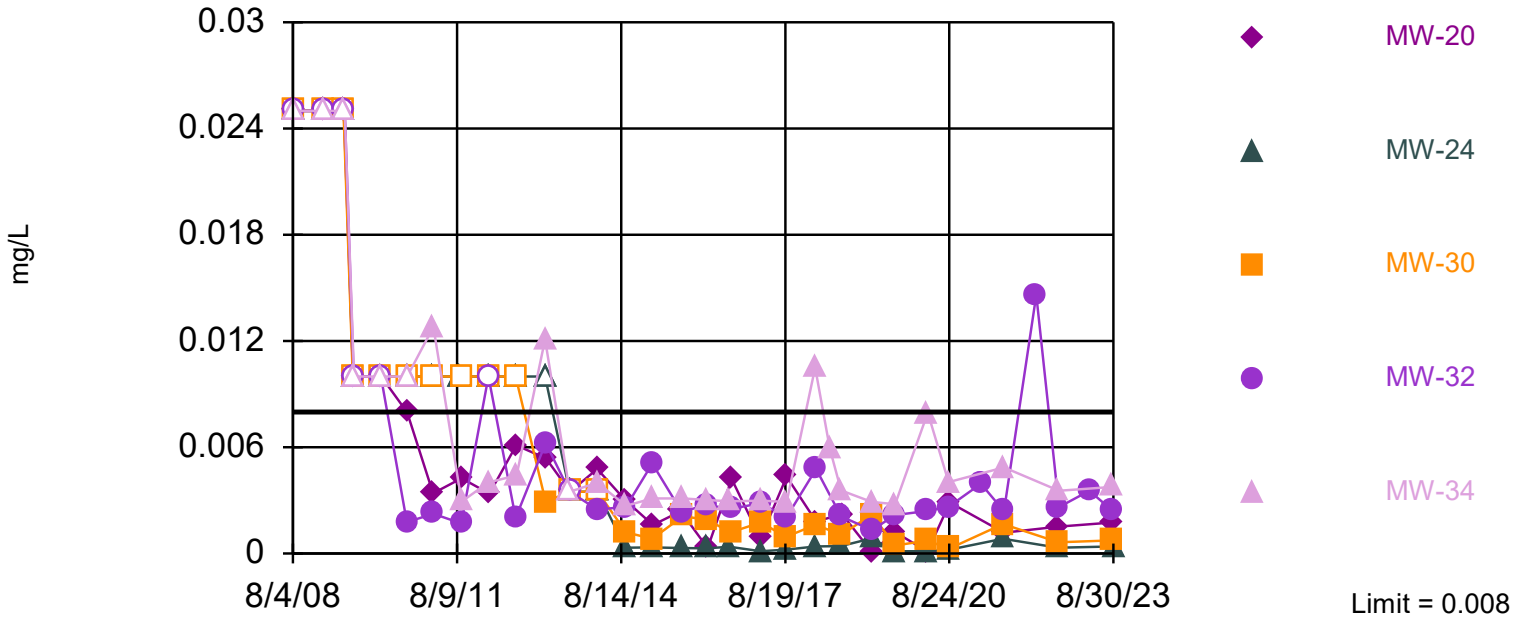
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/10/2023 4:13 PM

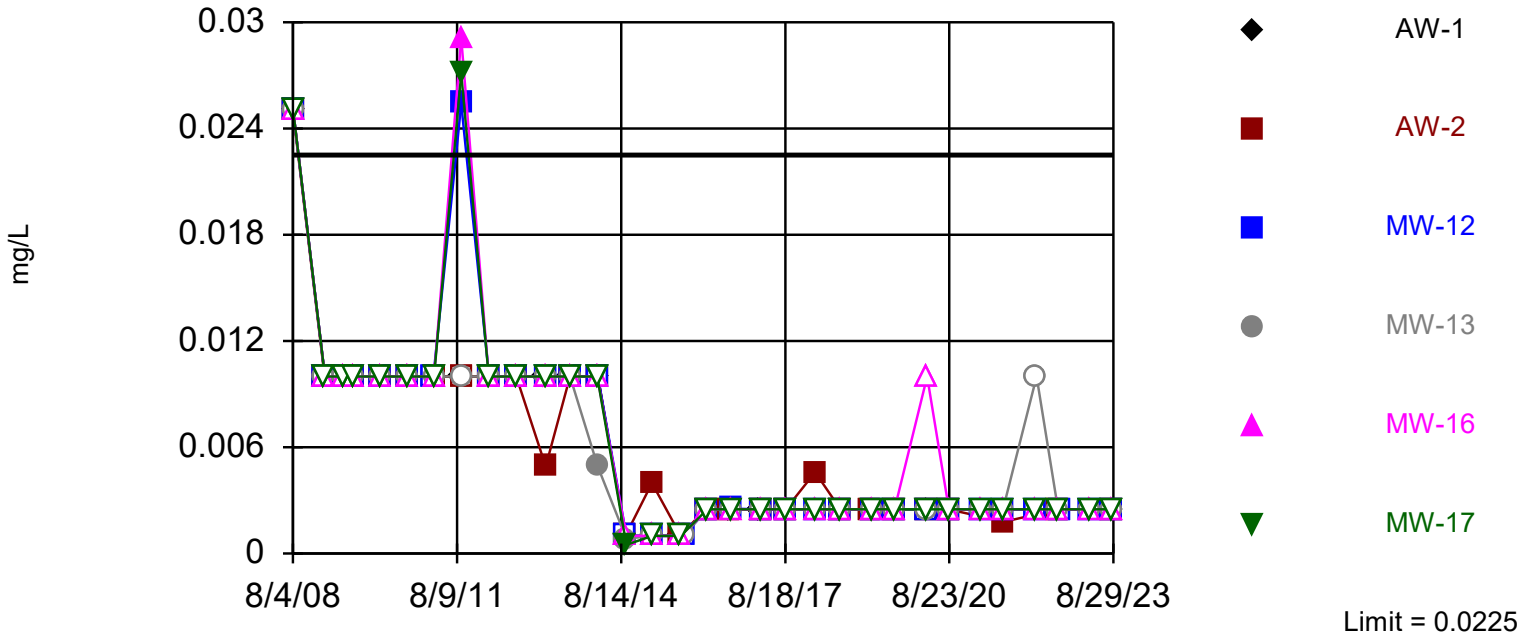
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 93.75% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/10/2023 4:08 PM

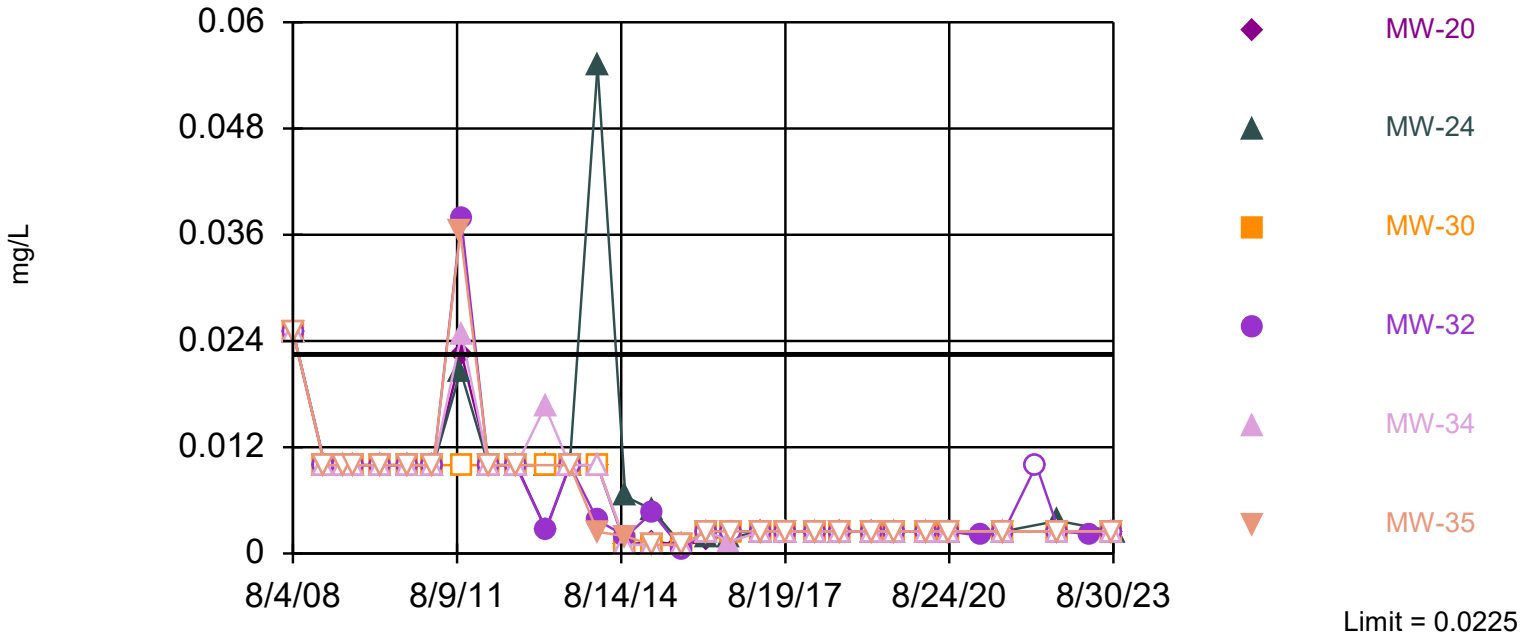
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 93.75% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/10/2023 4:13 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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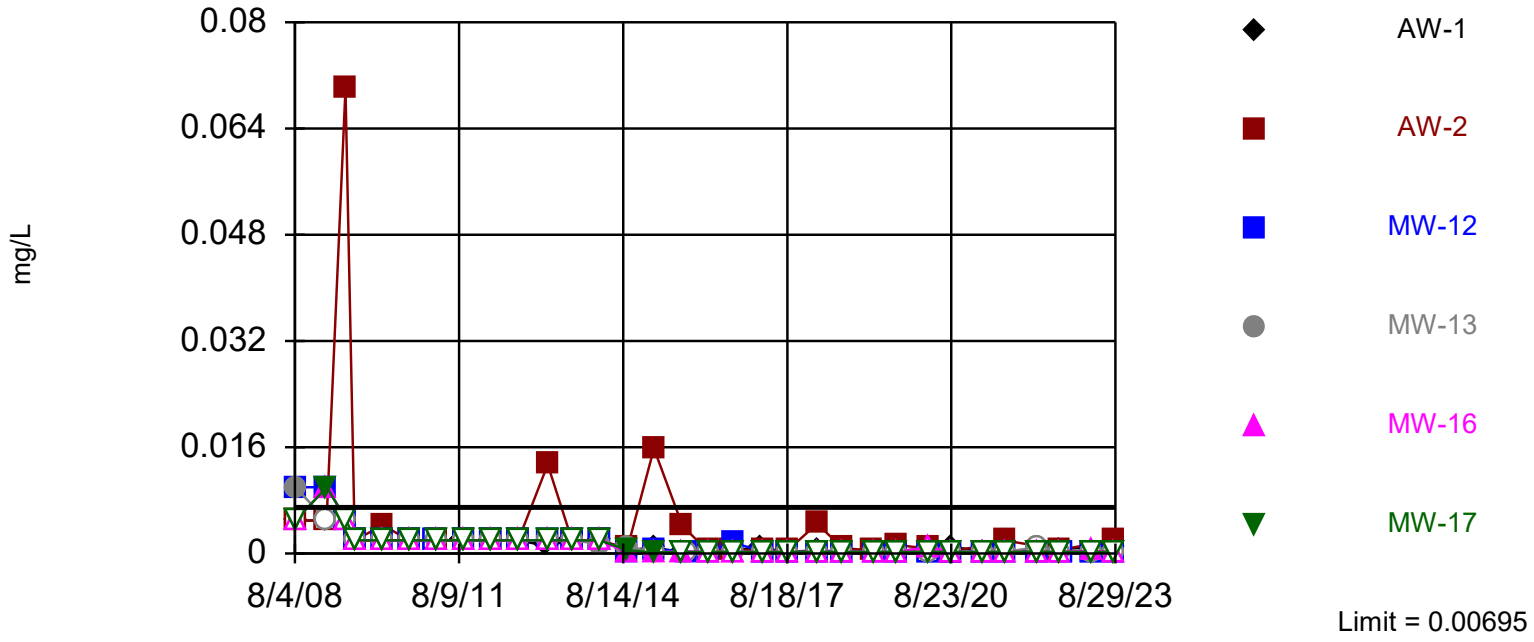
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 76.6% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Lead Analysis Run 11/10/2023 4:08 PM

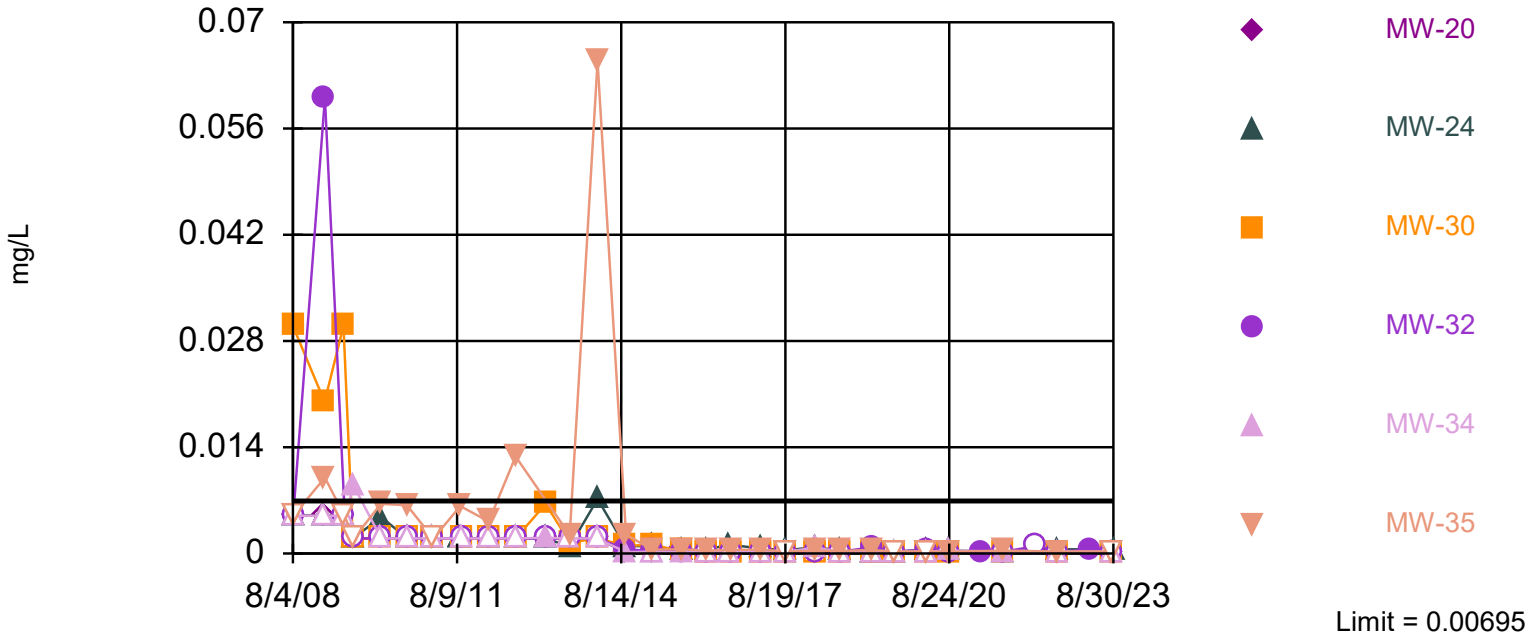
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 76.6% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Lead Analysis Run 11/10/2023 4:13 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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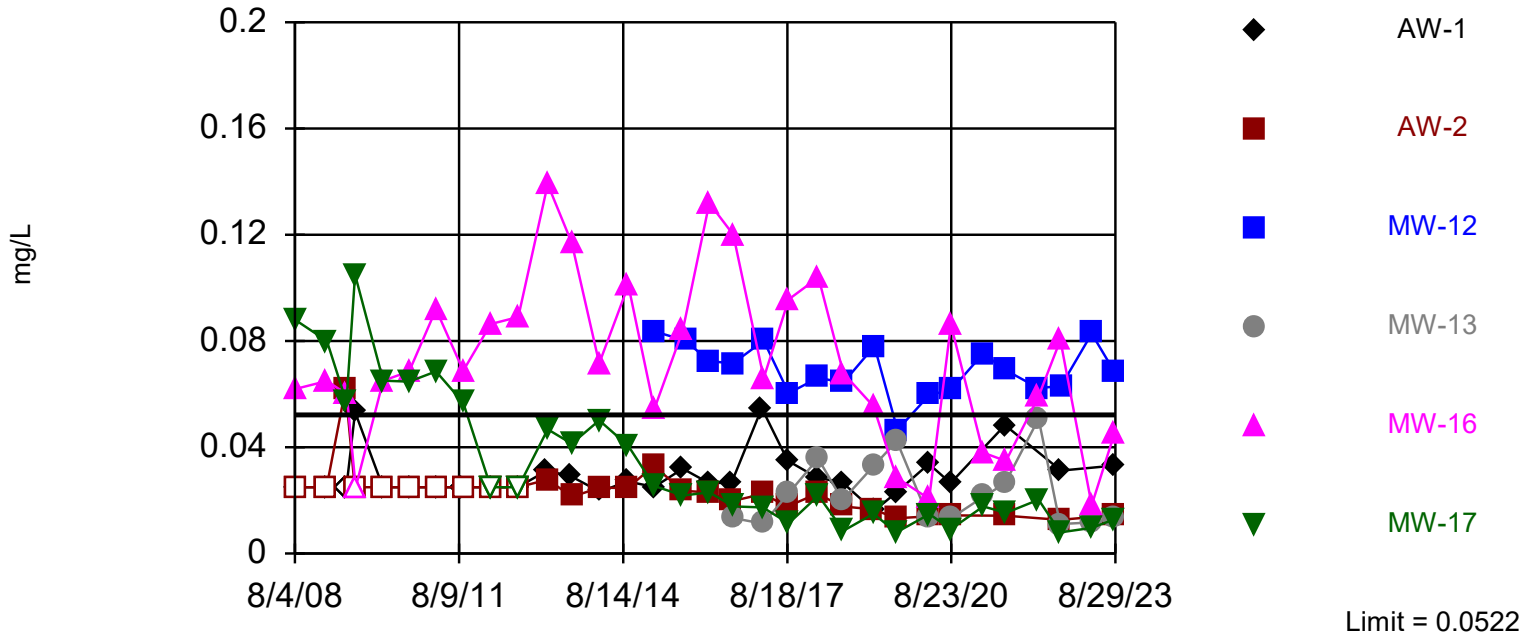
Hollow symbols indicate censored values.

Exceeds Limit: MW-12

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 58.33% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Nickel Analysis Run 11/10/2023 4:08 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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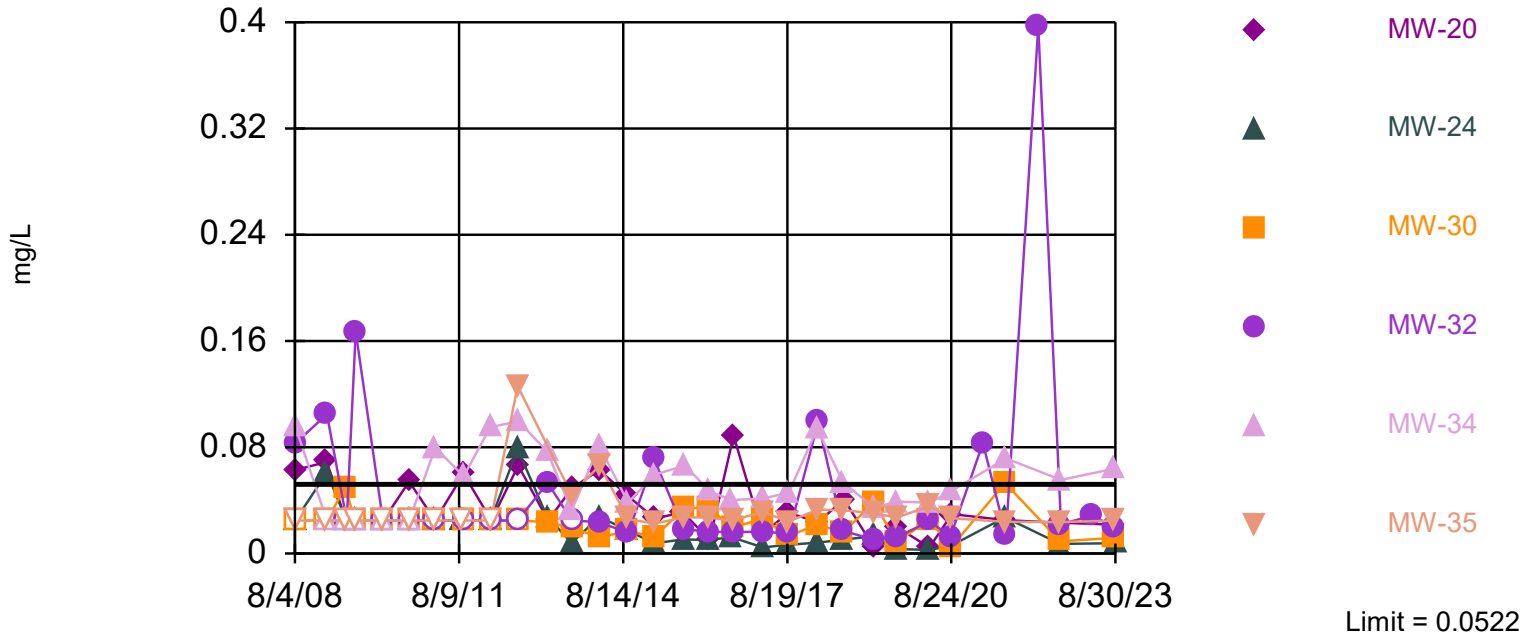
Hollow symbols indicate censored values.

Exceeds Limit: MW-34

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 58.33% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Nickel Analysis Run 11/10/2023 4:13 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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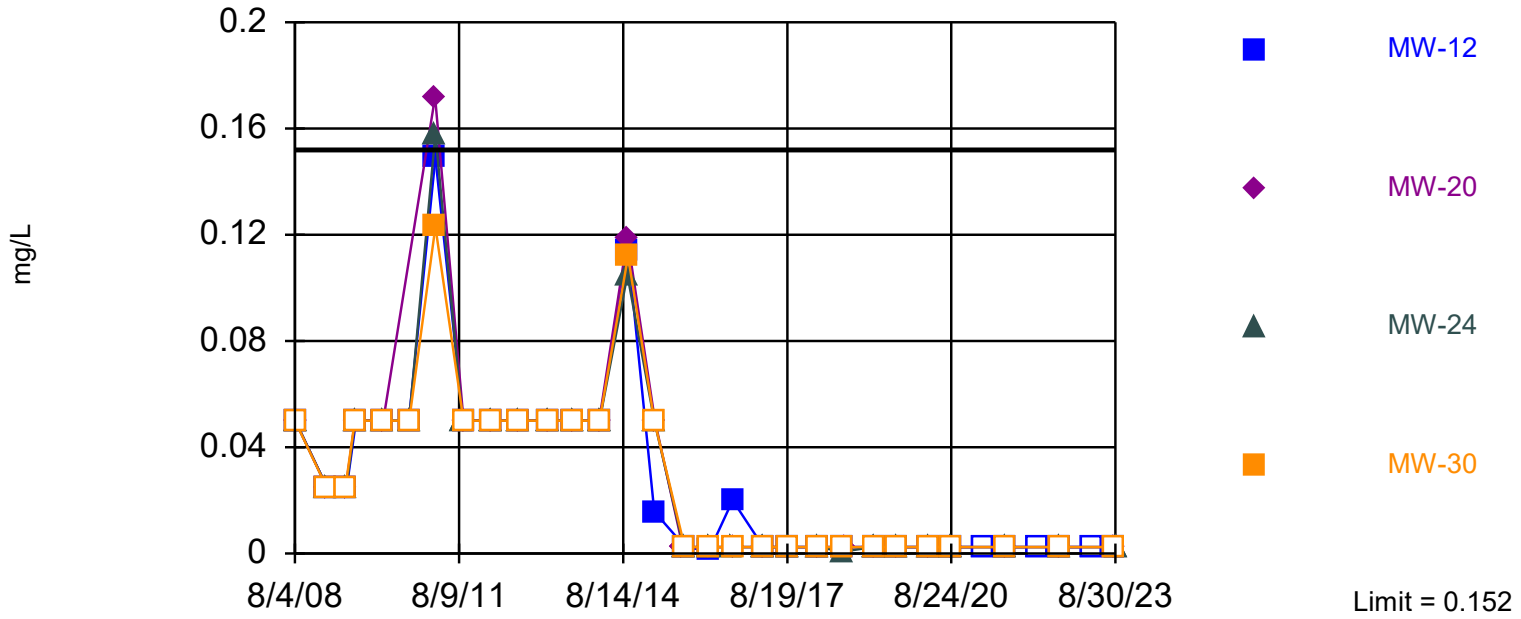
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 96% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Tin Analysis Run 11/10/2023 3:03 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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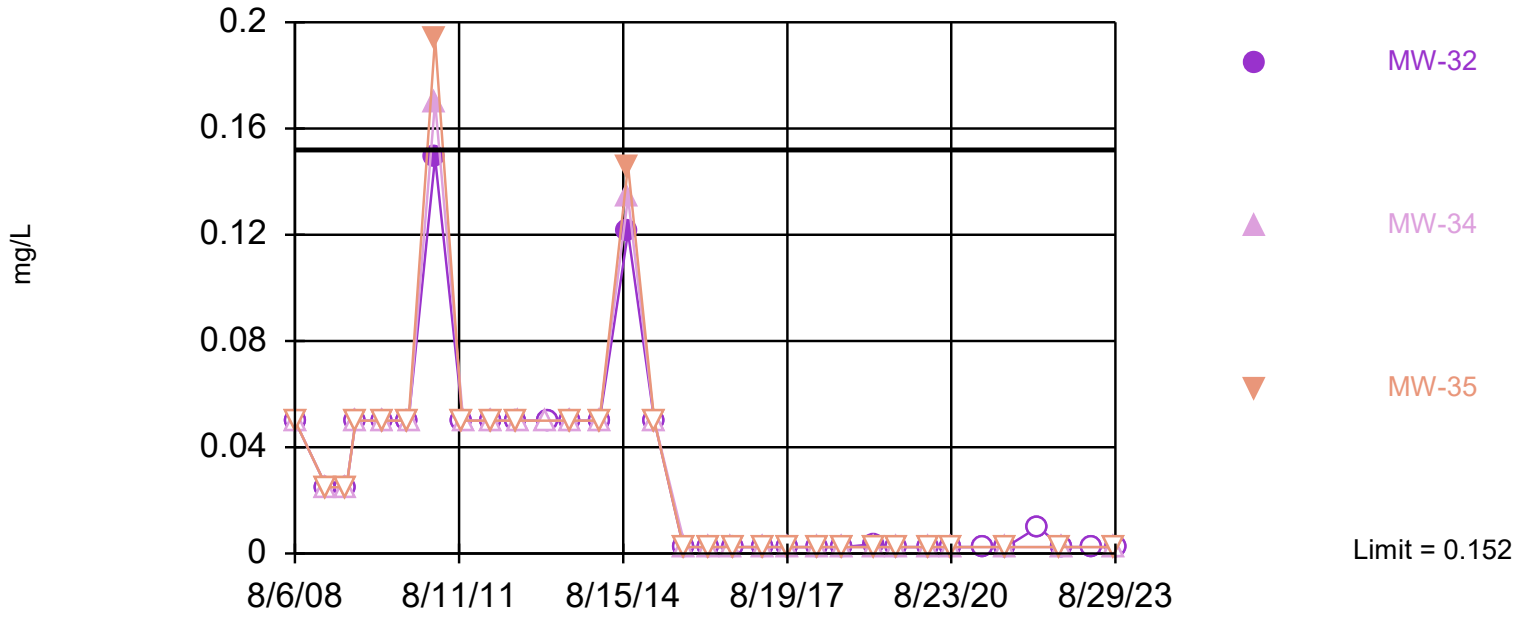
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 96% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Tin Analysis Run 11/10/2023 3:04 PM

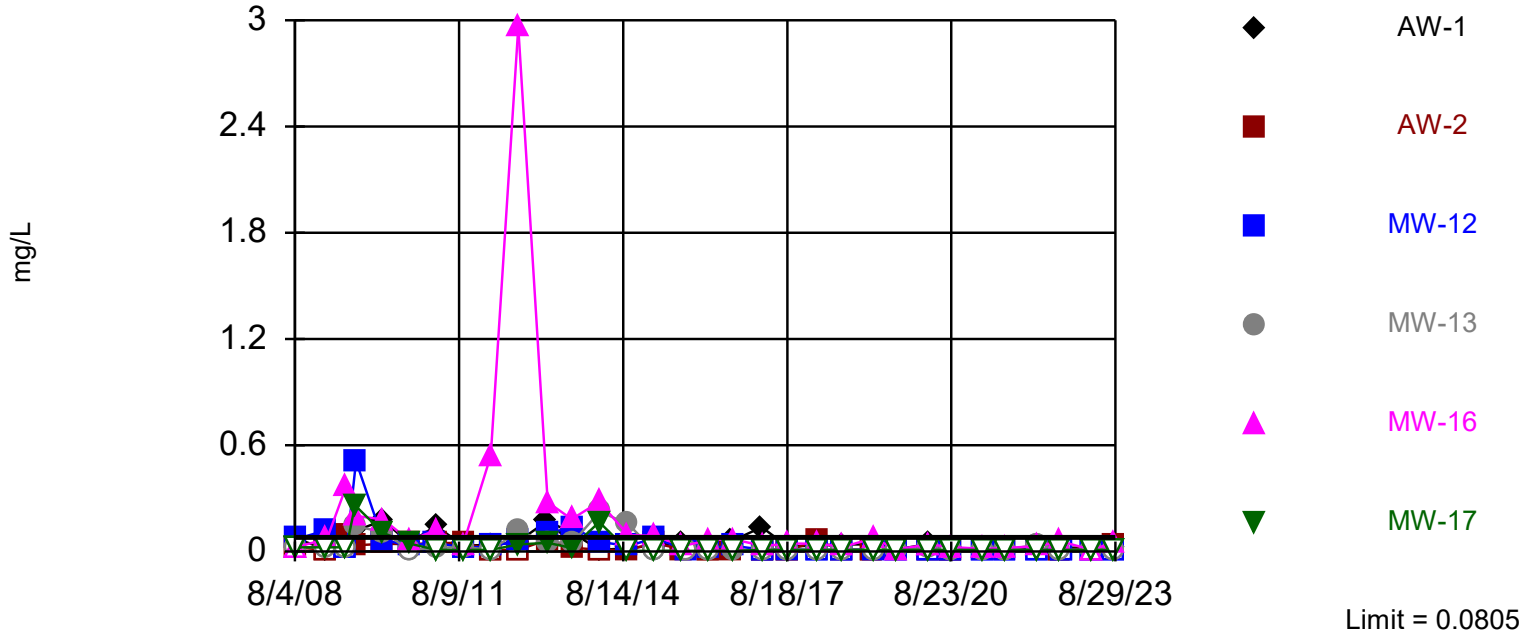
Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 86% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Zinc Analysis Run 11/10/2023 4:08 PM

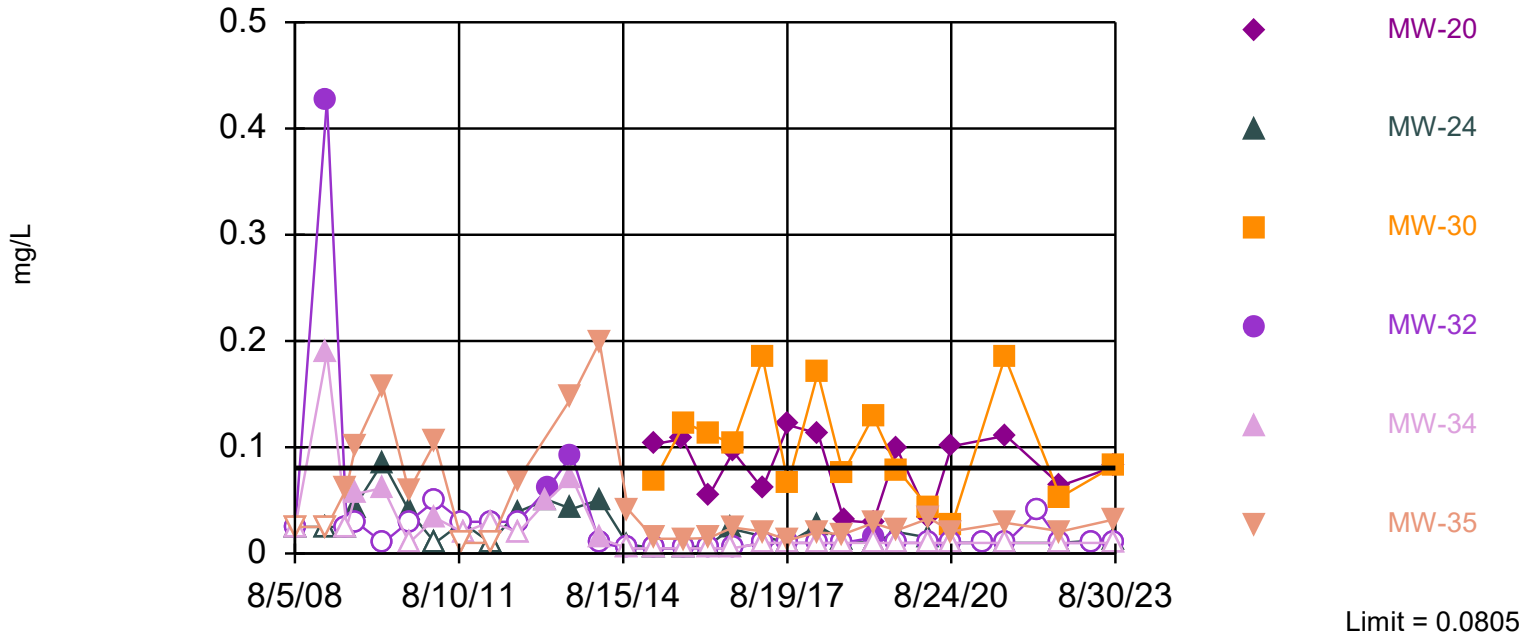
Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Exceeds Limit: MW-20, MW-30

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 50 background values. 86% NDs. Annual per-constituent alpha = 0.03181. Individual comparison alpha = 0.0007026 (1 of 2).

Constituent: Zinc Analysis Run 11/10/2023 4:13 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Deeper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Detection Monitoring Locations													
Antimony (mg/L)	MW-31	0.0101	8/29/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-31	0.00225	8/29/2023	0.001ND	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-31	0.138	8/29/2023	0.0999	No	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Cadmium (mg/L)	MW-31	0.000824	8/29/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-31	0.0008831	8/29/2023	0.00025ND	No	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Copper (mg/L)	MW-31	0.0108	8/29/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-31	0.00735	8/29/2023	0.0025ND	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Zinc (mg/L)	MW-31	0.0366	8/29/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Delineation Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	MW-102B	0.0101	8/30/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-105B	0.0101	8/23/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-107B	0.0101	8/22/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-108B	0.0101	8/30/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-109B	0.0101	8/24/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-102B	0.00225	8/30/2023	0.001ND	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-104B	0.00225	8/30/2023	0.00061J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-105B	0.00225	8/23/2023	0.000868J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-107B	0.00225	8/22/2023	0.001ND	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-108B	0.00225	8/30/2023	0.001ND	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-102B	0.138	8/30/2023	0.108	No	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-105B	0.138	8/23/2023	0.143	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-107B	0.138	8/22/2023	0.302	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-108B	0.138	8/30/2023	0.183	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-109B	0.138	8/24/2023	0.747	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Cadmium (mg/L)	MW-102B	0.000824	8/30/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-105B	0.000824	8/23/2023	0.0001J	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-107B	0.000824	8/22/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-108B	0.000824	8/30/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-109B	0.000824	8/24/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-102B	0.0008831	8/30/2023	0.00105	Yes	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-107B	0.0008831	8/22/2023	0.00275	Yes	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Copper (mg/L)	MW-102B	0.0108	8/30/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-105B	0.0108	8/23/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-107B	0.0108	8/22/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-108B	0.0108	8/30/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-109B	0.0108	8/24/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-102B	0.00735	8/30/2023	0.0024J	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-105B	0.00735	8/23/2023	0.0108	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-107B	0.00735	8/22/2023	0.0126	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-108B	0.00735	8/30/2023	0.00619	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-109B	0.00735	8/24/2023	0.0347	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Zinc (mg/L)	MW-102B	0.0366	8/30/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-105B	0.0366	8/23/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-107B	0.0366	8/22/2023	0.0102J	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-108B	0.0366	8/30/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-109B	0.0366	8/24/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Assessment Monitoring Locations													
Antimony (mg/L)	MW-11	0.0101	8/24/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-15	0.0101	8/23/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2

Deeper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations (Continued)													
Antimony (mg/L)	MW-18	0.0101	8/29/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-19	0.0101	8/28/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-25	0.0101	8/30/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-11	0.00225	8/24/2023	0.00071J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-15	0.00225	8/23/2023	0.000546J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-18	0.00225	8/29/2023	0.00207	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-19	0.00225	8/28/2023	0.000621J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Arsenic (mg/L)	MW-25	0.00225	8/30/2023	0.00141J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-11	0.138	8/24/2023	0.0445	No	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-15	0.138	8/23/2023	0.04	No	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-18	0.138	8/29/2023	0.0248	No	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-19	0.138	8/28/2023	0.0351	No	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-25	0.138	8/30/2023	0.221	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-11	25.4	8/24/2023	4.715ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-15	25.4	8/23/2023	5.7ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-18	25.4	8/29/2023	5.55ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-19	25.4	8/28/2023	5ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-25	25.4	8/30/2023	5.8ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-11	0.000824	8/24/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-15	0.000824	8/23/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-18	0.000824	8/29/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-19	0.000824	8/28/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-25	0.000824	8/30/2023	0.000162J	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-11	0.0008831	8/24/2023	0.000822	No	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-15	0.0008831	8/23/2023	0.0032	Yes	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-18	0.0008831	8/29/2023	0.00025ND	No	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-19	0.0008831	8/28/2023	0.00025ND	No	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-25	0.0008831	8/30/2023	0.000175J	No	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Copper (mg/L)	MW-11	0.0108	8/24/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-15	0.0108	8/23/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-18	0.0108	8/29/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-19	0.0108	8/28/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-25	0.0108	8/30/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-11	0.00735	8/24/2023	0.00389J	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-15	0.00735	8/23/2023	0.0104	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-18	0.00735	8/29/2023	0.00671	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-19	0.00735	8/28/2023	0.015	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-25	0.00735	8/30/2023	0.0025ND	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Tin (mg/L)	MW-11	0.109	8/24/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-25	0.109	8/30/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-11	0.0366	8/24/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-15	0.0366	8/23/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-18	0.0366	8/29/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-19	0.0366	8/28/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-25	0.0366	8/30/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Corrective Action Monitoring Locations - Assessment Constituents													
Antimony (mg/L)	AW-6	0.0101	8/29/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	CRL-9	0.0101	8/29/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-14	0.0101	8/22/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2

Deeper Bedrock

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents (Continued)													
Antimony (mg/L)	MW-22	0.0101	8/30/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-33	0.0101	8/29/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Antimony (mg/L)	MW-36	0.0101	8/28/2023	0.001ND	No	47	n/a	n/a	96	n/a	n/a	0.0008056	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	AW-6	0.00225	8/29/2023	0.000696J	No	49	n/a	n/a	39	n/a	n/a	0.0007368	NP Inter (normality) 1 of 2
Barium (mg/L)	AW-6	0.138	8/29/2023	0.178	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	CRL-9	0.138	8/29/2023	0.518	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-14	0.138	8/22/2023	0.373	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-22	0.138	8/30/2023	0.653	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-33	0.138	8/29/2023	0.819	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-36	0.138	8/28/2023	0.735	Yes	45	n/a	n/a	0	n/a	n/a	0.0008745	NP Inter (normality) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	AW-6	25.4	8/29/2023	5.45ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	CRL-9	25.4	8/29/2023	5.45ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-22	25.4	8/30/2023	5.55ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-33	25.4	8/29/2023	5.45ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
bis[2-Ethylhexyl]phthalate (ug/L)	MW-36	25.4	8/28/2023	5ND	No	49	n/a	n/a	92	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	AW-6	0.000824	8/29/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	CRL-9	0.000824	8/29/2023	0.000107J	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-14	0.000824	8/22/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-22	0.000824	8/30/2023	0.000149J	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-33	0.000824	8/29/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-36	0.000824	8/28/2023	0.0001ND	No	46	n/a	n/a	98	n/a	n/a	0.00084	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-14	0.0008831	8/22/2023	0.000874	No	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-33	0.0008831	8/29/2023	0.00147	Yes	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Cobalt (mg/L)	MW-36	0.0008831	8/28/2023	0.00126	Yes	36	-8.283	0.5254	14	None	ln(x)	0.0002545	Param Inter 1 of 2
Copper (mg/L)	AW-6	0.0108	8/29/2023	0.00211J	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	CRL-9	0.0108	8/29/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-14	0.0108	8/22/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-22	0.0108	8/30/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-33	0.0108	8/29/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Copper (mg/L)	MW-36	0.0108	8/28/2023	0.0025ND	No	48	n/a	n/a	98	n/a	n/a	0.0007712	NP Inter (NDs) 1 of 2
Nickel (mg/L)	AW-6	0.00735	8/29/2023	0.0318	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	CRL-9	0.00735	8/29/2023	0.0217	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-14	0.00735	8/22/2023	0.0171	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-22	0.00735	8/30/2023	0.0314	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-33	0.00735	8/29/2023	0.00841	Yes	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-36	0.00735	8/28/2023	0.00711	No	36	n/a	n/a	50	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Tin (mg/L)	AW-6	0.109	8/29/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Tin (mg/L)	CRL-9	0.109	8/29/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-22	0.109	8/30/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-33	0.109	8/29/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Tin (mg/L)	MW-36	0.109	8/28/2023	0.0025ND	No	49	n/a	n/a	96	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	AW-6	0.0366	8/29/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	CRL-9	0.0366	8/29/2023	0.0245	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-14	0.0366	8/22/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-22	0.0366	8/30/2023	0.00661J	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-33	0.0366	8/29/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW-36	0.0366	8/28/2023	0.01ND	No	49	n/a	n/a	90	n/a	n/a	0.0007368	NP Inter (NDs) 1 of 2

[1] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-38 and MW-101B data set. Note that background data set adjustments were incorporated in accordance with Section 3.1 of the Fall 2023 Statistical Evaluation memo.

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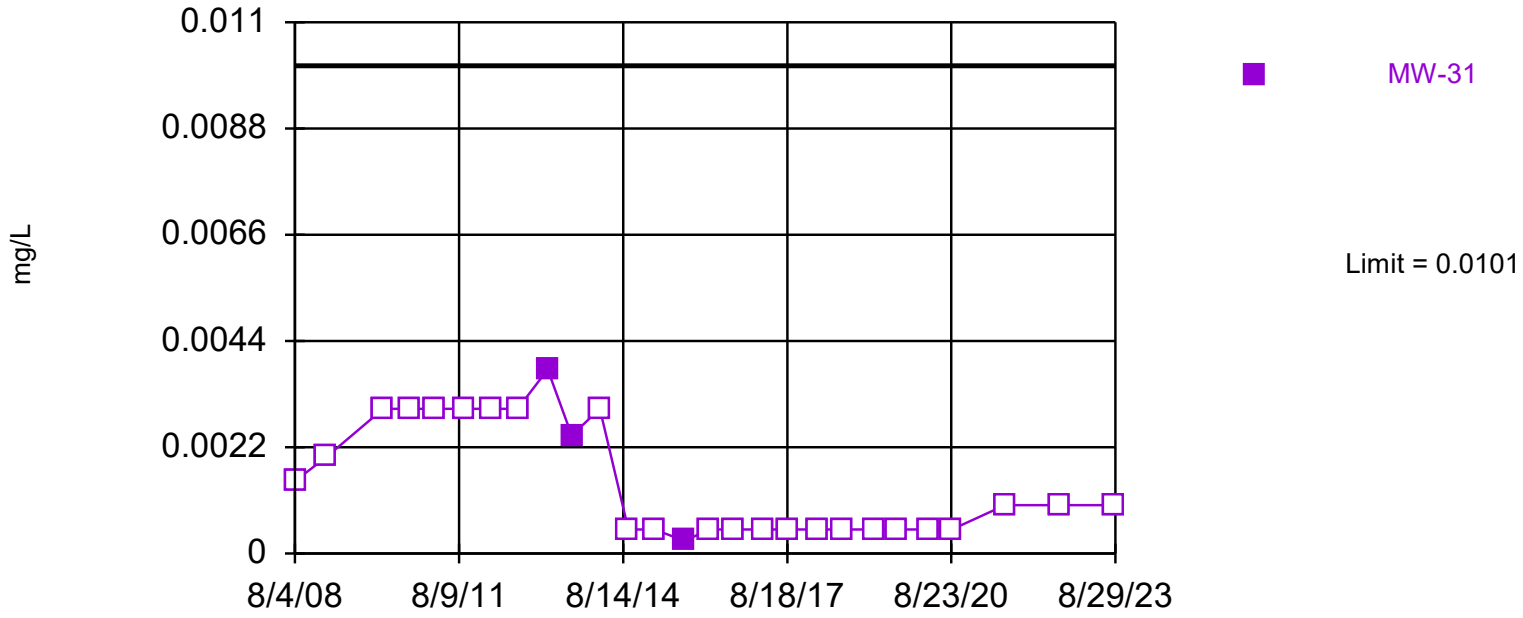
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 95.74% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Antimony Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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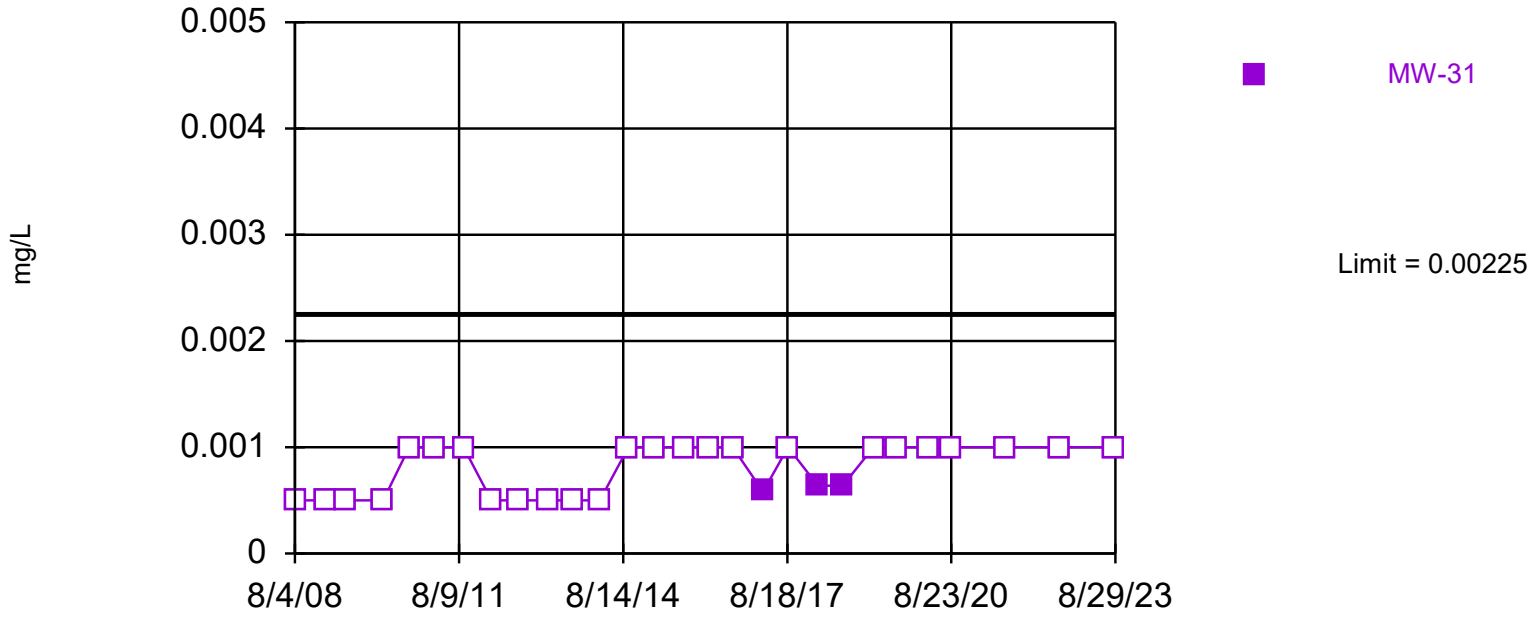
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 38.78% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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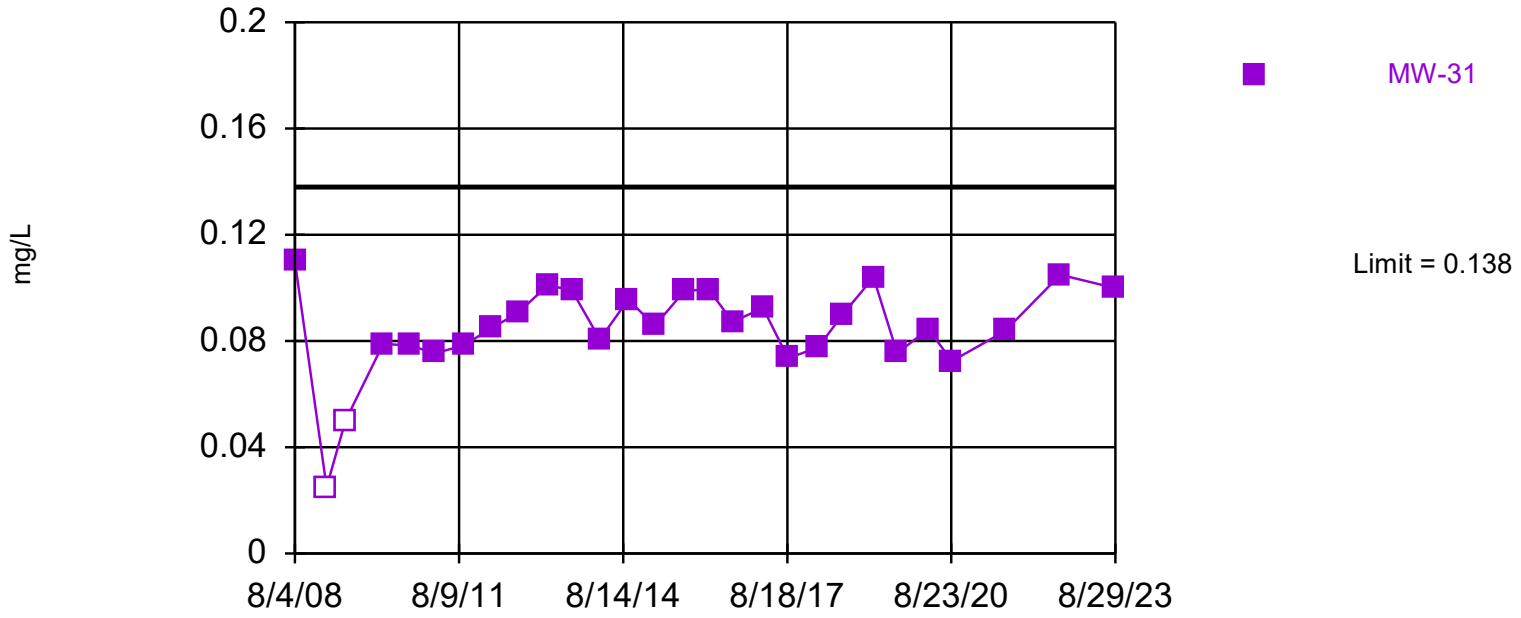
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Barium Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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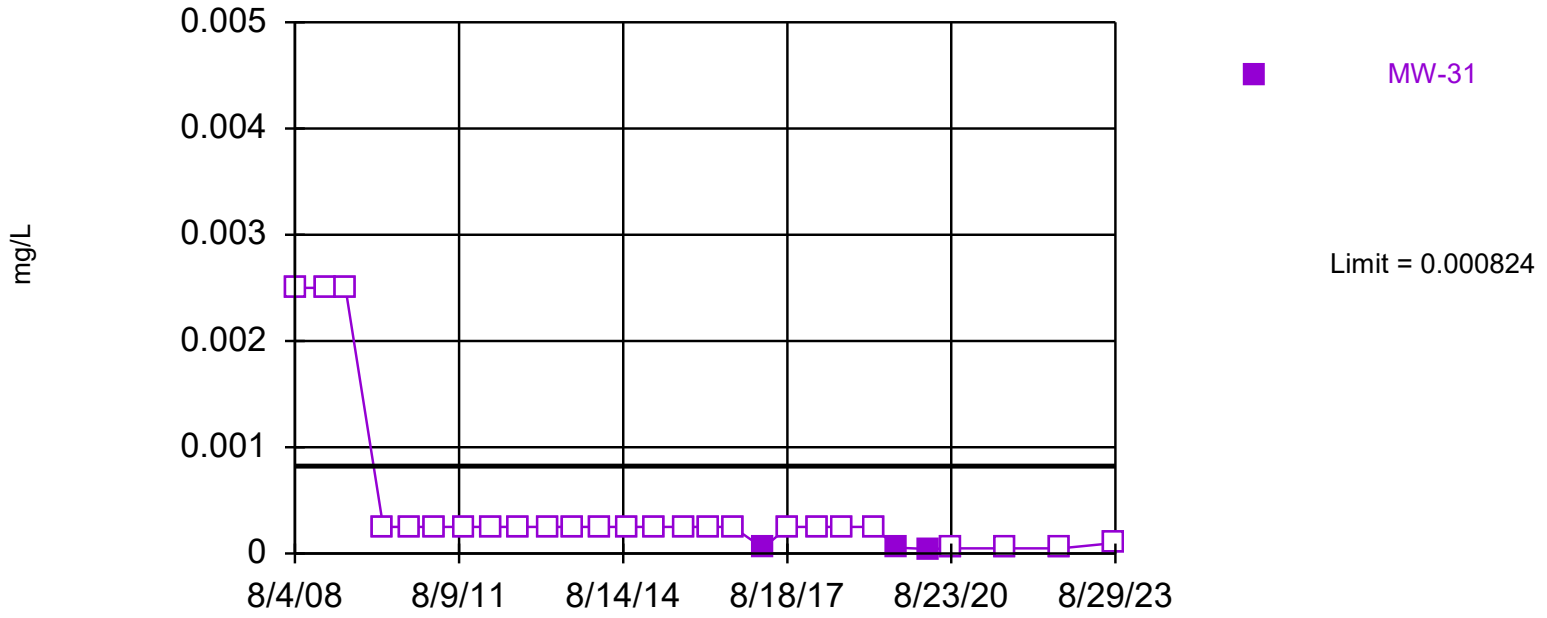
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 97.83% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Cadmium Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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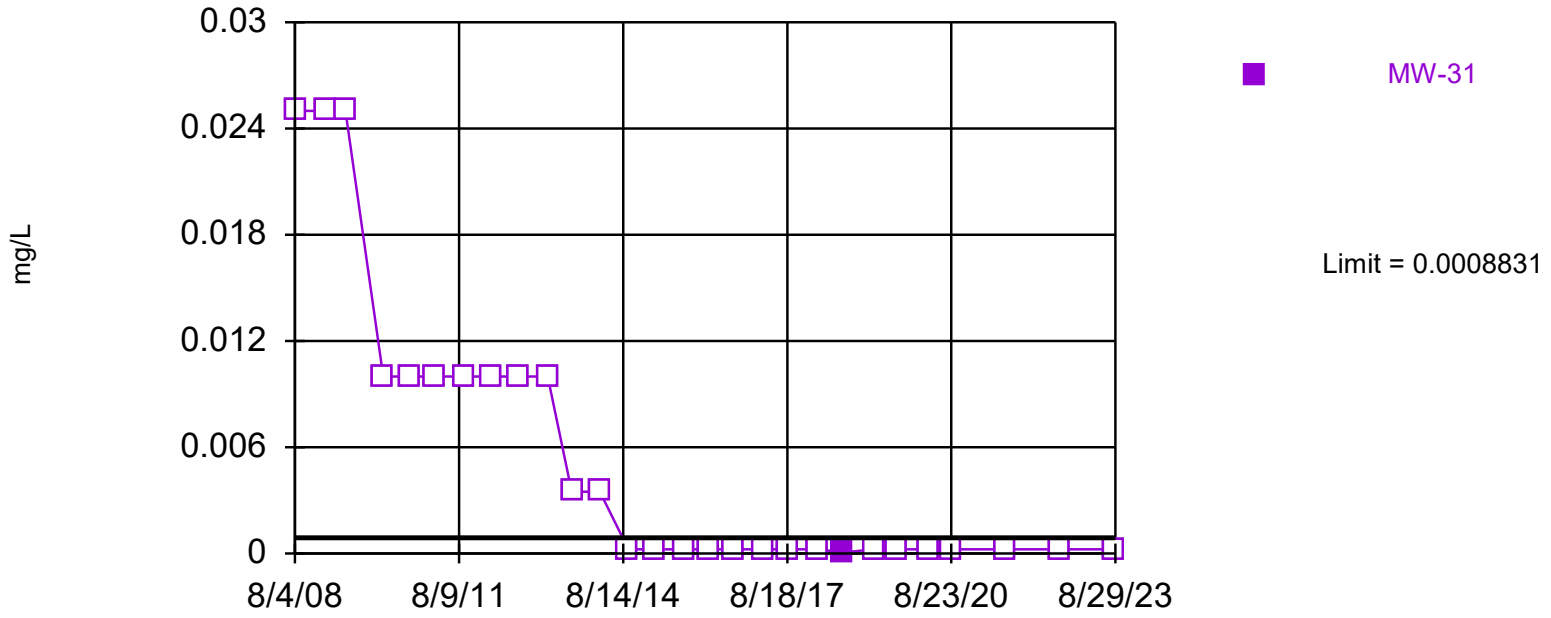
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-8.283, Std. Dev.=0.5254, n=36, 13.89% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9489, critical = 0.912. Kappa = 2.381 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Cobalt Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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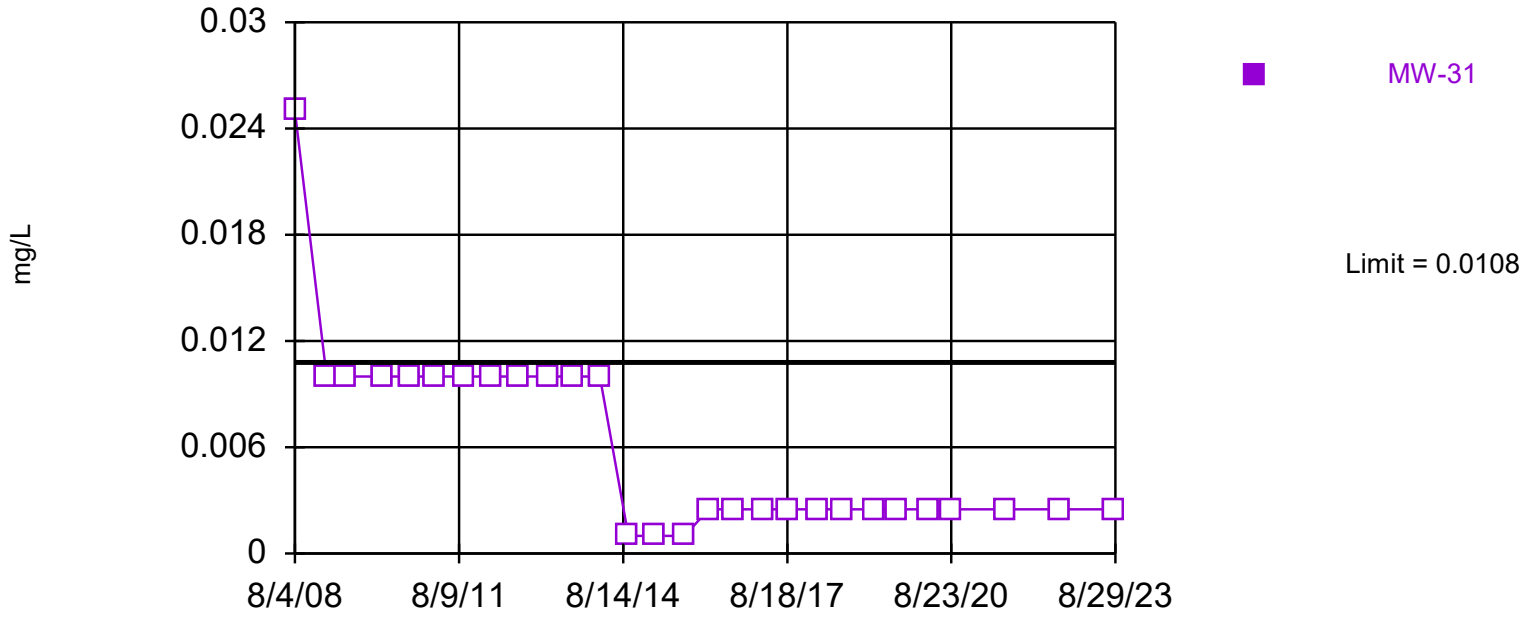
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 97.92% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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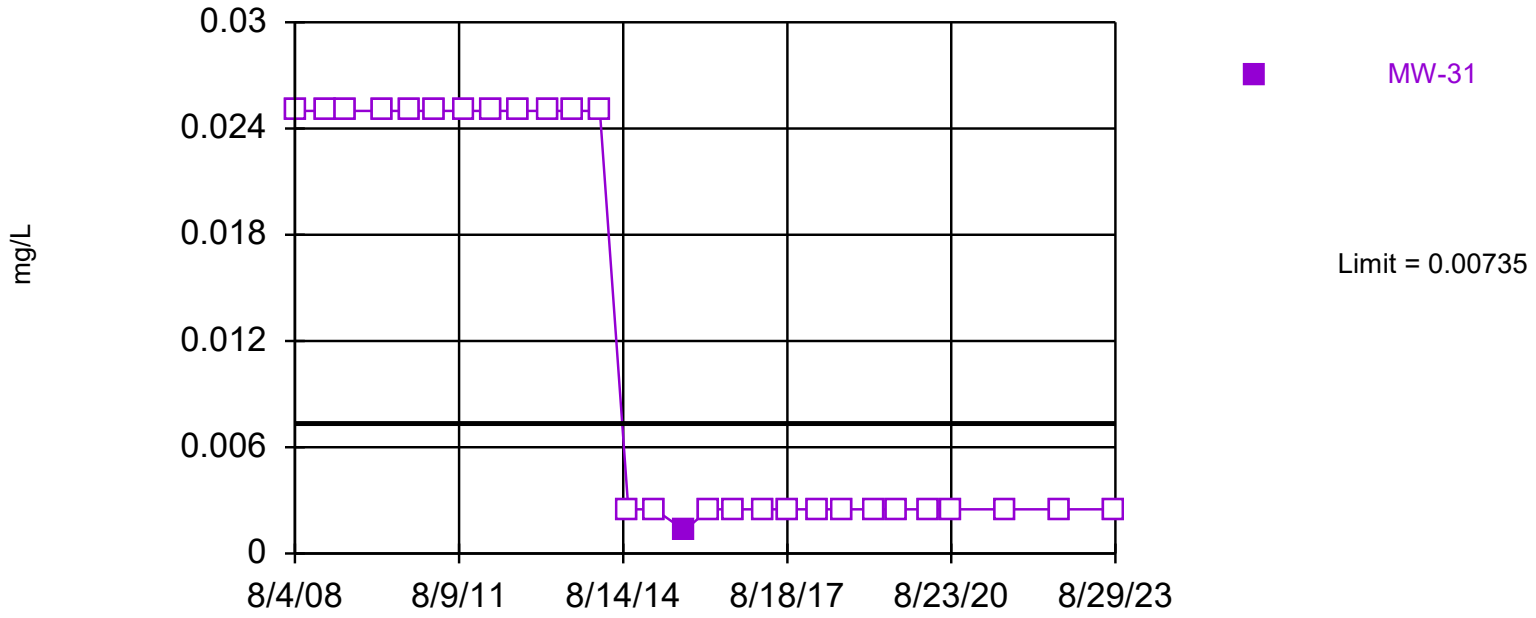
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 50% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Nickel Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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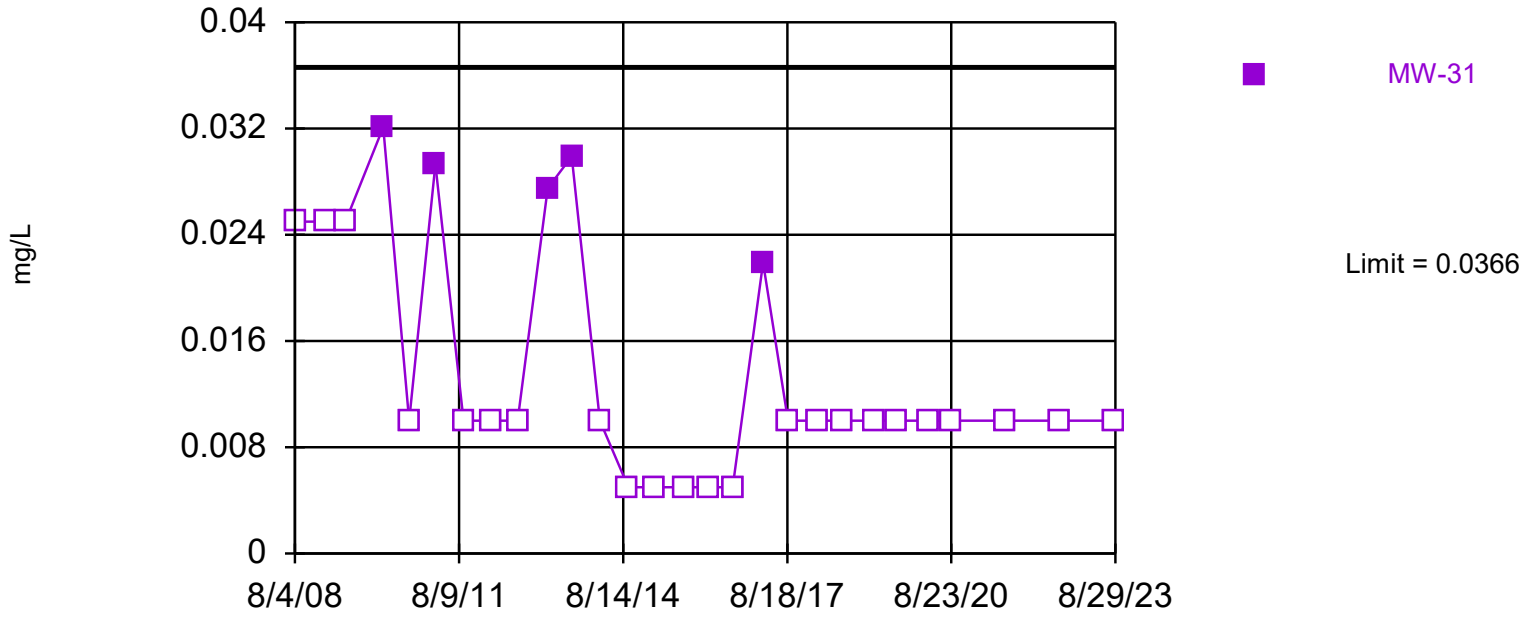
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 89.8% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Zinc Analysis Run 11/11/2023 3:39 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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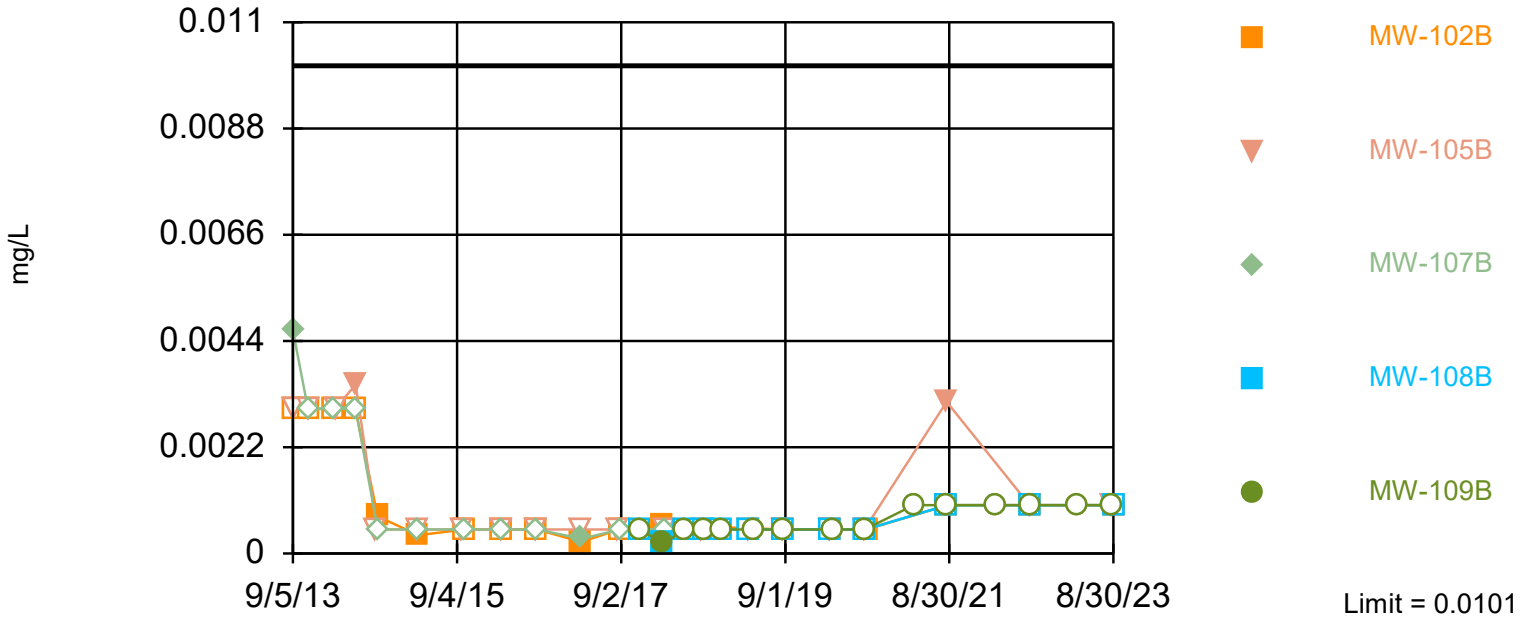
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 95.74% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Antimony Analysis Run 11/11/2023 3:45 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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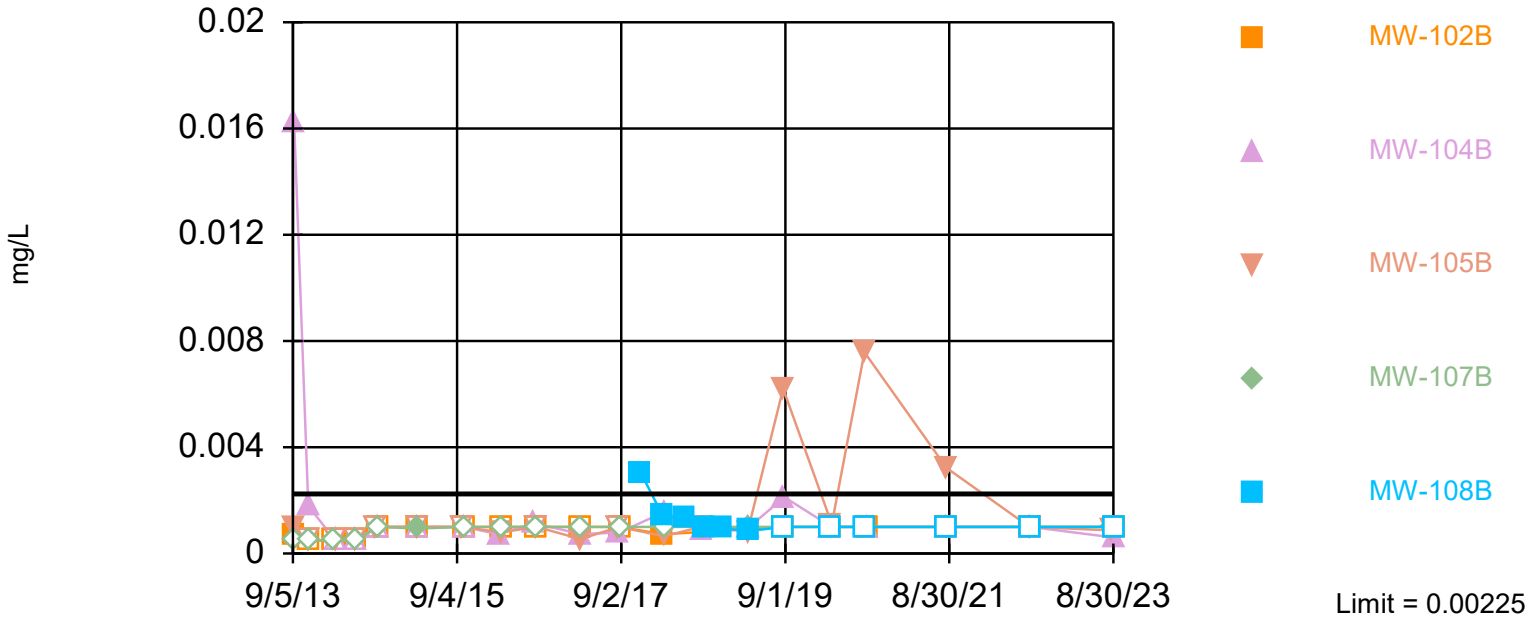
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 38.78% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

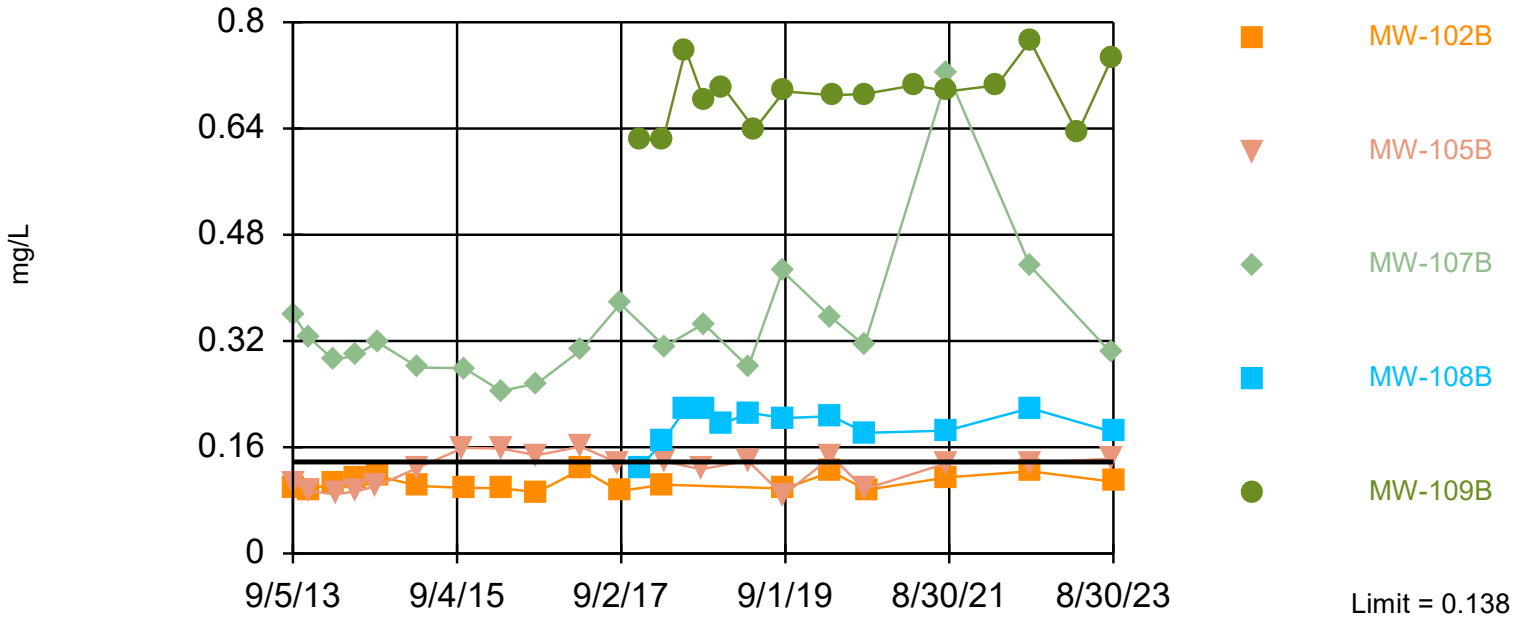
Constituent: Arsenic Analysis Run 11/11/2023 3:46 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Exceeds Limit: MW-105B, MW-107B, MW-108B, MW-109B

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Barium Analysis Run 11/11/2023 3:45 PM

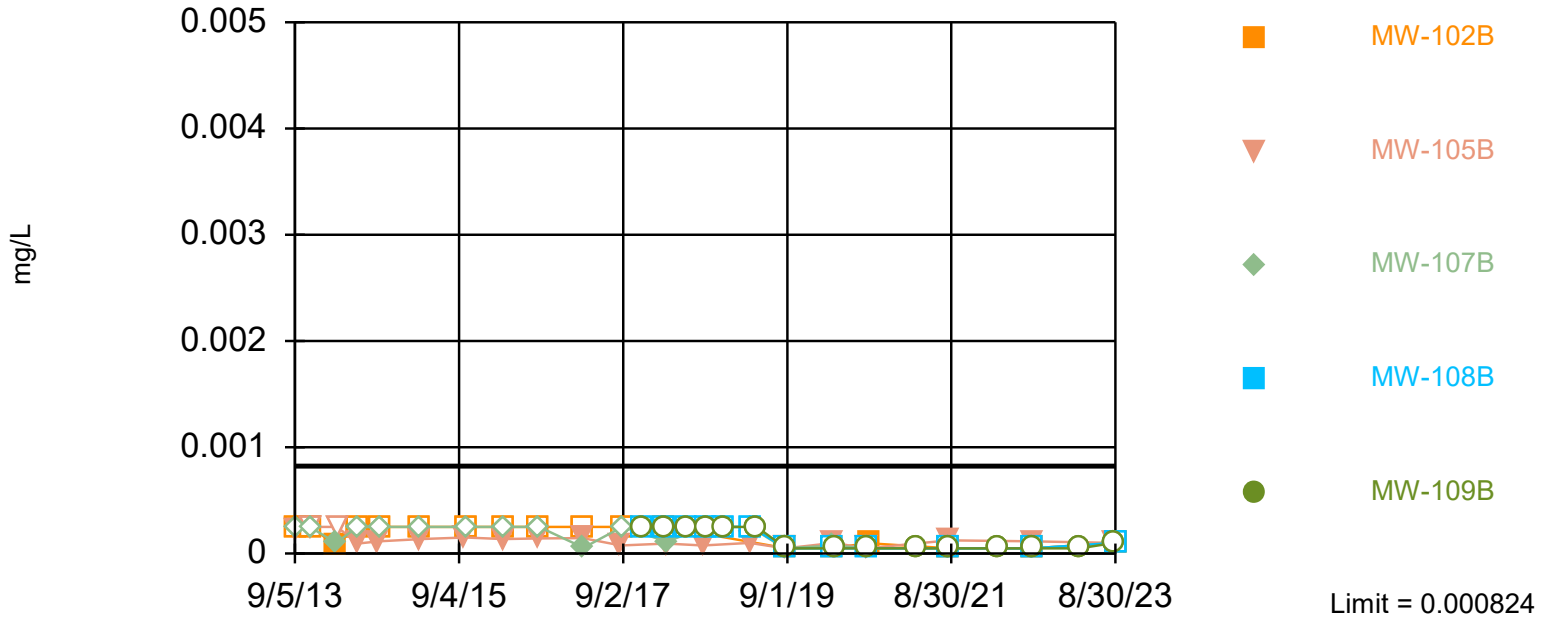
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 97.83% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

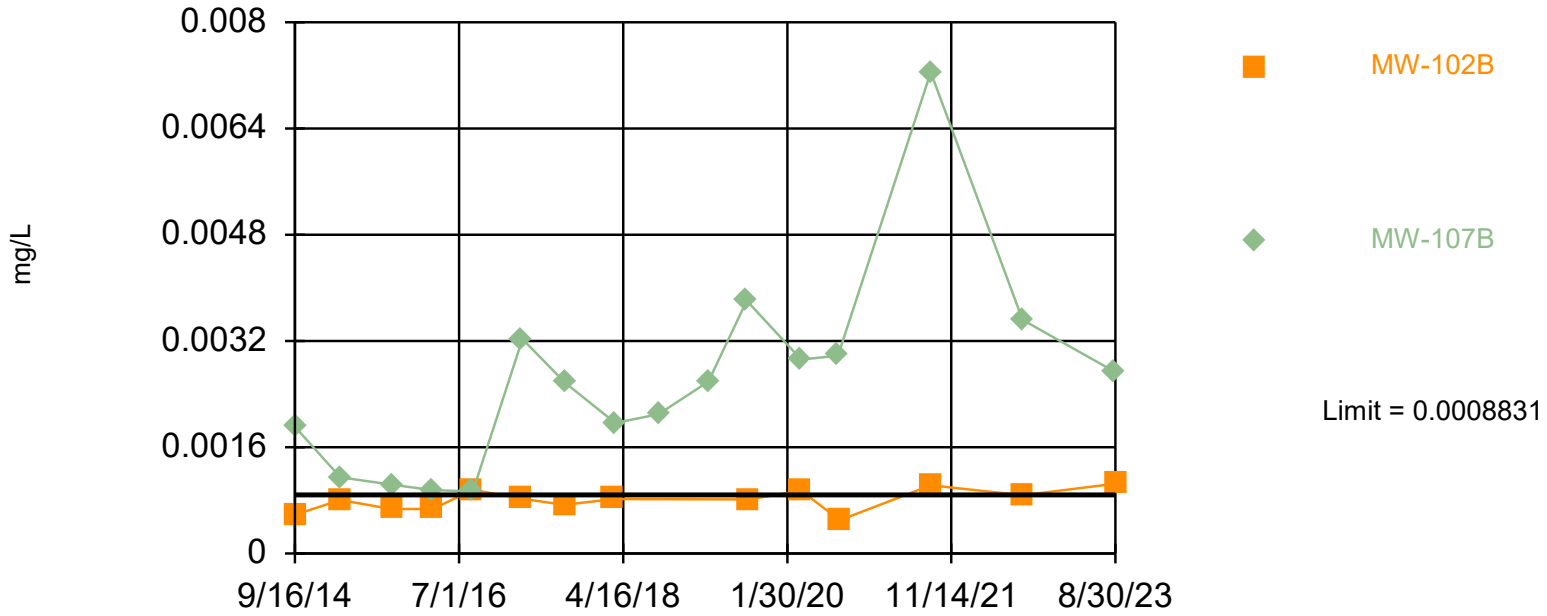
Constituent: Cadmium Analysis Run 11/11/2023 3:45 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Exceeds Limit: MW-102B, MW-107B

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-8.283, Std. Dev.=0.5254, n=36, 13.89% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9489, critical = 0.912. Kappa = 2.381 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Cobalt Analysis Run 11/11/2023 3:48 PM

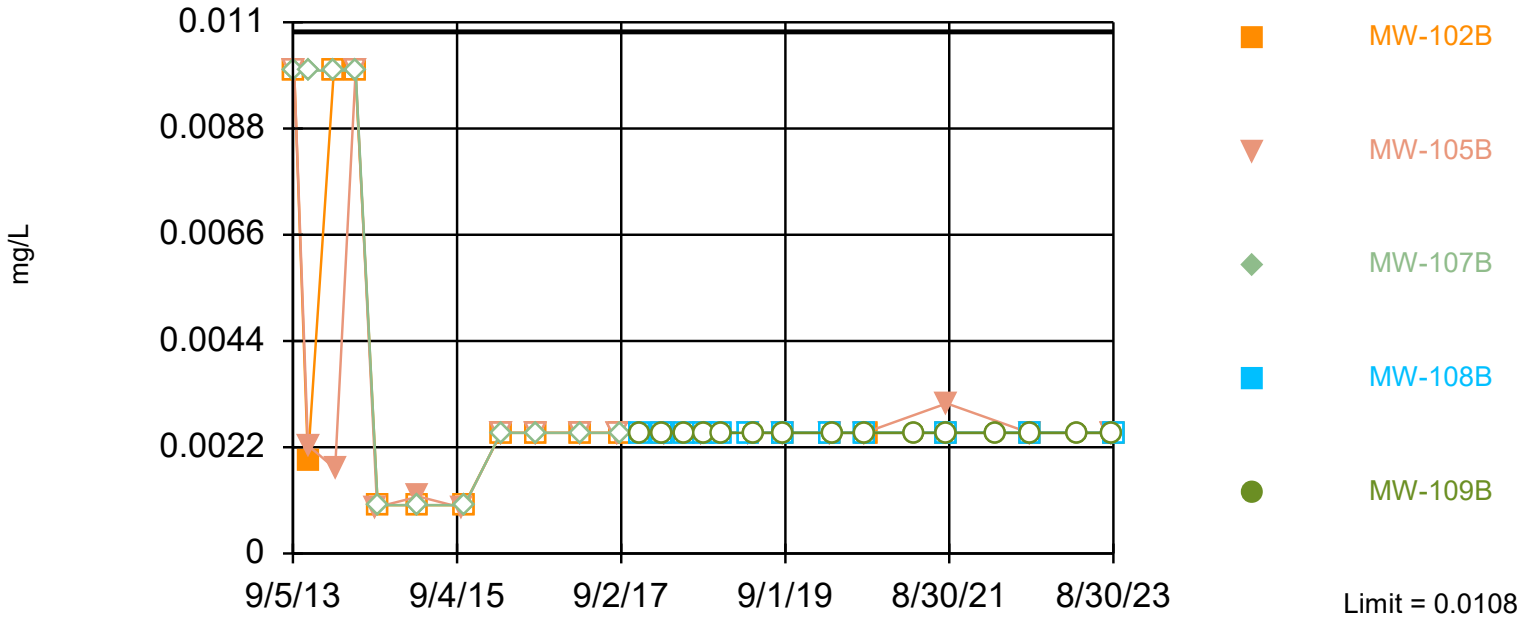
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 97.92% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/11/2023 3:45 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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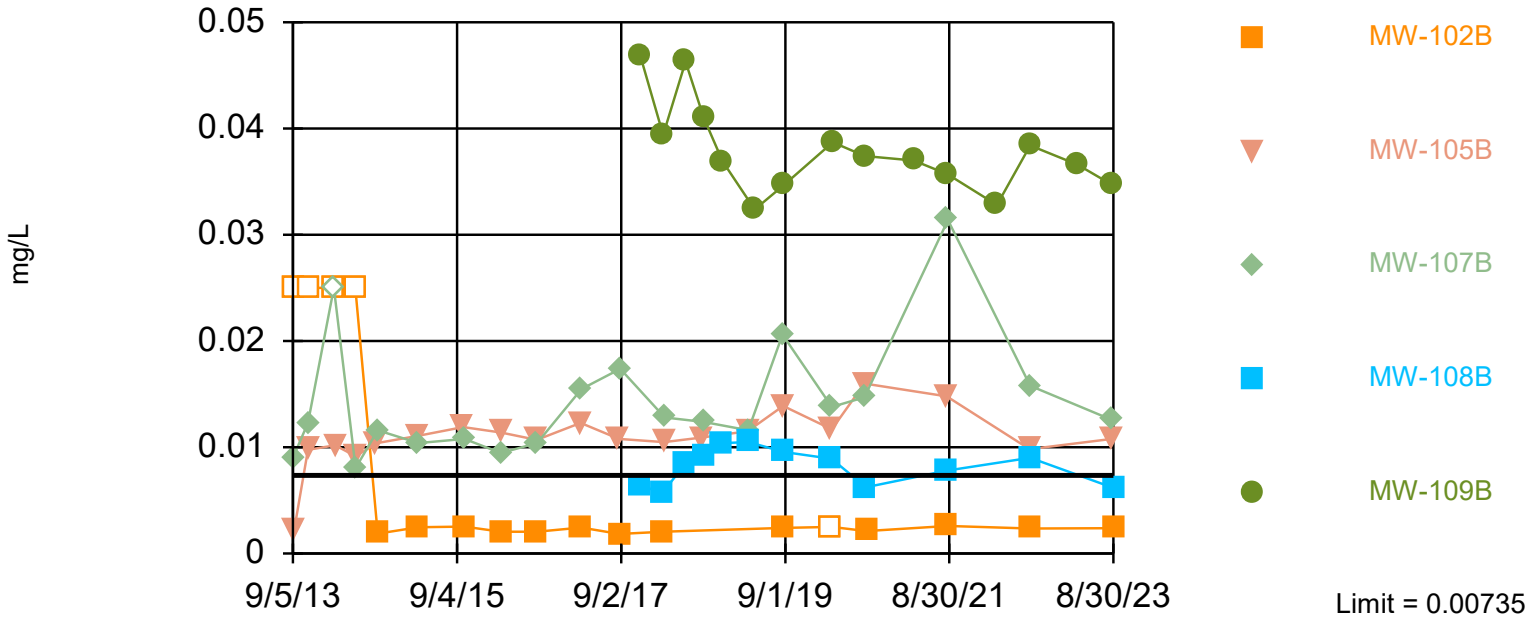
Hollow symbols indicate censored values.

Exceeds Limit: MW-105B, MW-107B, MW-109B

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 50% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Nickel Analysis Run 11/11/2023 3:45 PM

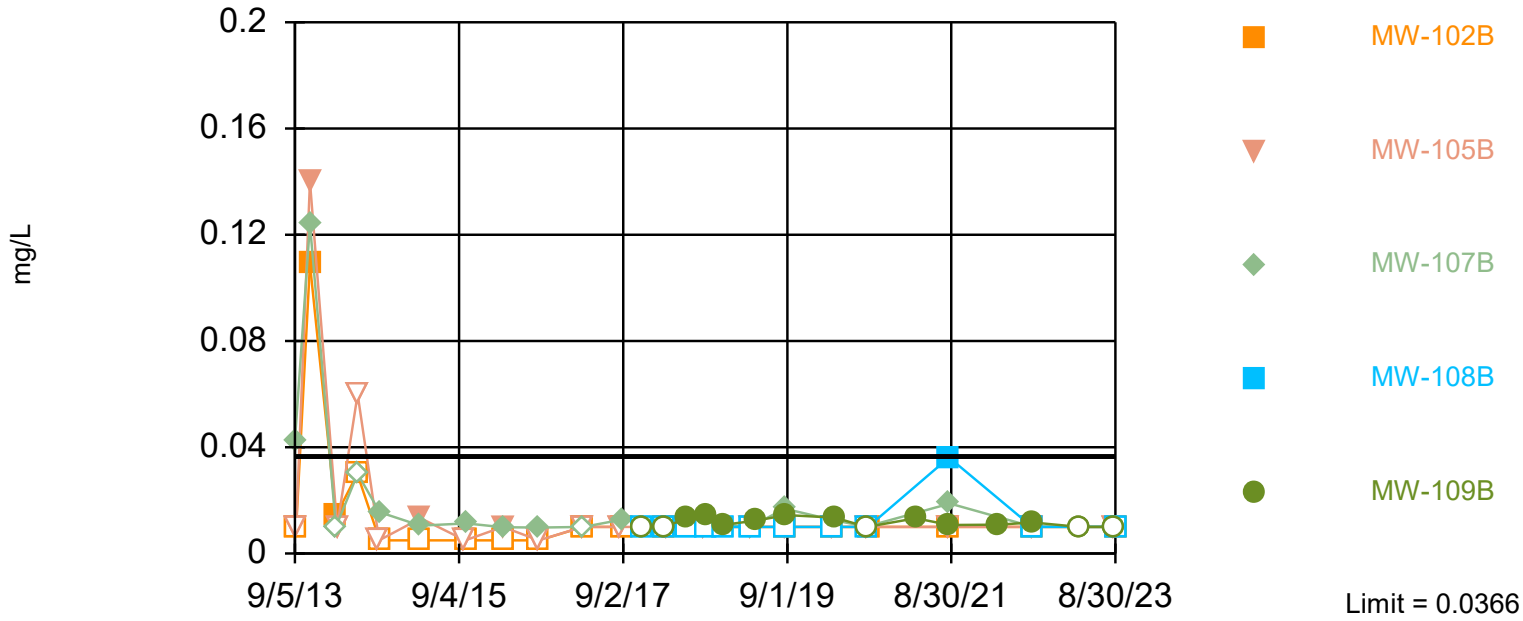
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 89.8% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Zinc Analysis Run 11/11/2023 3:45 PM

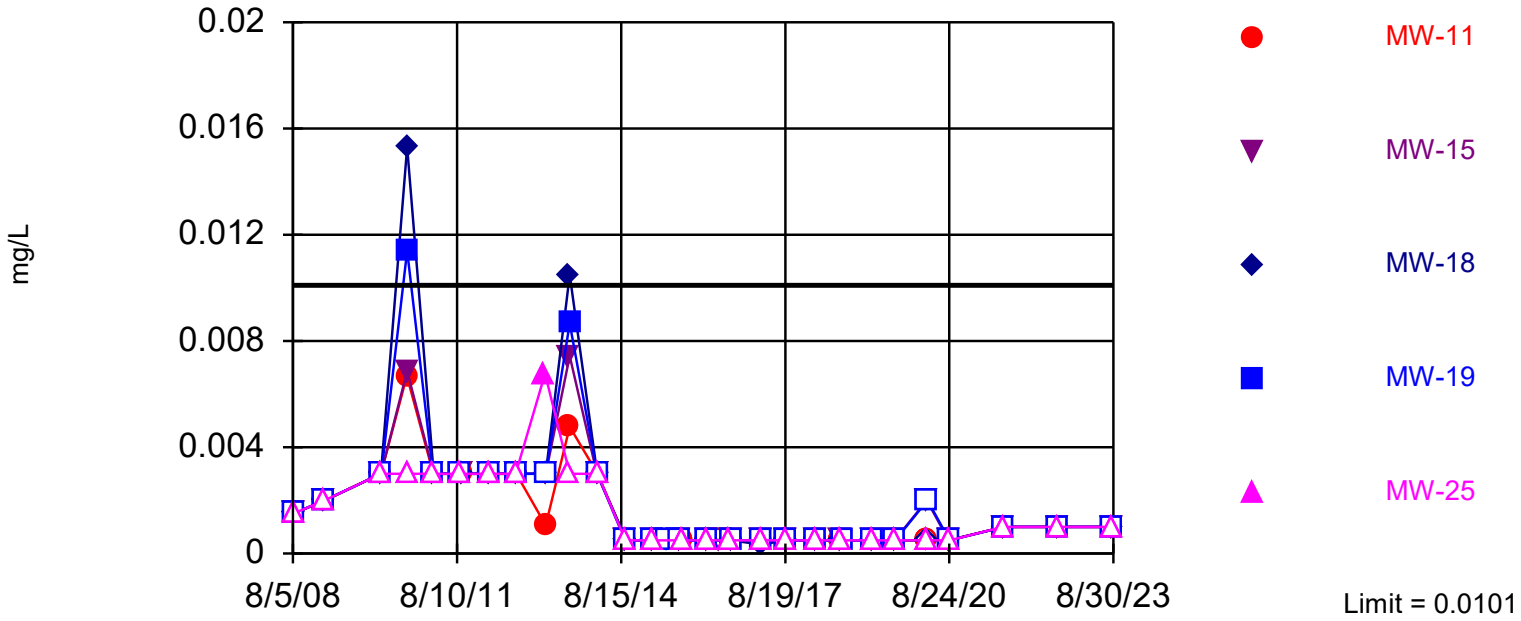
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 95.74% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Antimony Analysis Run 11/11/2023 3:55 PM

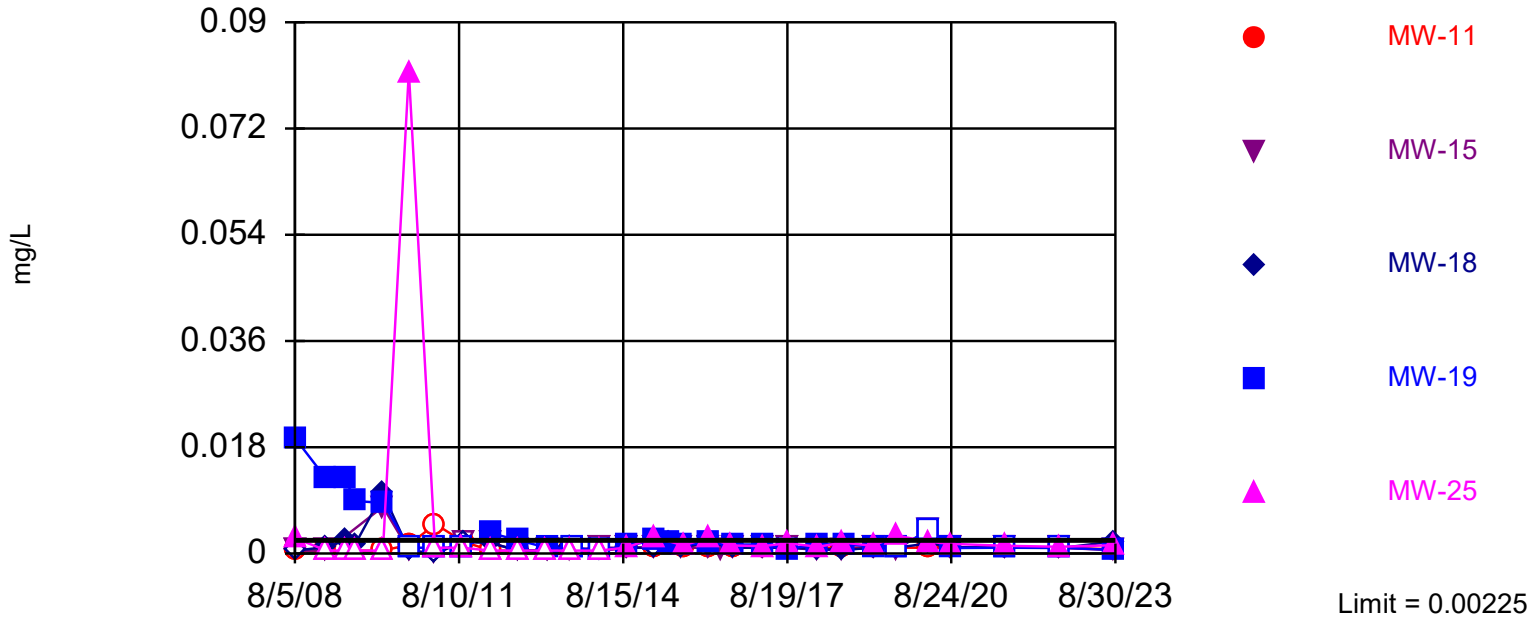
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 38.78% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/11/2023 3:55 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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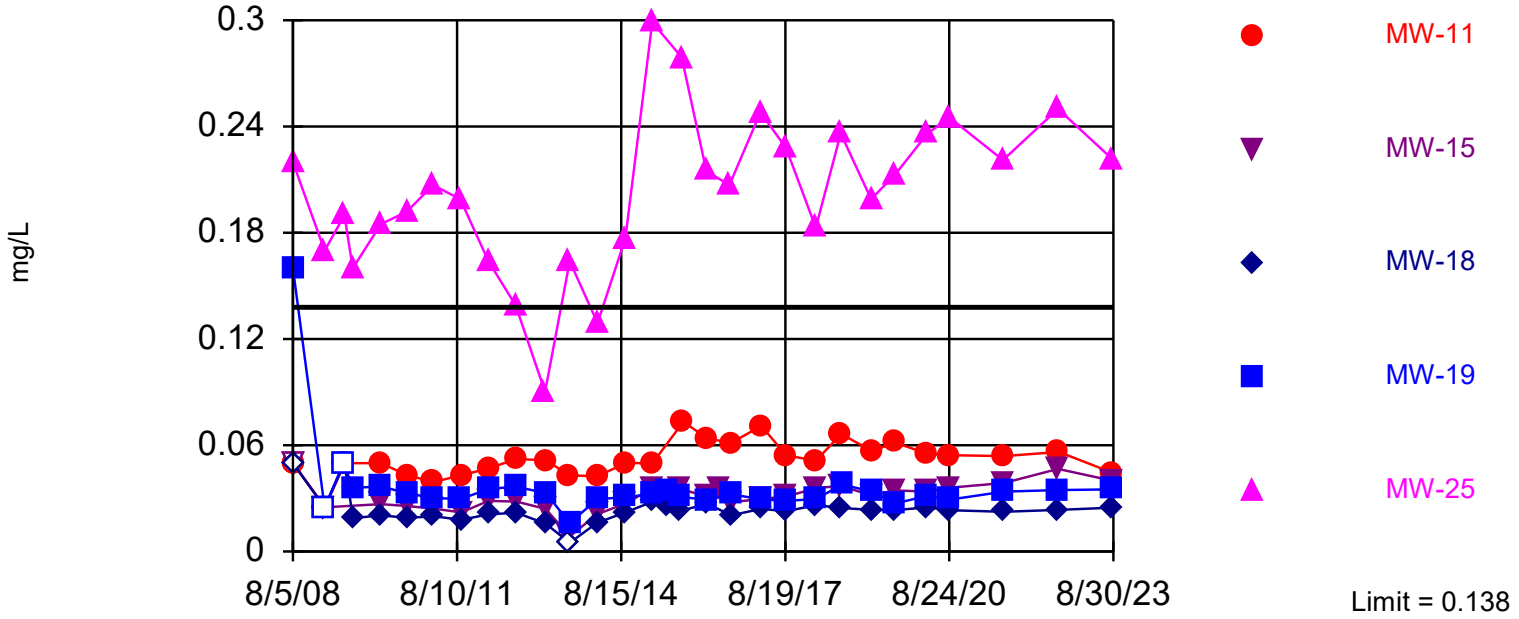
Hollow symbols indicate censored values.

Exceeds Limit: MW-25

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Barium Analysis Run 11/11/2023 3:55 PM

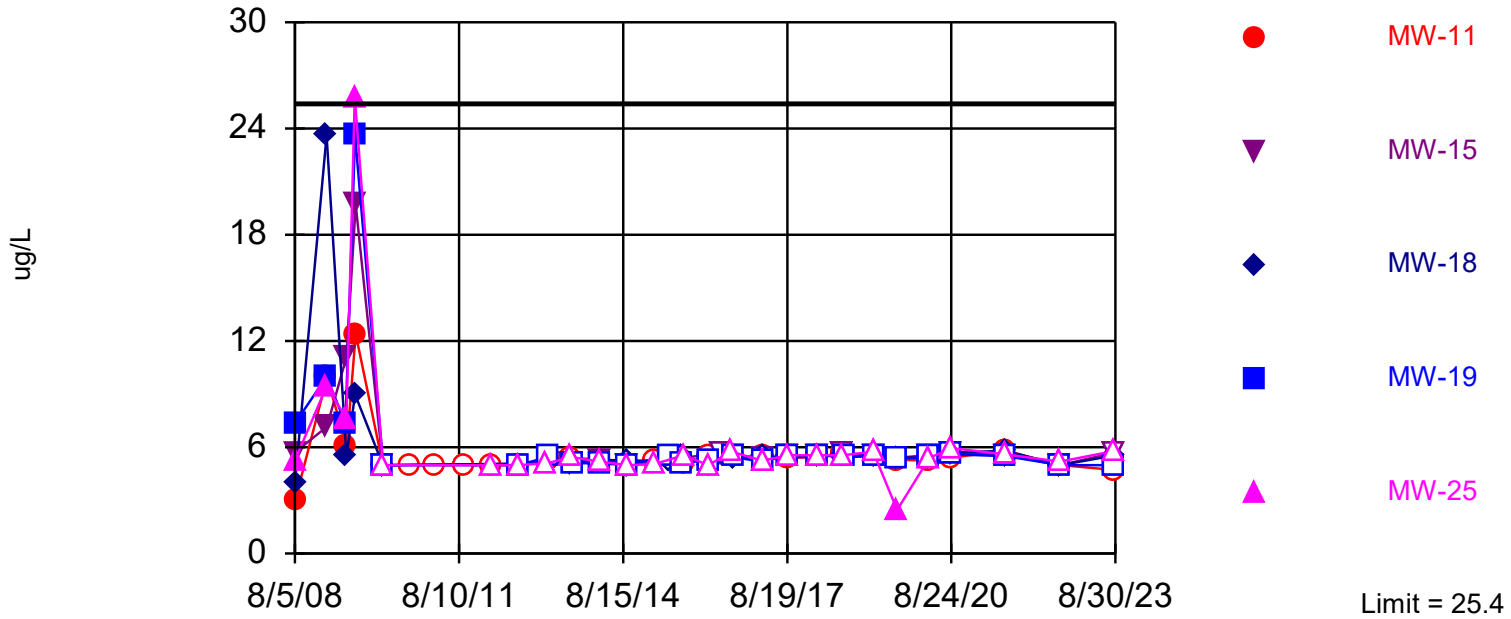
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 91.84% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: bis[2-Ethylhexyl]phthalate Analysis Run 11/11/2023 3:55 PM

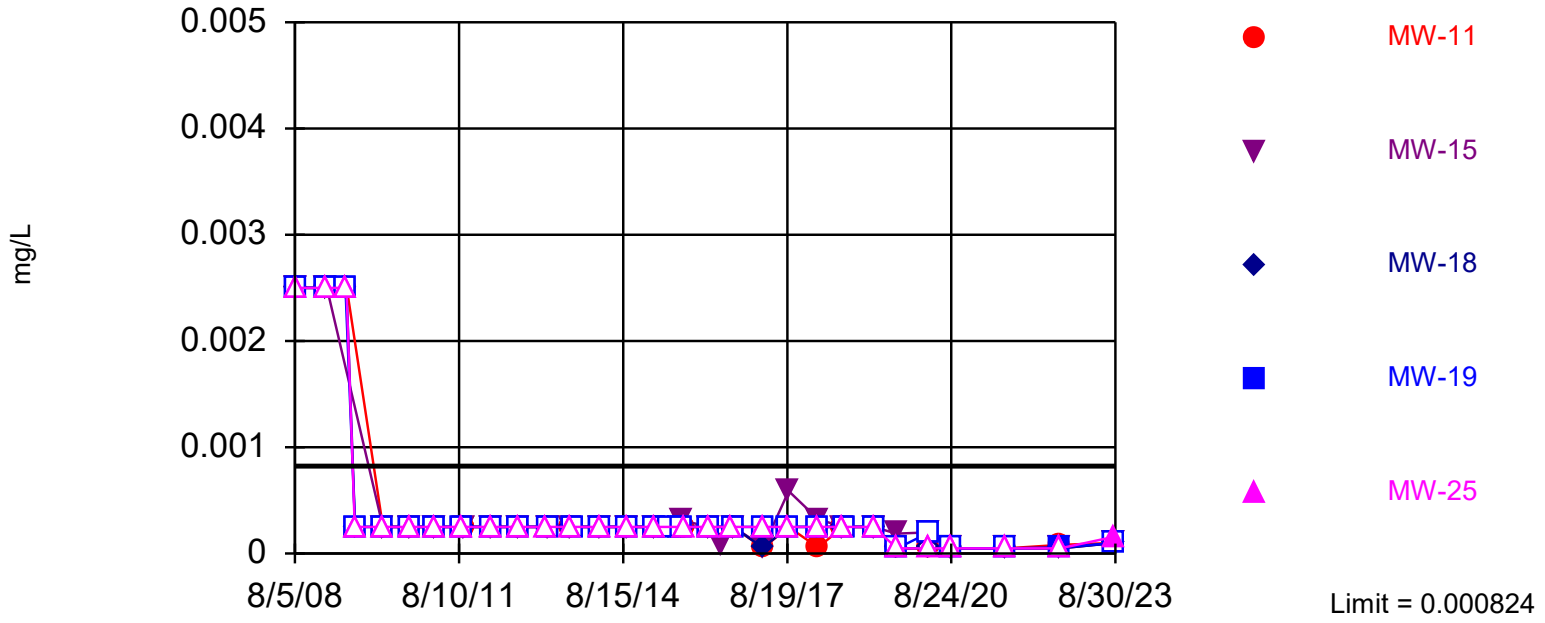
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 97.83% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

Constituent: Cadmium Analysis Run 11/11/2023 3:56 PM

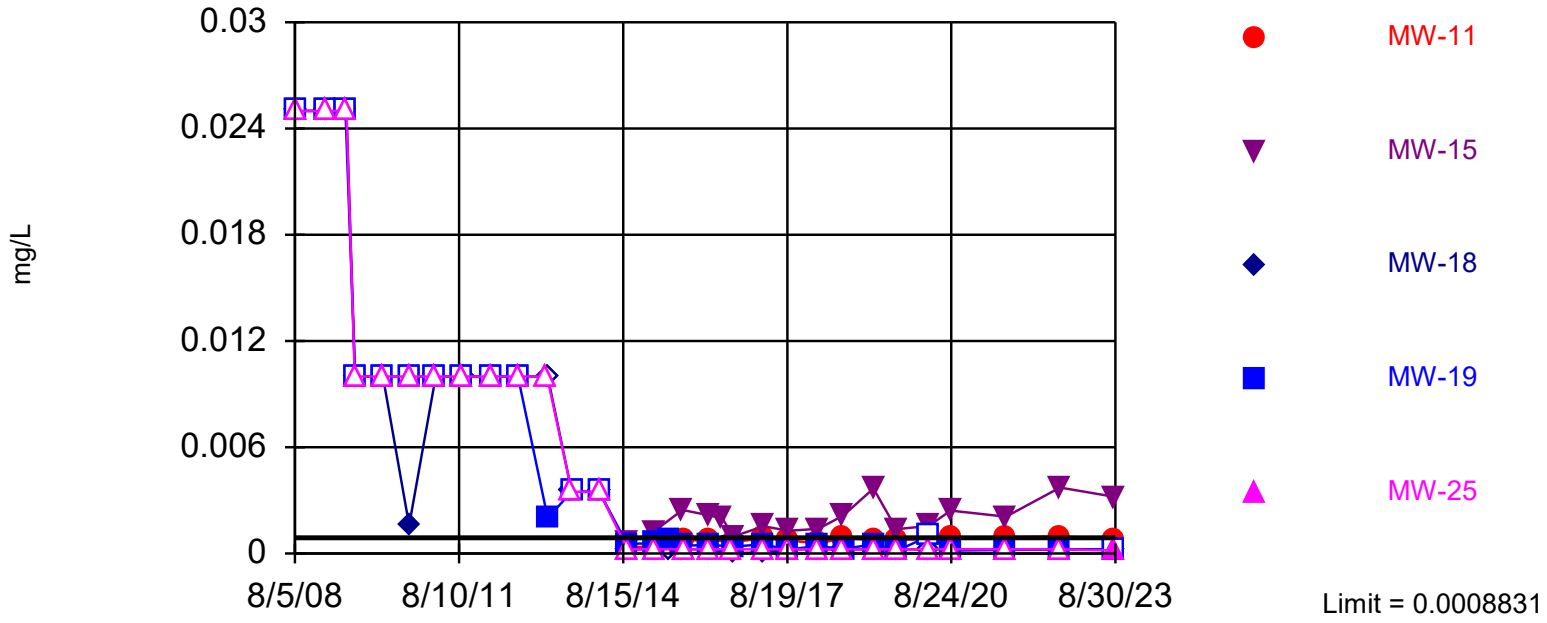
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Exceeds Limit: MW-15

Prediction Limit - Assessment Monitoring

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-8.283, Std. Dev.=0.5254, n=36, 13.89% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9489, critical = 0.912. Kappa = 2.381 (c=9, w=46, 1 of 2, event alpha = 0.1). Report alpha = 0.01164. Individual comparison alpha = 0.0002545.

Constituent: Cobalt Analysis Run 11/11/2023 3:56 PM

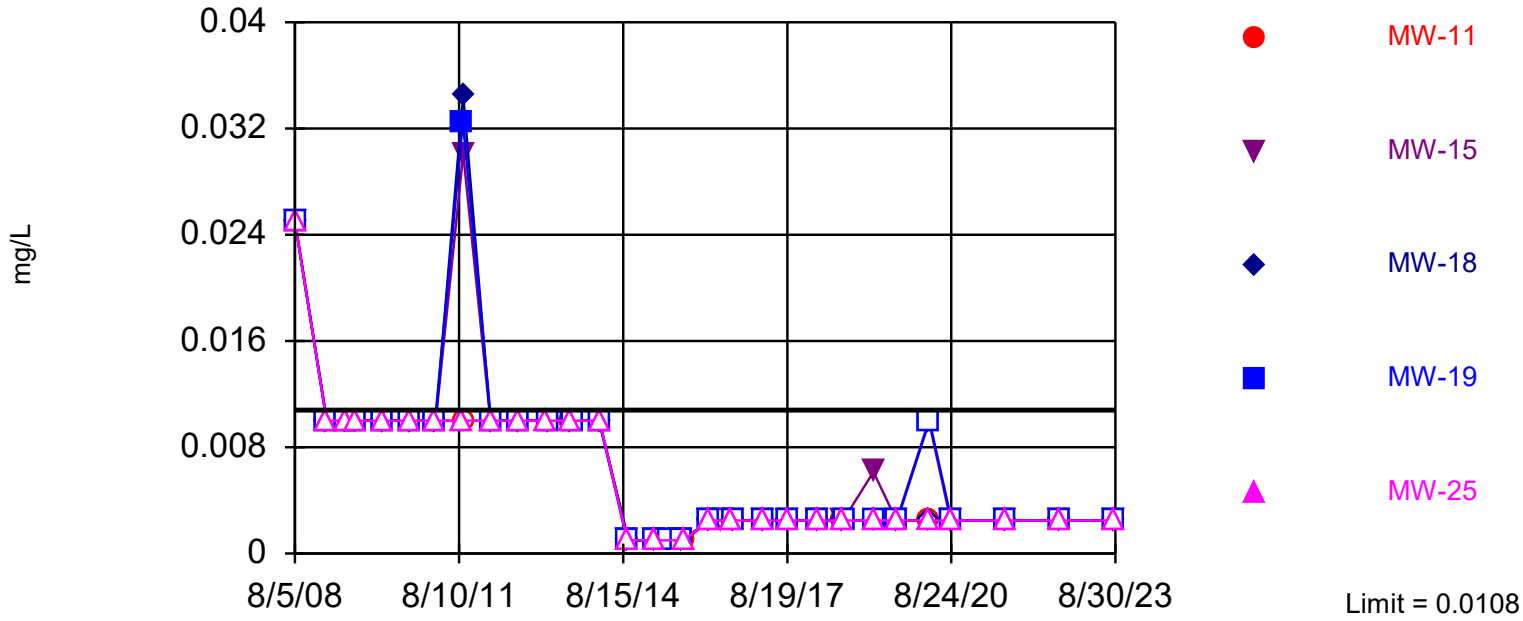
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 97.92% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/11/2023 3:56 PM

Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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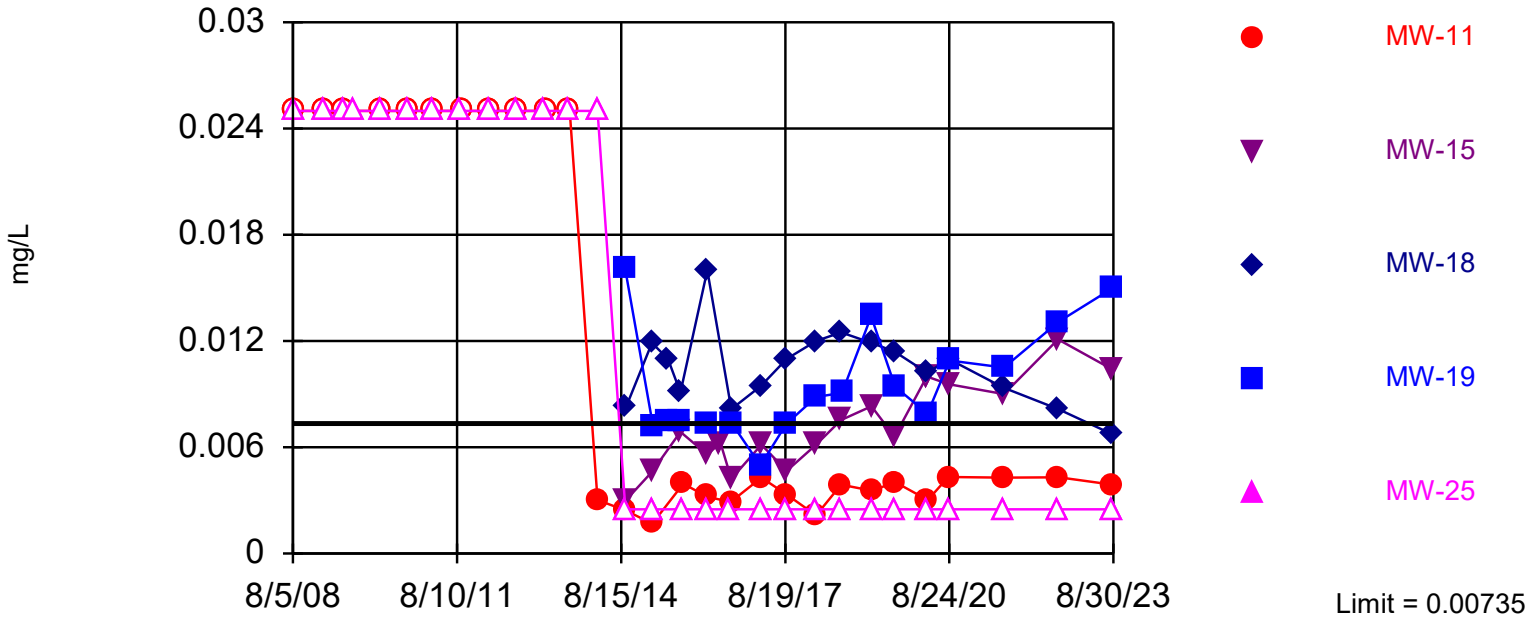
Hollow symbols indicate censored values.

Exceeds Limit: MW-15, MW-19

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



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Constituent: Nickel Analysis Run 11/11/2023 3:56 PM

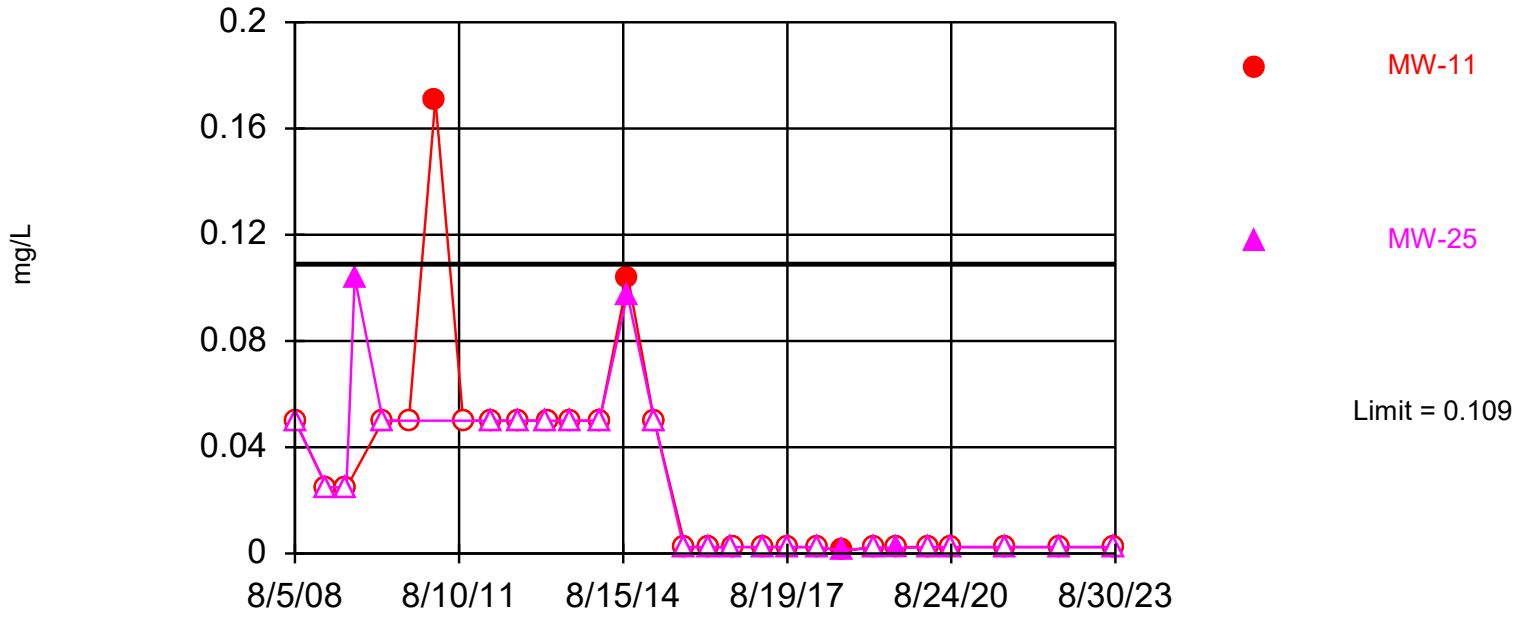
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 95.92% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Tin Analysis Run 11/11/2023 3:56 PM

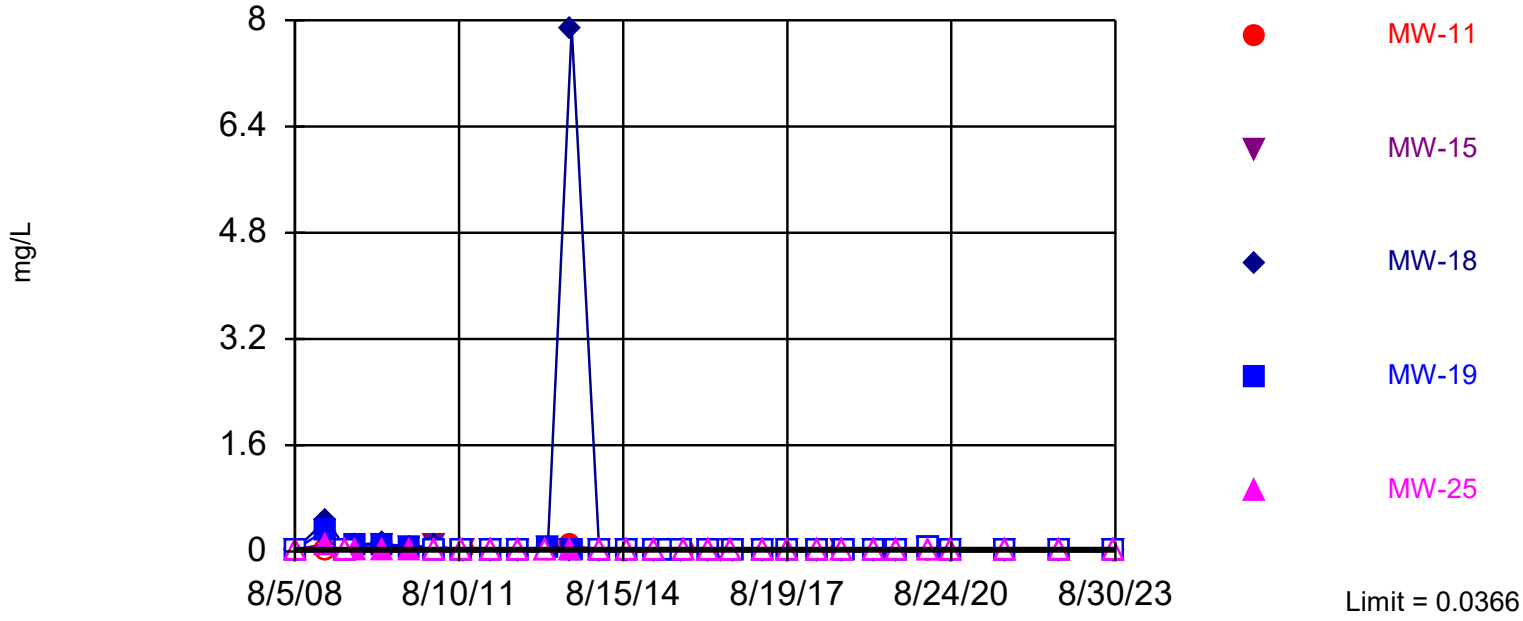
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 89.8% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Zinc Analysis Run 11/11/2023 3:56 PM

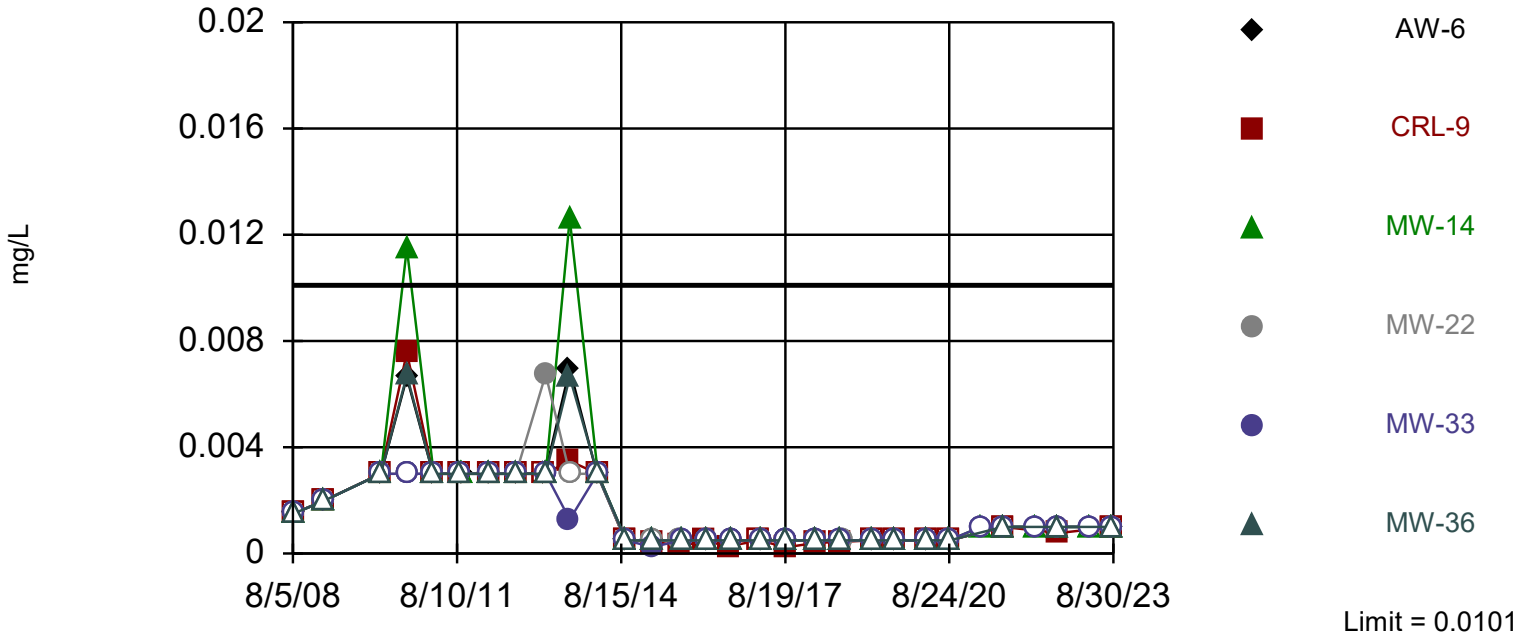
Linn County SWAL Client: Foth Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 95.74% NDs. Annual per-constituent alpha = 0.03639. Individual comparison alpha = 0.0008056 (1 of 2).

Constituent: Antimony Analysis Run 11/12/2023 12:03 PM

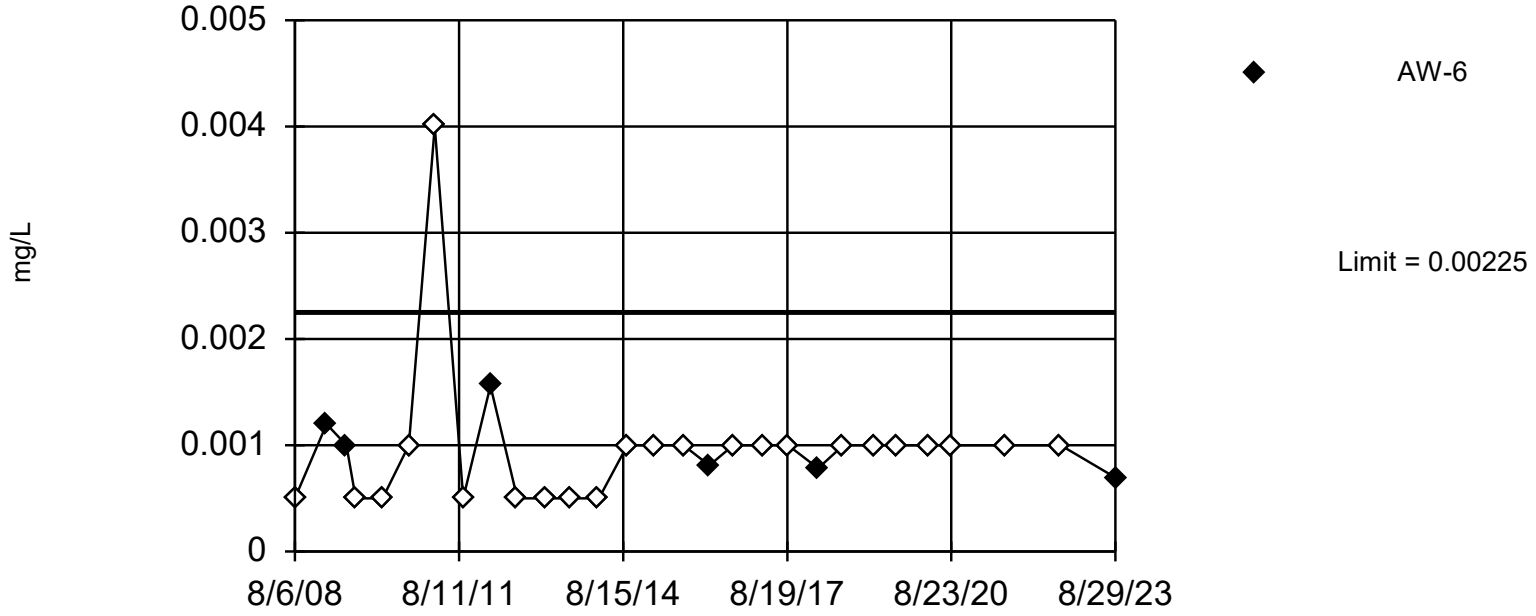
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. 38.78% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Arsenic Analysis Run 11/12/2023 12:05 PM

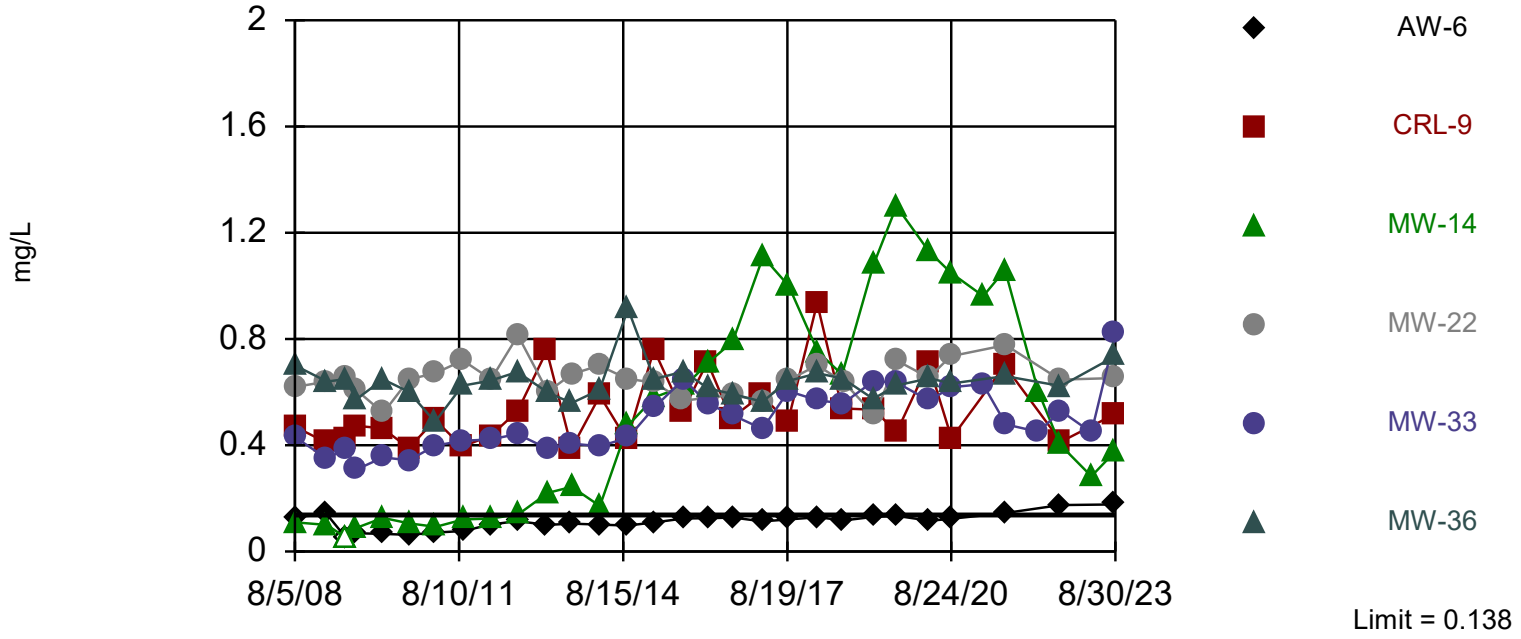
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Exceeds Limit: AW-6, CRL-9, MW-14, MW-22, MW-33, MW-36

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 45 background values. Annual per-constituent alpha = 0.03945. Individual comparison alpha = 0.0008745 (1 of 2).

Constituent: Barium Analysis Run 11/12/2023 12:04 PM

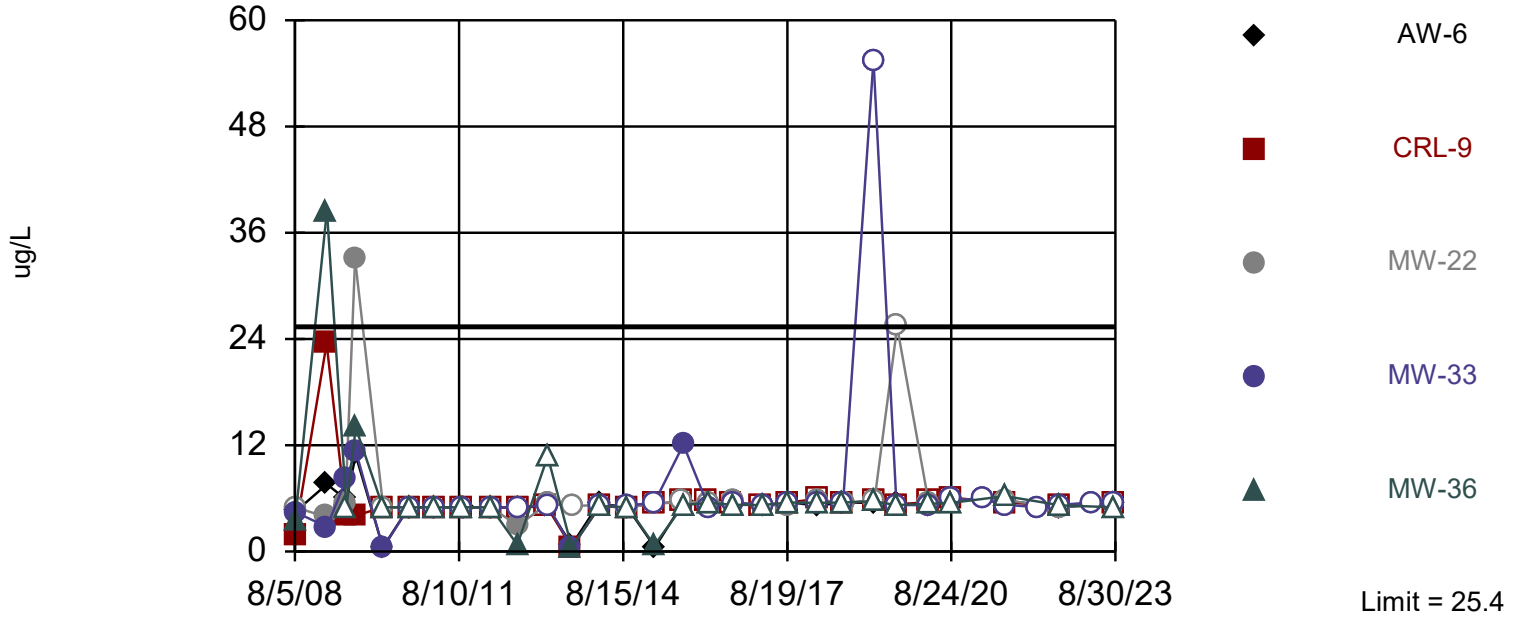
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 91.84% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: bis[2-Ethylhexyl]phthalate Analysis Run 11/12/2023 12:07 PM

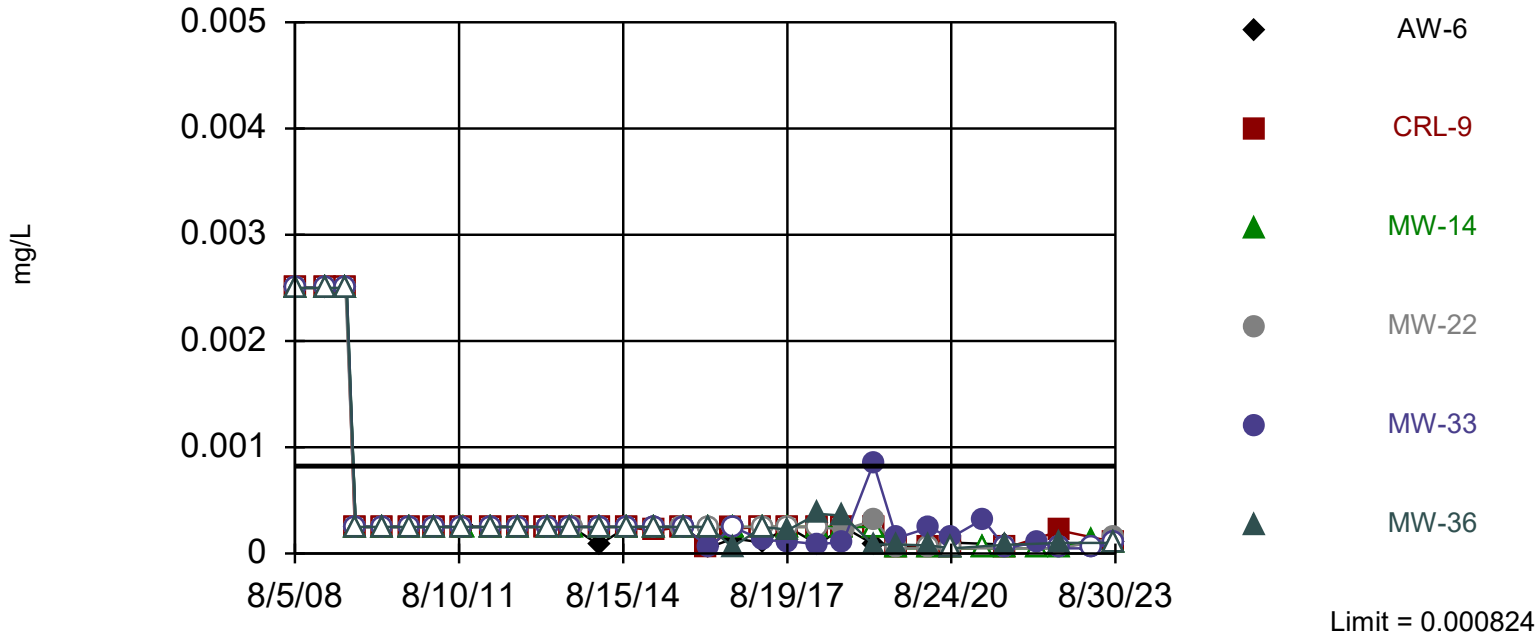
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 97.83% NDs. Annual per-constituent alpha = 0.03792. Individual comparison alpha = 0.00084 (1 of 2).

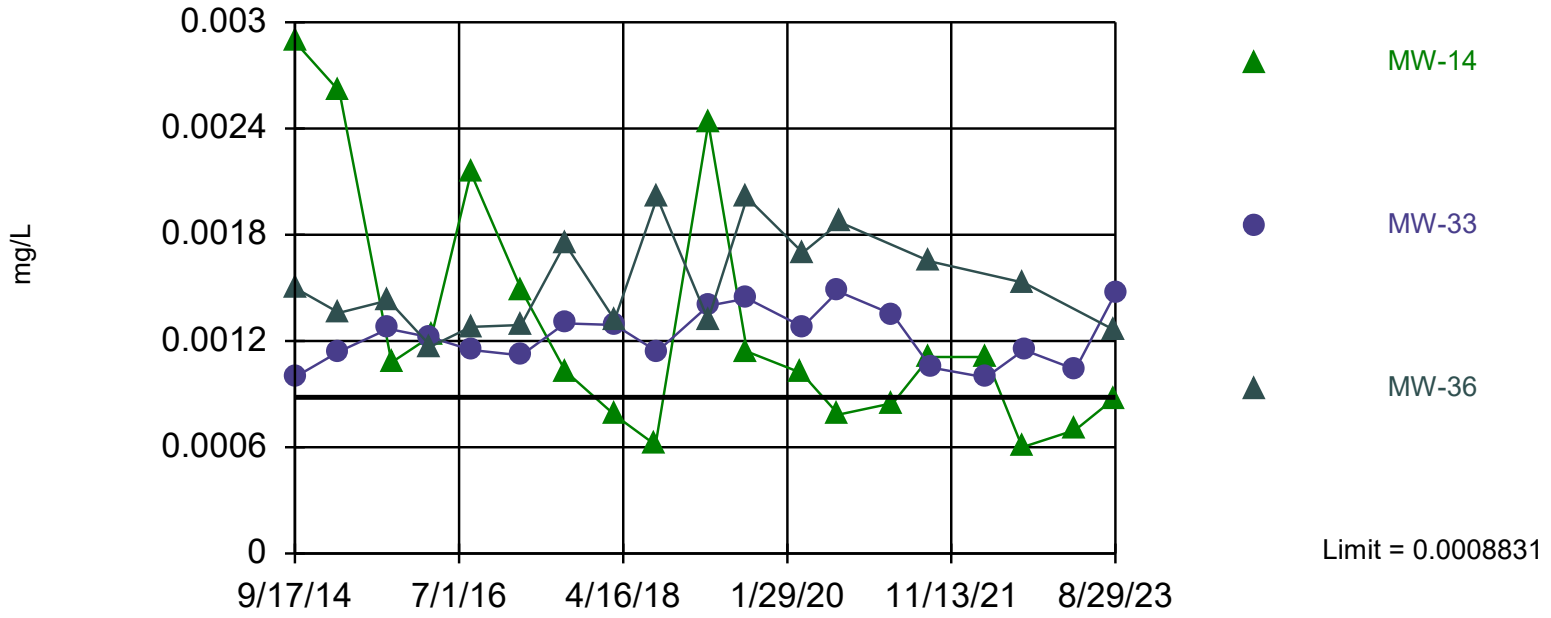
Constituent: Cadmium Analysis Run 11/12/2023 12:04 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Exceeds Limit: MW-33, MW-36

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Parametric



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Constituent: Cobalt Analysis Run 11/12/2023 12:09 PM

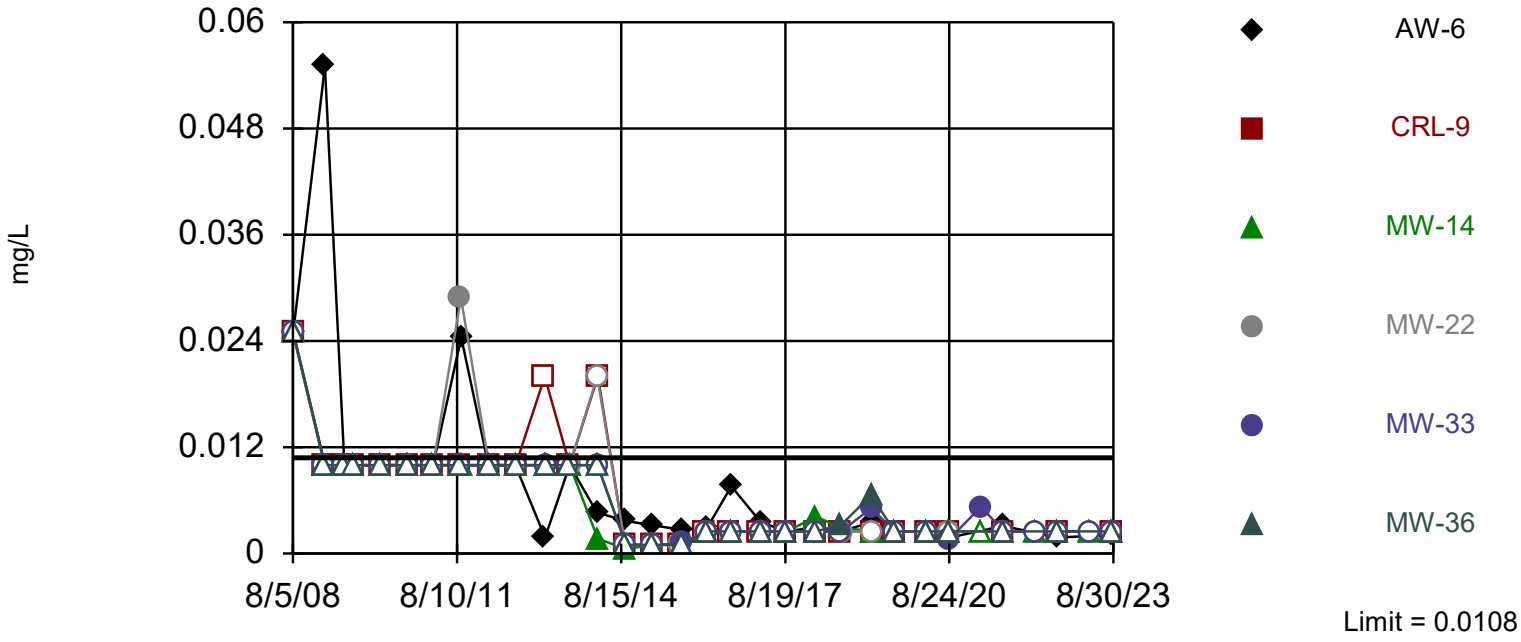
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 97.92% NDs. Annual per-constituent alpha = 0.03487. Individual comparison alpha = 0.0007712 (1 of 2).

Constituent: Copper Analysis Run 11/12/2023 12:04 PM

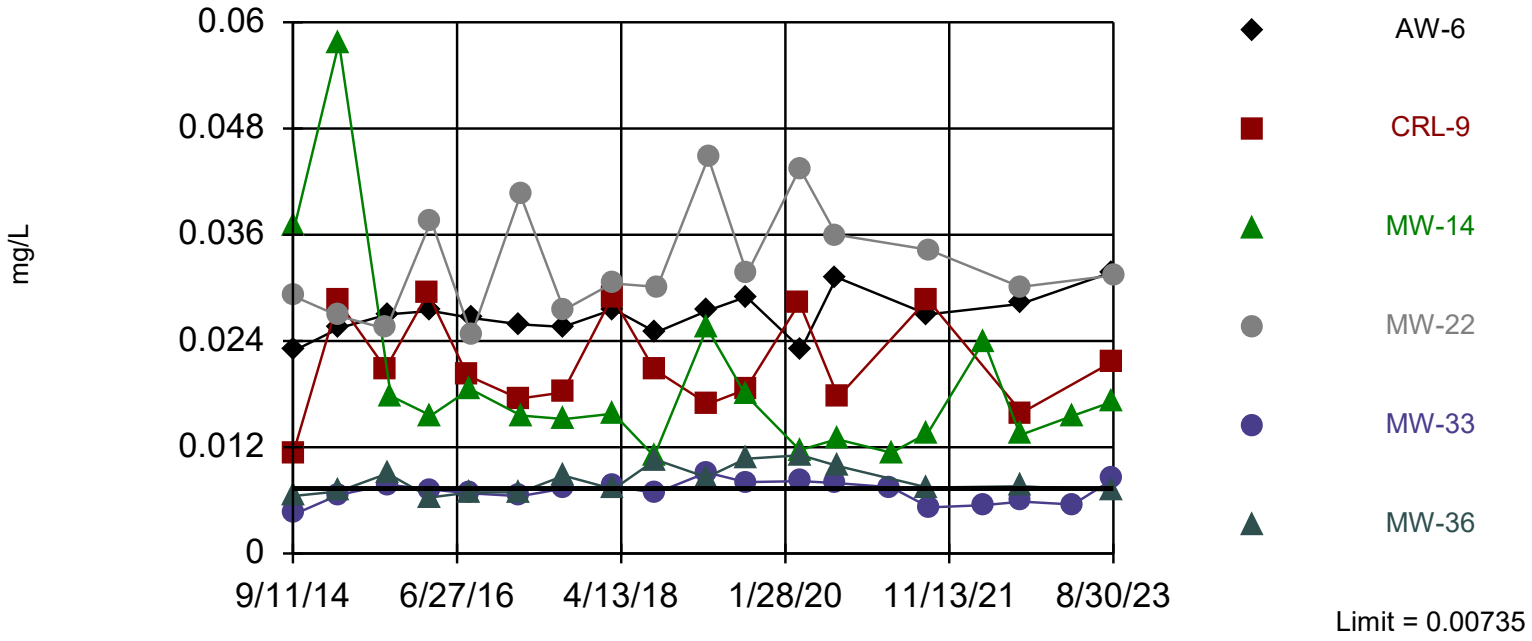
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG

Exceeds Limit: AW-6, CRL-9, MW-14, MW-22, MW-33

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 50% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Nickel Analysis Run 11/12/2023 12:04 PM

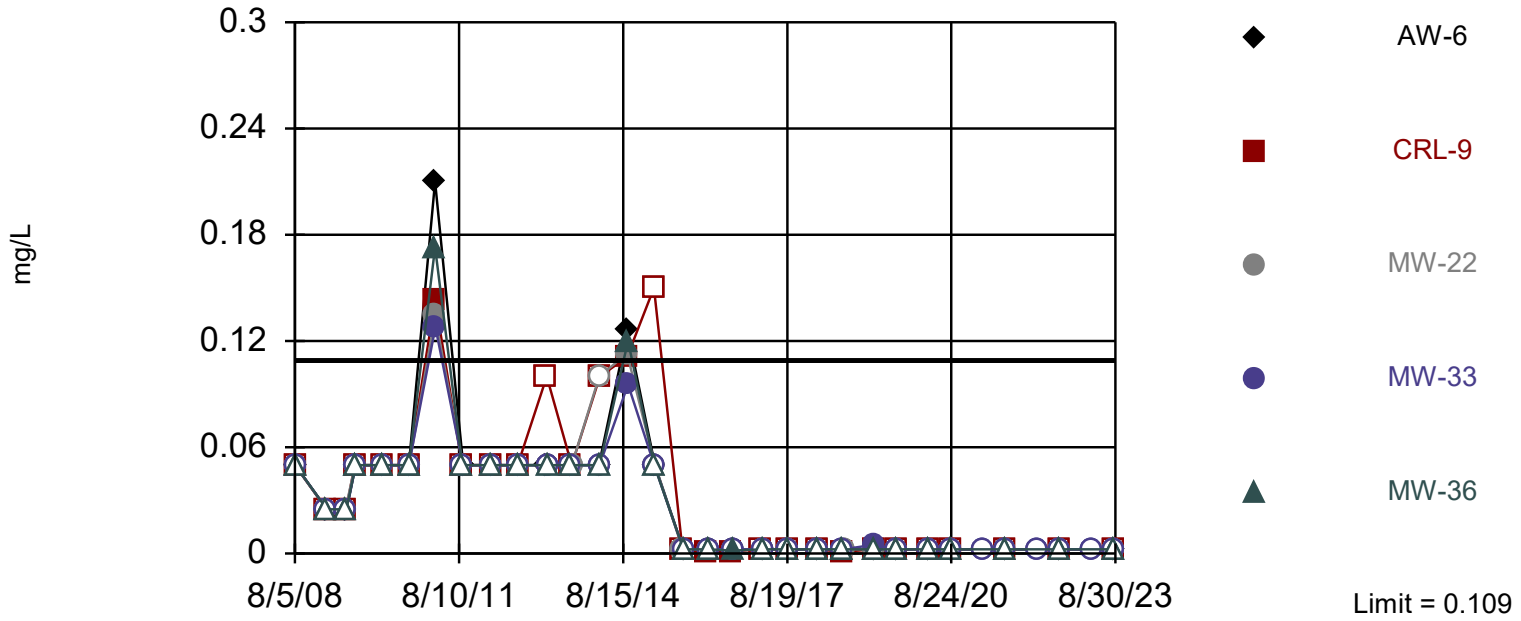
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



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Constituent: Tin Analysis Run 11/12/2023 12:10 PM

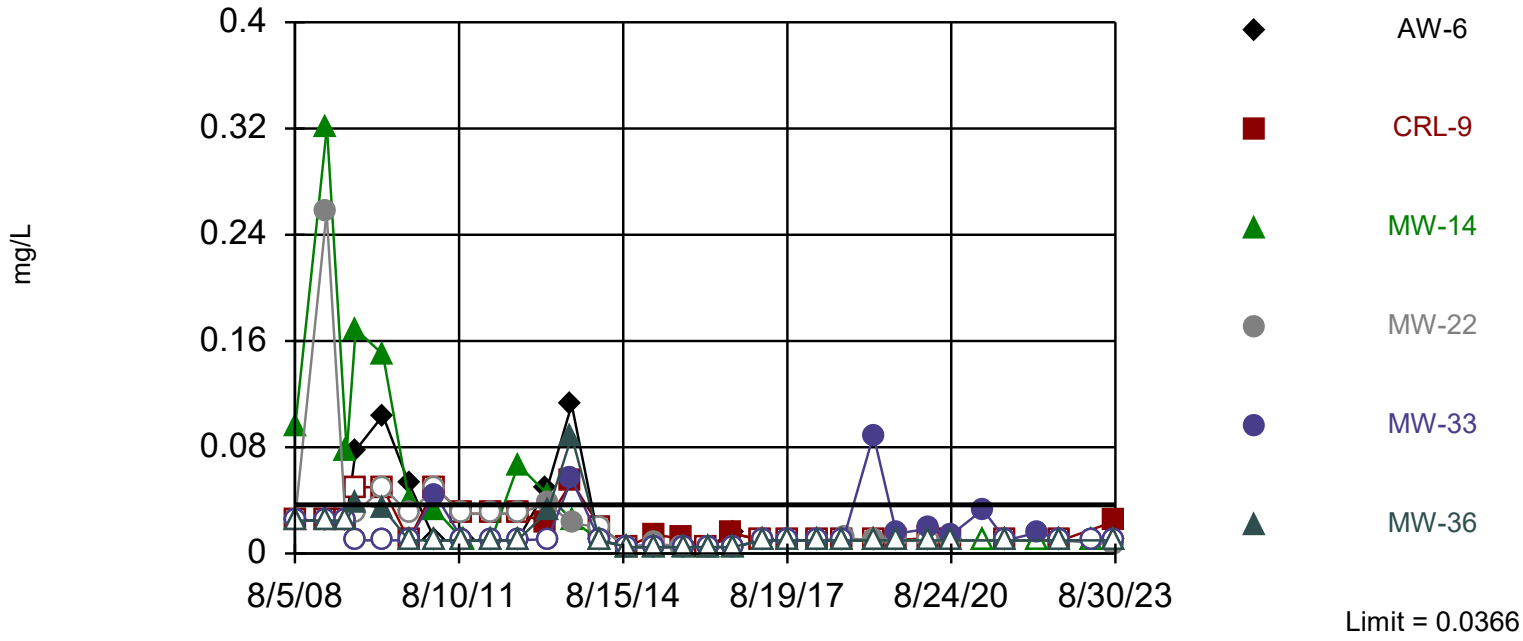
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 89.8% NDs. Annual per-constituent alpha = 0.03334. Individual comparison alpha = 0.0007368 (1 of 2).

Constituent: Zinc Analysis Run 11/12/2023 12:04 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Attachment 3

Sanitas Report Output for Double Quantification Rule Evaluations

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Detect Screening - Delineation Monitoring
Analysis Run 11/10/2023 3:01 PM - Assessment Constituents

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

A listing of detects for 209 constituents in MW-105A, MW-106A, MW-107A, and MW-109A in August 2023:

-none-

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Detect Screening - Assessment Monitoring

Analysis Run 11/10/2023 12:53 PM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

A listing of detects for 209 constituents in AW-3, AW-4, AW-5, MW-21, MW-23, MW-26, MW-28, VP-3, and VP-4 in August 2023:

Cadmium, AW-5, 8/28/2023: 0.000219 mg/L
Cadmium, MW-23, 8/28/2023: 0.000228 mg/L
Chlorobenzene, MW-21, 8/28/2023: 2.14 ug/L
Thallium, AW-5, 8/28/2023: 0.00314 mg/L
Thallium, MW-21, 8/28/2023: 0.00156 mg/L
Thallium, MW-23, 8/28/2023: 0.00139 mg/L

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Detect Screening - Corrective Action Monitoring

Analysis Run 11/10/2023 5:12 PM **- Assessment Constituents**

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

A listing of detects for 209 constituents in AW-1, AW-2, MW-12, MW-13, MW-16, MW-17, MW-20, MW-24, MW-30, MW-32, MW-34, and MW-35 in August 2023:

1,1-Dichloroethane, MW-12, 8/24/2023: 3.58 ug/L
1,1-Dichloroethane, MW-16, 8/23/2023: 1.77 ug/L
1,1-Dichloroethane, MW-30, 8/29/2023: 7.97 ug/L
1,1-Dichloroethane, MW-34, 8/24/2023: 4.75 ug/L
1,2-Dichlorobenzene, MW-13, 8/22/2023: 1.24 ug/L
1,2-Dichlorobenzene, MW-24, 8/30/2023: 5.07 ug/L
1,4-Dichlorobenzene, AW-1, 8/28/2023: 1.19 ug/L
1,4-Dichlorobenzene, MW-12, 8/24/2023: 1.24 ug/L
1,4-Dichlorobenzene, MW-13, 8/22/2023: 12.9 ug/L
1,4-Dichlorobenzene, MW-24, 8/30/2023: 11.9 ug/L
1,4-Dichlorobenzene, MW-32, 8/29/2023: 3.42 ug/L
1,4-Dichlorobenzene, MW-34, 8/24/2023: 2.17 ug/L
Benzene, MW-13, 8/22/2023: 3.51 ug/L
Benzene, MW-16, 8/23/2023: 0.534 ug/L
Benzene, MW-24, 8/30/2023: 7.69 ug/L
Benzene, MW-30, 8/29/2023: 1.29 ug/L
Benzene, MW-32, 8/29/2023: 0.647 ug/L
Benzene, MW-34, 8/24/2023: 1.56 ug/L
Chlorobenzene, AW-1, 8/28/2023: 4.09 ug/L
Chlorobenzene, AW-2, 8/22/2023: 1.57 ug/L
Chlorobenzene, MW-12, 8/24/2023: 2.23 ug/L
Chlorobenzene, MW-13, 8/22/2023: 3.49 ug/L
Chlorobenzene, MW-16, 8/23/2023: 2.02 ug/L
Chlorobenzene, MW-24, 8/30/2023: 68 ug/L
Chlorobenzene, MW-32, 8/29/2023: 8.06 ug/L
Chlorobenzene, MW-34, 8/24/2023: 2.41 ug/L
Chloroethane, MW-30, 8/29/2023: 8.67 ug/L
cis-1,2-Dichloroethene, AW-2, 8/22/2023: 2.87 ug/L
cis-1,2-Dichloroethene, MW-12, 8/24/2023: 3.55 ug/L
cis-1,2-Dichloroethene, MW-30, 8/29/2023: 5.56 ug/L
cis-1,2-Dichloroethene, MW-34, 8/24/2023: 6.03 ug/L
Thallium, AW-1, 8/28/2023: 0.0012 mg/L
Thallium, MW-12, 8/24/2023: 0.00211 mg/L
Thallium, MW-24, 8/30/2023: 0.0015 mg/L
trans-1,2-Dichloroethene, MW-34, 8/24/2023: 1.02 ug/L
Vinyl Chloride, MW-30, 8/29/2023: 1.65 ug/L

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Detect Screening - Detection Monitoring

Analysis Run 11/12/2023 12:35 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

A listing of detects for 208 constituents in MW-31 in August 2023:

-none-

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Detect Screening - Delineation Monitoring Assessment Constituents

Analysis Run 11/12/2023 12:39 PM
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

A listing of detects for 208 constituents in MW-102B, MW-105B, MW-107B, MW-108B, and MW-109B in August 2023:

1,1-Dichloroethane, MW-105B, 8/23/2023: 2.49 ug/L
Chlorobenzene, MW-109B, 8/24/2023: 6.68 ug/L
Thallium, MW-107B, 8/22/2023: 0.002 mg/L

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Detect Screening - Assessment Monitoring

Analysis Run 11/12/2023 12:41 PM
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

A listing of detects for 208 constituents in MW-11, MW-15, MW-18, MW-19, and MW-25 in August 2023:

Lead, MW-25, 8/30/2023: 0.0006 mg/L
Thallium, MW-25, 8/30/2023: 0.00307 mg/L

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Detect Screening - Corrective Action Monitoring
Assessment Constituents

Analysis Run 11/12/2023 12:44 PM
Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

A listing of detects for 208 constituents in AW-6, CRL-9, MW-14, MW-22, MW-33, and MW-36 in August 2023:

1,1-Dichloroethane, AW-6, 8/29/2023: 1.29 ug/L
1,1-Dichloroethane, MW-14, 8/22/2023: 1.7 ug/L
1,1-Dichloroethane, MW-22, 8/30/2023: 1.09 ug/L
1,4-Dichlorobenzene, MW-14, 8/22/2023: 7.04 ug/L
1,4-Dichlorobenzene, MW-33, 8/29/2023: 1.19 ug/L
1,4-Dichlorobenzene, MW-36, 8/28/2023: 1.69 ug/L
Benzene, CRL-9, 8/29/2023: 3.05 ug/L
Benzene, MW-14, 8/22/2023: 0.943 ug/L
Benzene, MW-33, 8/29/2023: 0.56 ug/L
Chlorobenzene, MW-14, 8/22/2023: 2.06 ug/L
Chlorobenzene, MW-33, 8/29/2023: 7.1 ug/L
Chlorobenzene, MW-36, 8/28/2023: 6.29 ug/L
Thallium, MW-22, 8/30/2023: 0.00241 mg/L

Attachment 4

Sanitas Report Output for Confidence Interval Calculations
Assessment Mode

Upper Bedrock

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations - Assessment Constituents																
Barium (mg/L)	MW-107A	0.13	0.10	2	No	20	0.11	0.03	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-109A	0.23	0.19	2	No	12	0.21	0.03	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Assessment Monitoring Locations																
Arsenic (mg/L)	AW-3	0.0056	0.0025	0.01	No	30	0.0059	0.0066	1.1	<0.01	<0.01	10	None	No	0.01	NP (normality)
Arsenic (mg/L)	AW-5	0.0116	0.0065	0.01	No	29	0.0090	0.0056	0.6	<0.01	<0.01	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21	0.0084	0.0015	0.01	No	29	0.0103	0.0174	1.7	<0.01	<0.01	10	None	No	0.01	NP (normality)
Arsenic (mg/L)	VP-3	0.0105	0.0053	0.01	No	11	0.0079	0.0044	0.6	0.04	0.03	0	None	No	0.04	Param.
Arsenic (mg/L)	VP-4	0.0056	0.0033	0.01	No	28	0.0049	0.0024	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	AW-5	0.21	0.12	2	No	29	0.17	0.06	0.4	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21	0.32	0.25	2	No	29	0.28	0.07	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-23	0.18	0.13	2	No	29	0.16	0.04	0.2	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-26	0.25	0.20	2	No	31	0.22	0.06	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-28	0.28	0.24	2	No	29	0.26	0.04	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	VP-3	0.69	0.50	2	No	29	0.59	0.20	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Cadmium (mg/L)	AW-5	0.00027	0.00015	0.005	No	29	0.00044	0.00072	1.6	<0.01	<0.01	41	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-23	0.00025	0.00015	0.005	No	29	0.00043	0.00072	1.7	<0.01	<0.01	48	None	No	0.01	NP (normality)
Chlorobenzene (ug/L)	MW-21	2.3	1.2	100	No	29	1.8	1.2	0.6	<0.01	<0.01	17	Kaplan-Meier	No	0.01	Param.
Copper (mg/L)	AW-4	0.04	0.01	1.3	No	31	0.03	0.03	0.9	<0.01	<0.01	35	None	No	0.01	NP (normality)
Nickel (mg/L)	MW-21	0.046	0.034	0.1	No	29	0.037	0.014	0.4	<0.01	<0.01	24	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	AW-5	0.00100	0.00020	0.002	No	28	0.00071	0.00060	0.9	<0.01	<0.01	71	Kaplan-Meier	No	0.01	NP (NDs)
Thallium (mg/L)	MW-21	0.00226	0.00100	0.002	No	28	0.00168	0.00070	0.4	<0.01	<0.01	32	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-23	0.00139	0.00100	0.002	No	27	0.00114	0.00025	0.2	<0.01	<0.01	33	None	No	0.01	NP (normality)
Zinc (mg/L)	MW-23	0.11	0.08	2	No	29	0.09	0.03	0.4	<0.01	<0.01	0	None	No	0.01	Param.
Corrective Action Monitoring Locations - Assessment Constituents																
1,1-Dichloroethane (ug/L)	MW-12	22.3	13.4	140	No	32	17.9	10.3	0.6	<0.01	<0.01	0	None	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW-16	18.7	2.1	140	No	32	12.9	13.1	1.0	<0.01	<0.01	0	None	No	0.01	NP (normality)
1,1-Dichloroethane (ug/L)	MW-30	11.8	8.3	140	No	29	10.1	3.8	0.4	<0.01	<0.01	0	None	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW-34	13.6	8.3	140	No	29	10.9	5.8	0.5	<0.01	<0.01	3	None	No	0.01	Param.
1,2-Dichlorobenzene (ug/L)	MW-13	3.0	2.2	600	No	32	2.6	0.9	0.3	<0.01	<0.01	3	None	No	0.01	Param.
1,2-Dichlorobenzene (ug/L)	MW-24	5.1	3.9	600	No	29	4.5	1.3	0.3	<0.01	<0.01	0	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	AW-1	1.6	1.0	75	No	29	1.3	0.7	0.5	<0.01	<0.01	24	Kaplan-Meier	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-12	6.1	3.4	75	No	32	4.8	3.1	0.7	<0.01	<0.01	3	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-13	14.6	11.8	75	No	32	12.6	3.3	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW-24	9.5	7.3	75	No	29	8.4	2.4	0.3	<0.01	<0.01	0	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-32	5.2	3.4	75	No	32	4.3	2.1	0.5	<0.01	<0.01	9	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-34	5.4	3.0	75	No	29	4.4	3.0	0.7	<0.01	<0.01	21	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	MW-20	0.0059	0.0034	0.01	No	5	0.0046	0.0025	0.5	0.12	0.16	0	None	No	0.16	Param.
Arsenic (mg/L)	MW-35	0.0095	0.0042	0.01	No	28	0.0080	0.0066	0.8	<0.01	<0.01	4	None	No	0.01	NP (normality)
Barium (mg/L)	AW-1	0.49	0.32	2	No	29	0.41	0.19	0.5	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	AW-2	0.42	0.35	2	No	29	0.41	0.13	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-12	0.36	0.16	2	No	32	0.25	0.12	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-13	0.79	0.54	2	No	32	0.66	0.28	0.4	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-17	0.27	0.13	2	No	32	0.20	0.11	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-20	0.17	0.14	2	No	29	0.16	0.05	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)

Upper Bedrock

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents (Continued)																
Barium (mg/L)	MW-24	1.00	0.76	2	No	29	0.87	0.24	0.3	<0.01	<0.01	3	None	No	0.01	NP (normality)
Barium (mg/L)	MW-30	0.27	0.18	2	No	29	0.25	0.11	0.4	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-32	0.92	0.70	2	No	32	0.78	0.22	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-34	0.40	0.25	2	No	29	0.32	0.17	0.5	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.33	0.14	2	No	28	0.23	0.13	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Benzene (ug/L)	MW-13	4.89	3.90	5	No	32	4.40	1.14	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Benzene (ug/L)	MW-16	2.74	1.74	5	No	32	2.24	1.15	0.5	<0.01	<0.01	0	None	No	0.01	Param.
Benzene (ug/L)	MW-24	5.65	4.41	5	No	29	5.03	1.36	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Benzene (ug/L)	MW-30	2.51	1.70	5	No	29	2.11	0.89	0.4	<0.01	<0.01	3	None	No	0.01	Param.
Benzene (ug/L)	MW-32	2.65	1.54	5	No	32	2.10	1.28	0.6	<0.01	<0.01	6	None	No	0.01	Param.
Benzene (ug/L)	MW-34	3.28	2.17	5	No	29	2.74	0.97	0.4	<0.01	<0.01	3	None	No	0.01	NP (normality)
Chlorobenzene (ug/L)	AW-1	7.9	4.8	100	No	29	6.4	3.4	0.5	<0.01	<0.01	3	None	No	0.01	Param.
Chlorobenzene (ug/L)	AW-2	2.8	1.7	100	No	29	2.3	1.2	0.5	<0.01	<0.01	7	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-12	6.4	2.5	100	No	32	4.8	2.6	0.5	<0.01	<0.01	0	None	No	0.01	NP (normality)
Chlorobenzene (ug/L)	MW-13	5.3	4.2	100	No	32	4.8	1.3	0.3	<0.01	<0.01	3	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-16	2.1	1.4	100	No	32	1.7	0.8	0.5	<0.01	<0.01	9	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-24	53.1	27.4	100	No	29	39.8	15.2	0.4	<0.01	<0.01	0	None	No	0.01	NP (normality)
Chlorobenzene (ug/L)	MW-32	11.5	8.7	100	No	32	10.1	3.1	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-34	5.1	2.7	100	No	29	4.2	2.4	0.6	<0.01	<0.01	10	None	No	0.01	NP (normality)
Chloroethane (ug/L)	MW-30	12.1	9.7	2800	No	29	10.9	2.7	0.2	<0.01	<0.01	0	None	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	AW-2	4.9	3.6	70	No	29	4.2	1.5	0.3	<0.01	<0.01	0	None	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-12	10.6	4.2	70	No	32	8.7	6.3	0.7	<0.01	<0.01	0	None	No	0.01	NP (normality)
cis-1,2-Dichloroethene (ug/L)	MW-30	6.2	5.0	70	No	29	5.6	1.4	0.2	<0.01	<0.01	0	None	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-34	22.4	5.3	70	No	29	16.1	14.7	0.9	<0.01	<0.01	3	None	No	0.01	NP (normality)
Nickel (mg/L)	MW-12	0.075	0.063	0.1	No	18	0.069	0.010	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-34	0.066	0.047	0.1	No	29	0.055	0.024	0.4	<0.01	<0.01	17	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	AW-1	0.00104	0.00072	0.002	No	28	0.00092	0.00030	0.3	<0.01	<0.01	39	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	MW-12	0.00428	0.00119	0.002	No	32	0.00339	0.00307	0.9	<0.01	<0.01	22	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-24	0.00166	0.00050	0.002	No	28	0.00161	0.00185	1.1	<0.01	<0.01	21	None	No	0.01	NP (normality)
trans-1,2-Dichloroethene (ug/L)	MW-34	2.0	1.3	100	No	29	2.0	2.1	1.1	<0.01	<0.01	3	None	No	0.01	NP (normality)
Vinyl Chloride (ug/L)	MW-30	1.36	1.03	2	No	29	1.15	0.44	0.4	<0.01	<0.01	17	Kaplan-Meier	No	0.01	Param.
Zinc (mg/L)	MW-20	0.10	0.06	2	No	15	0.08	0.03	0.4	<0.01	<0.01	0	None	No	0.01	Param.
Zinc (mg/L)	MW-30	0.13	0.07	2	No	15	0.10	0.05	0.5	0.01	<0.01	0	None	No	0.01	Param.

[1] Under assessment mode, an SSL is indicated when the lower confidence limit exceeds the groundwater protection standard (compliance limit).

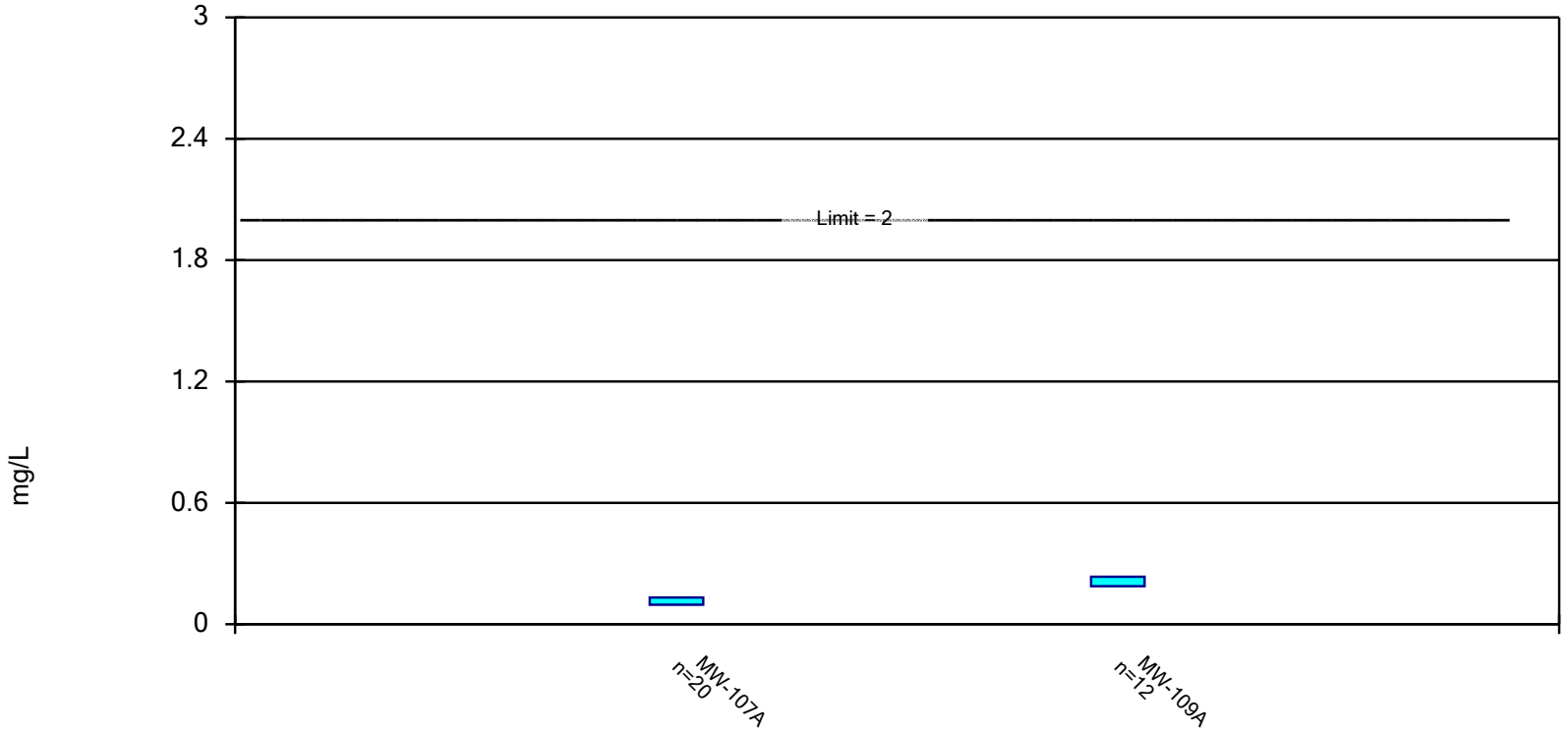
[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] For parametric confidence intervals: Except where otherwise indicated, based on Unified Guidance Equation 22.2, i.e., $\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right)$ where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{1-b,n-1}$ is the (1−b) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

[4] For non-parametric confidence intervals: Based on Unified Guidance Equation 22.1, i.e., $1-\beta = G_{T,n-1}\left(t_{1-\alpha,n-1}\middle|\Delta = \sqrt{n}(R-1)\right)$ where R is the desired risk ratio, $t_{1-a,n-1}$ is the (1−a) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter D.

Parametric Confidence Interval - Delineation Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 8:13 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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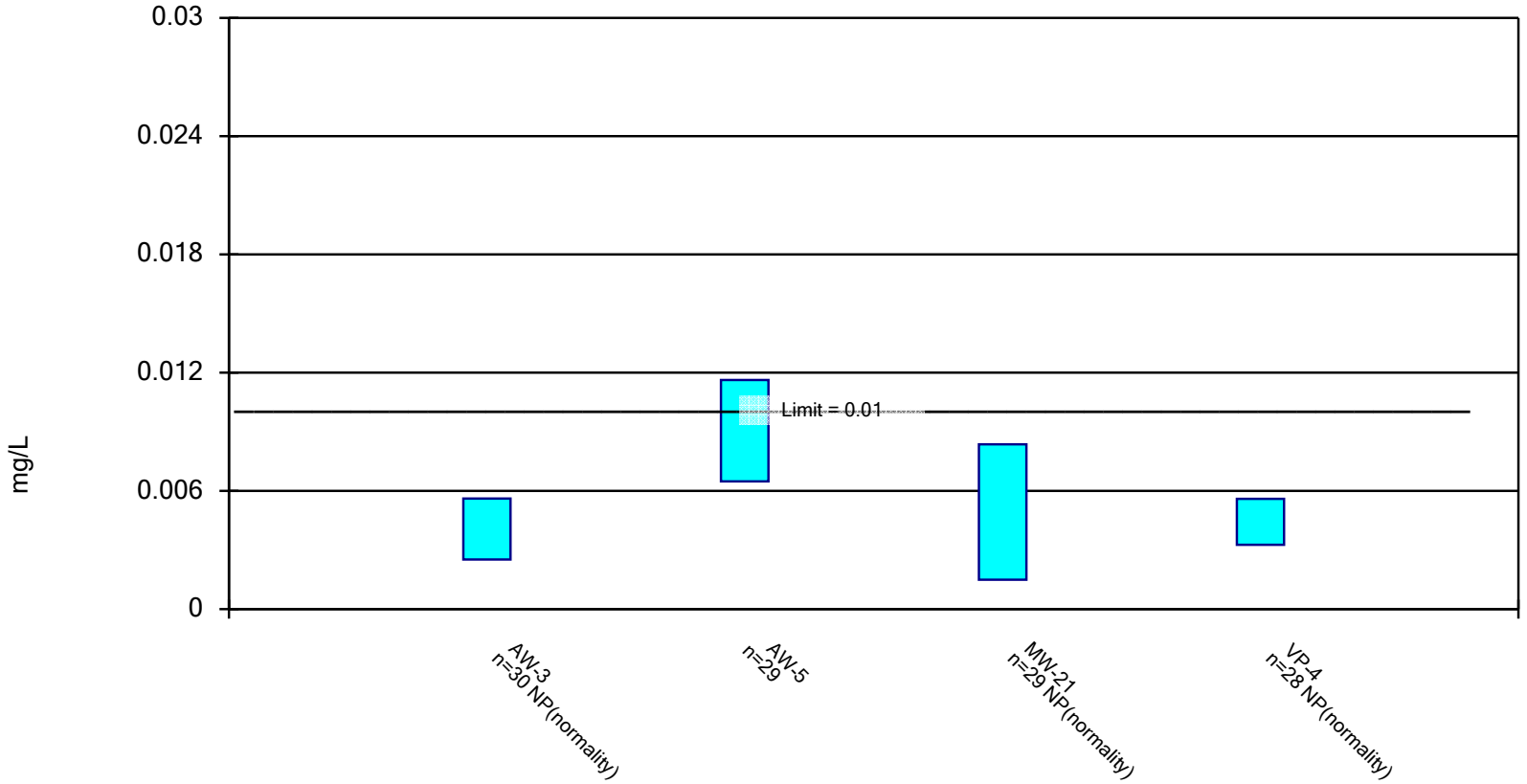
Parametric and Non-Parametric (NP) Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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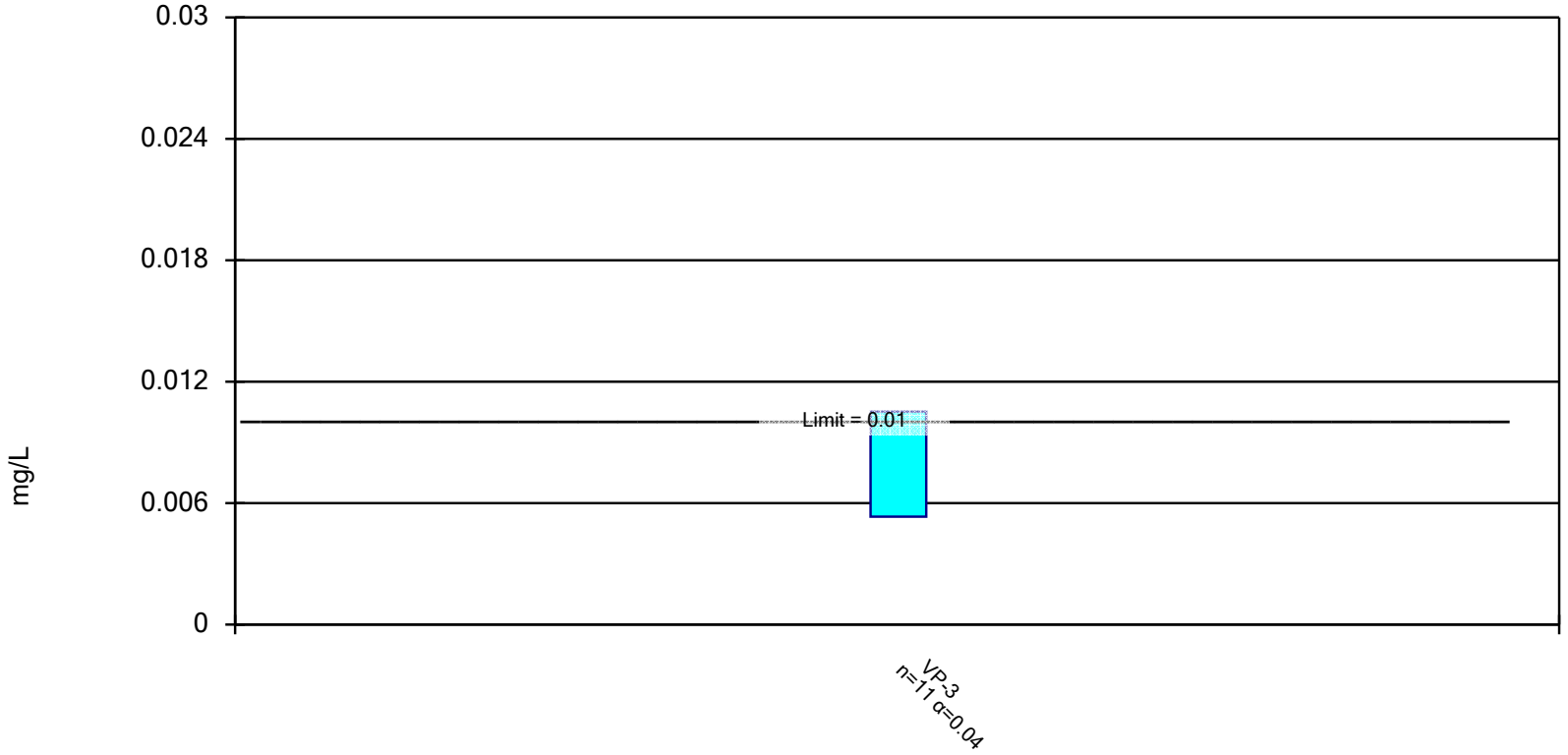
Parametric Confidence Intervall - Assessment Monitoring

Compliance Limit is not exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/13/2023 8:09 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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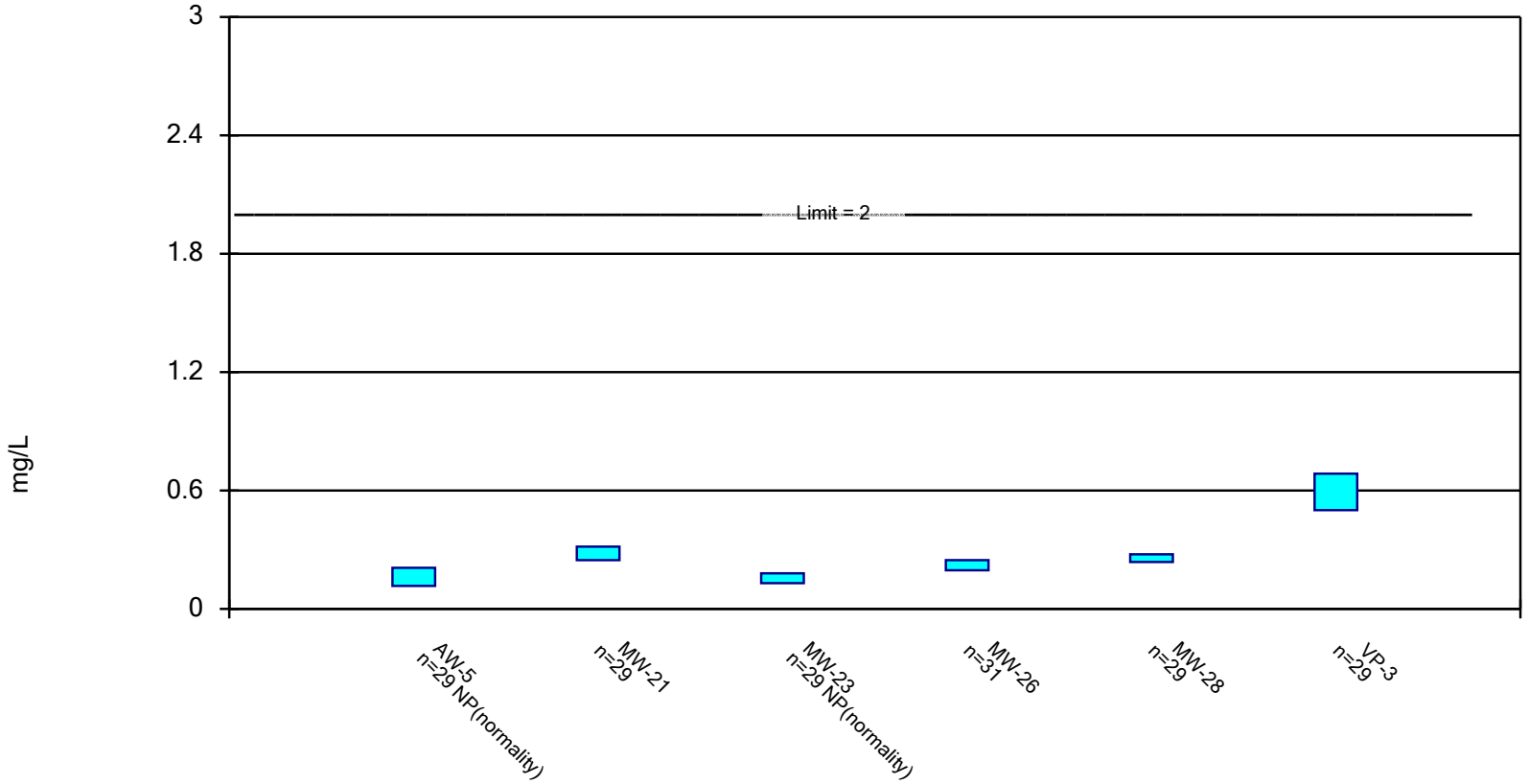
Parametric and Non-Parametric (NP) Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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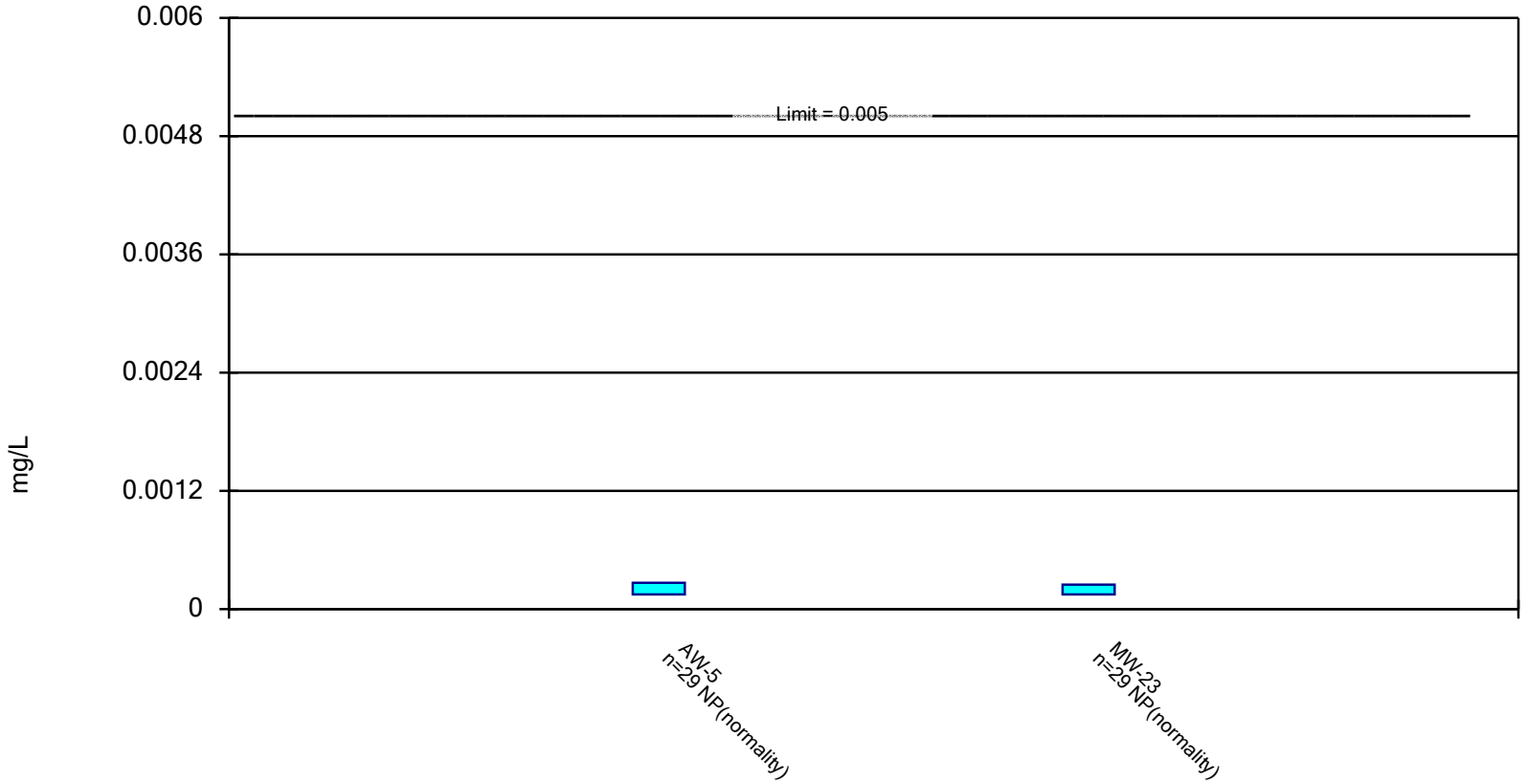
Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.

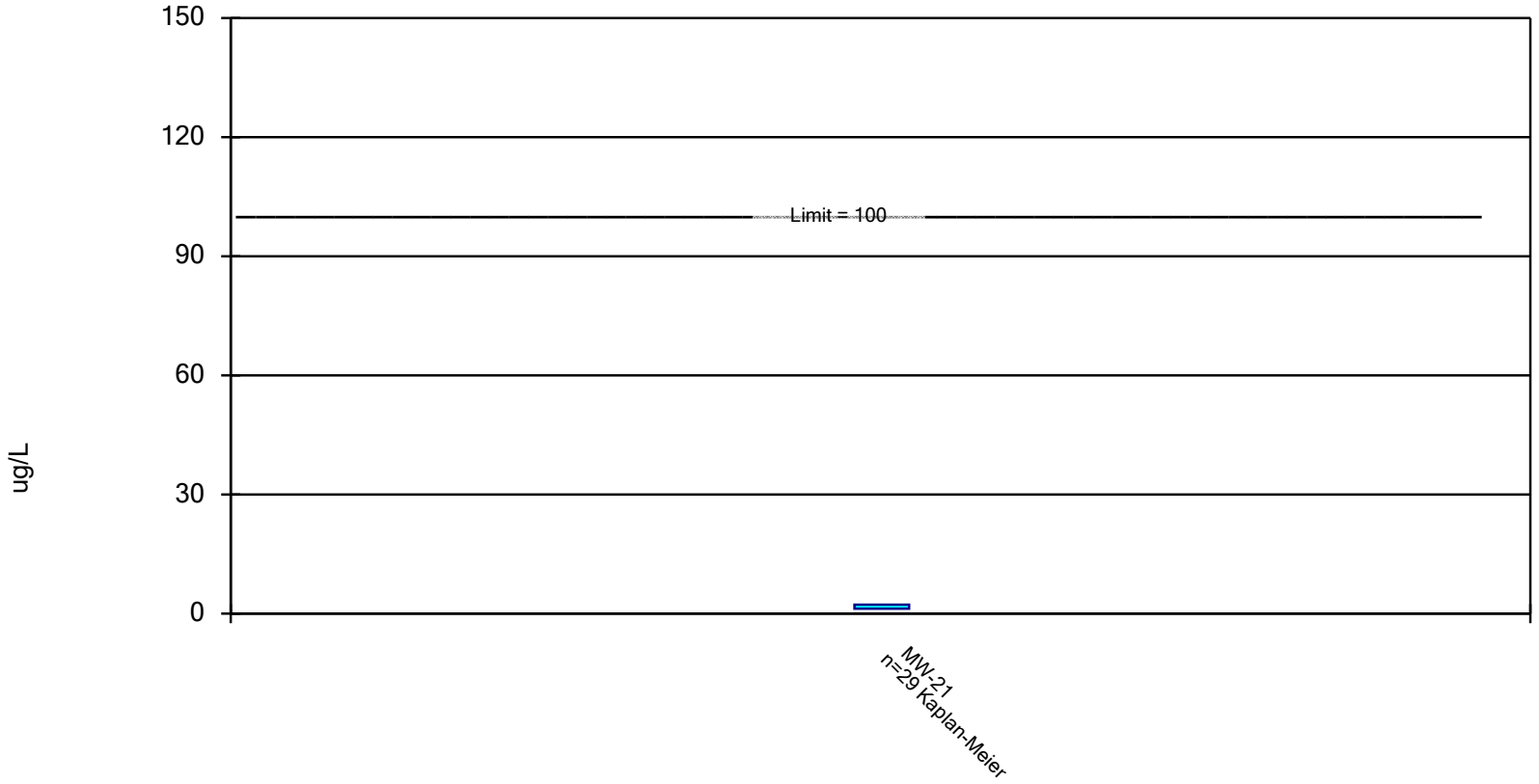


Constituent: Cadmium Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chlorobenzene Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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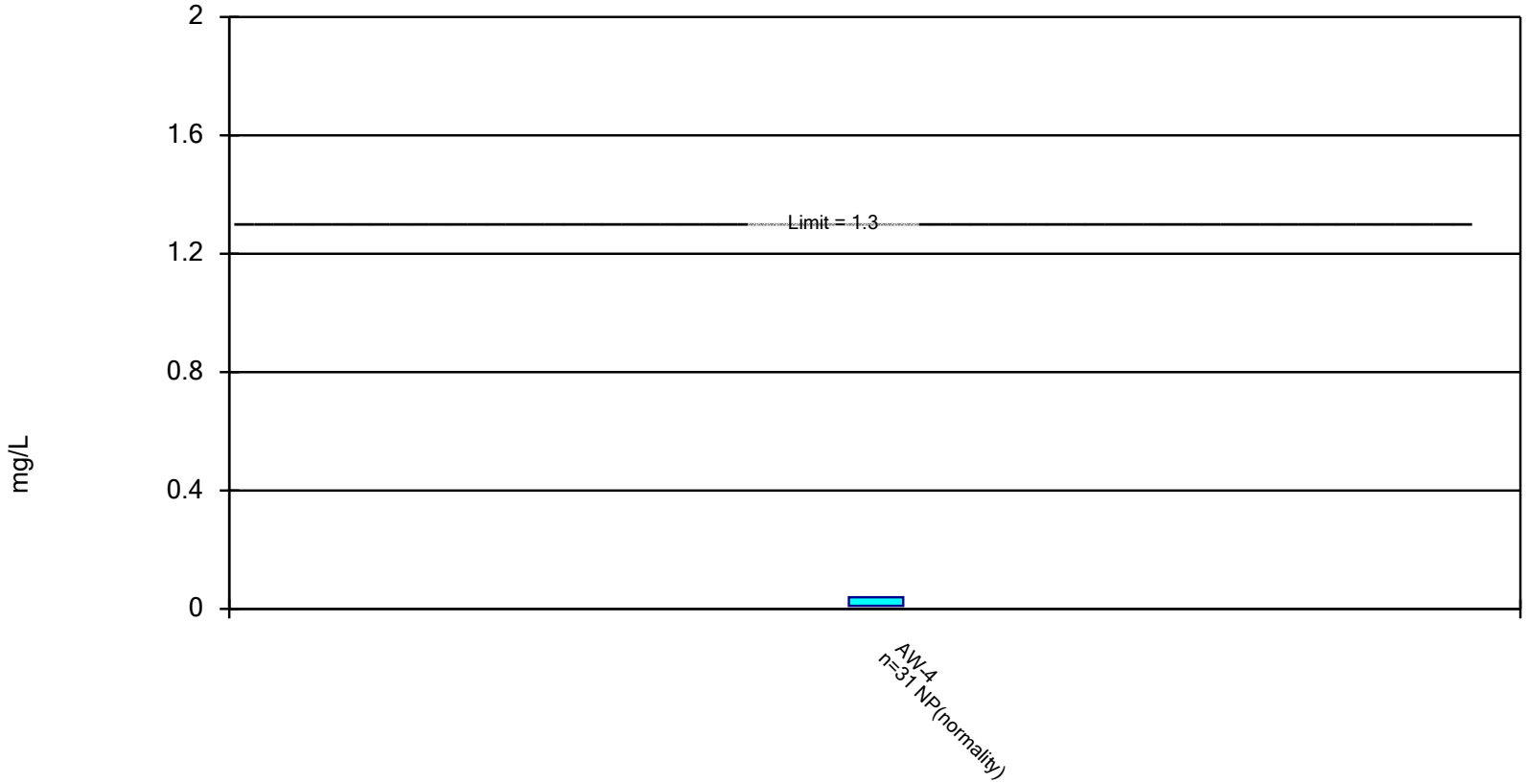
Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Copper Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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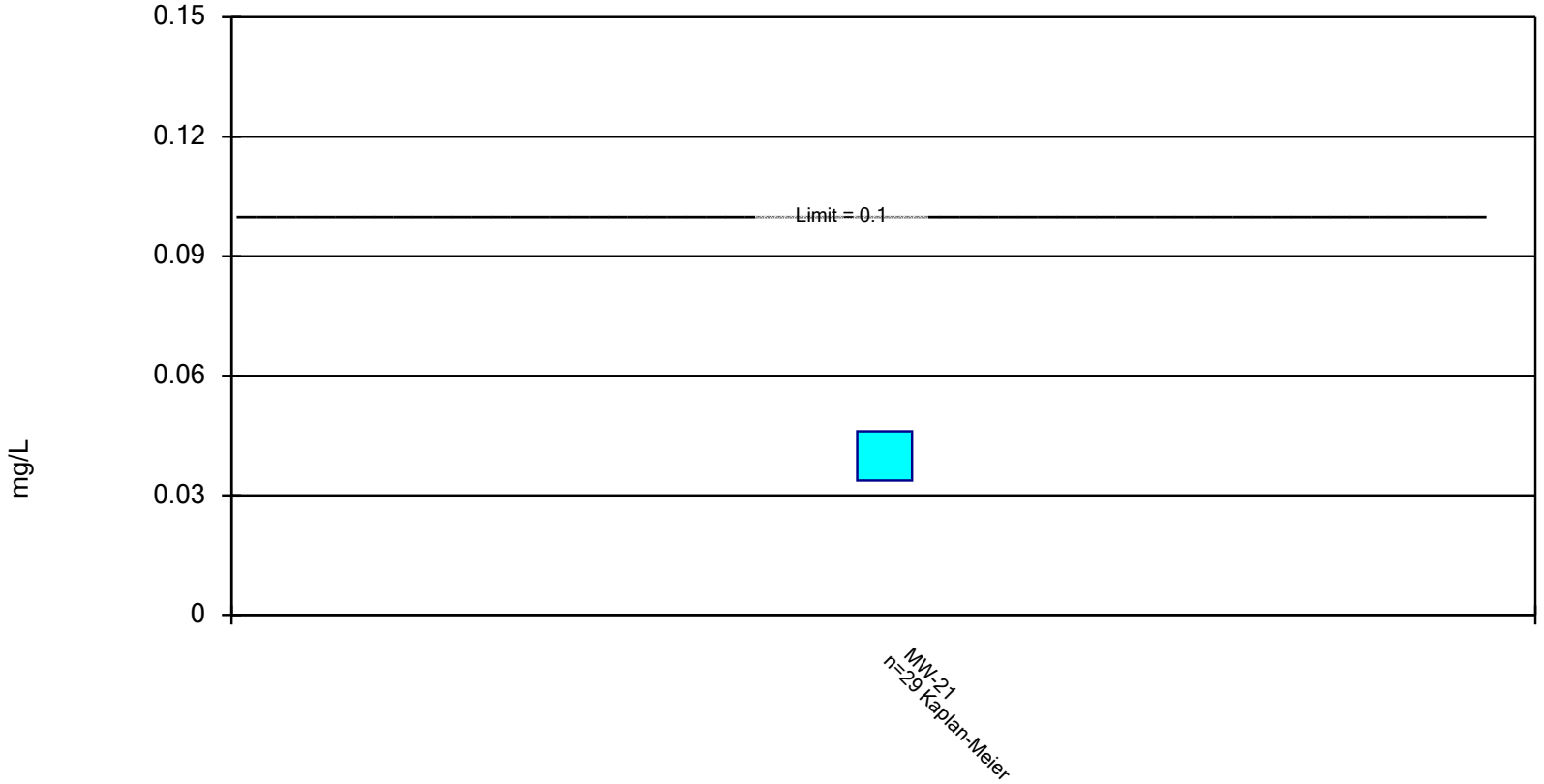
Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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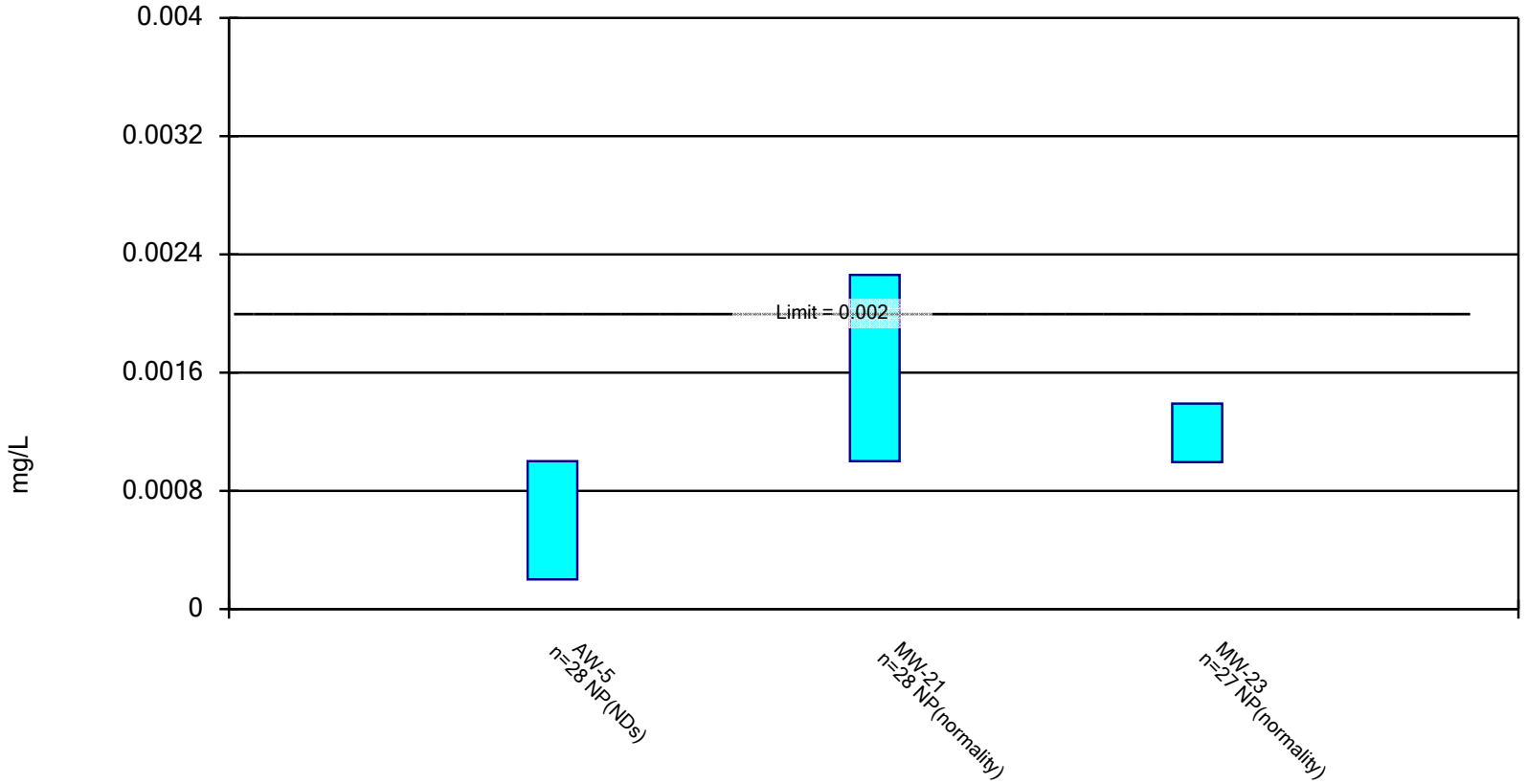
Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.

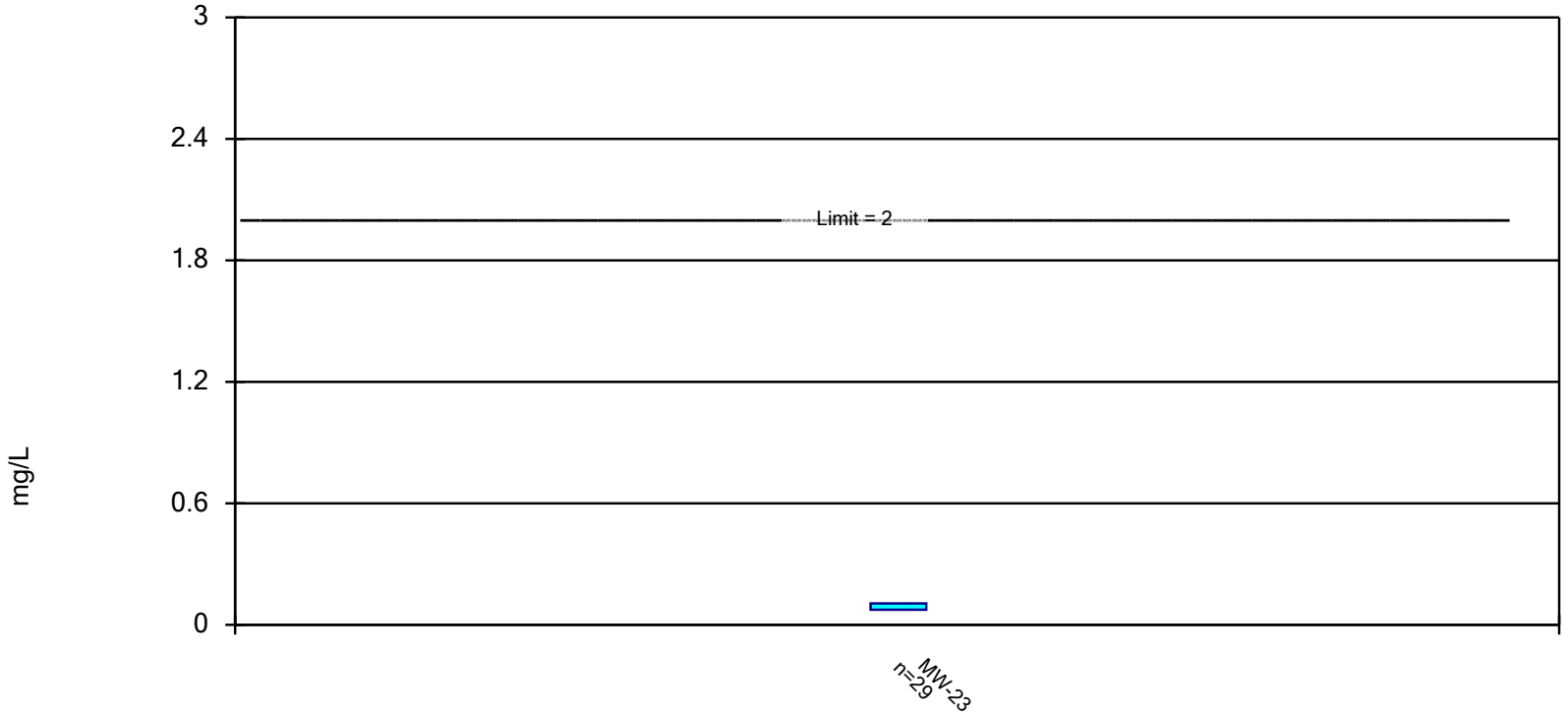


Constituent: Thallium Analysis Run 11/13/2023 7:29 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Zinc Analysis Run 11/13/2023 7:30 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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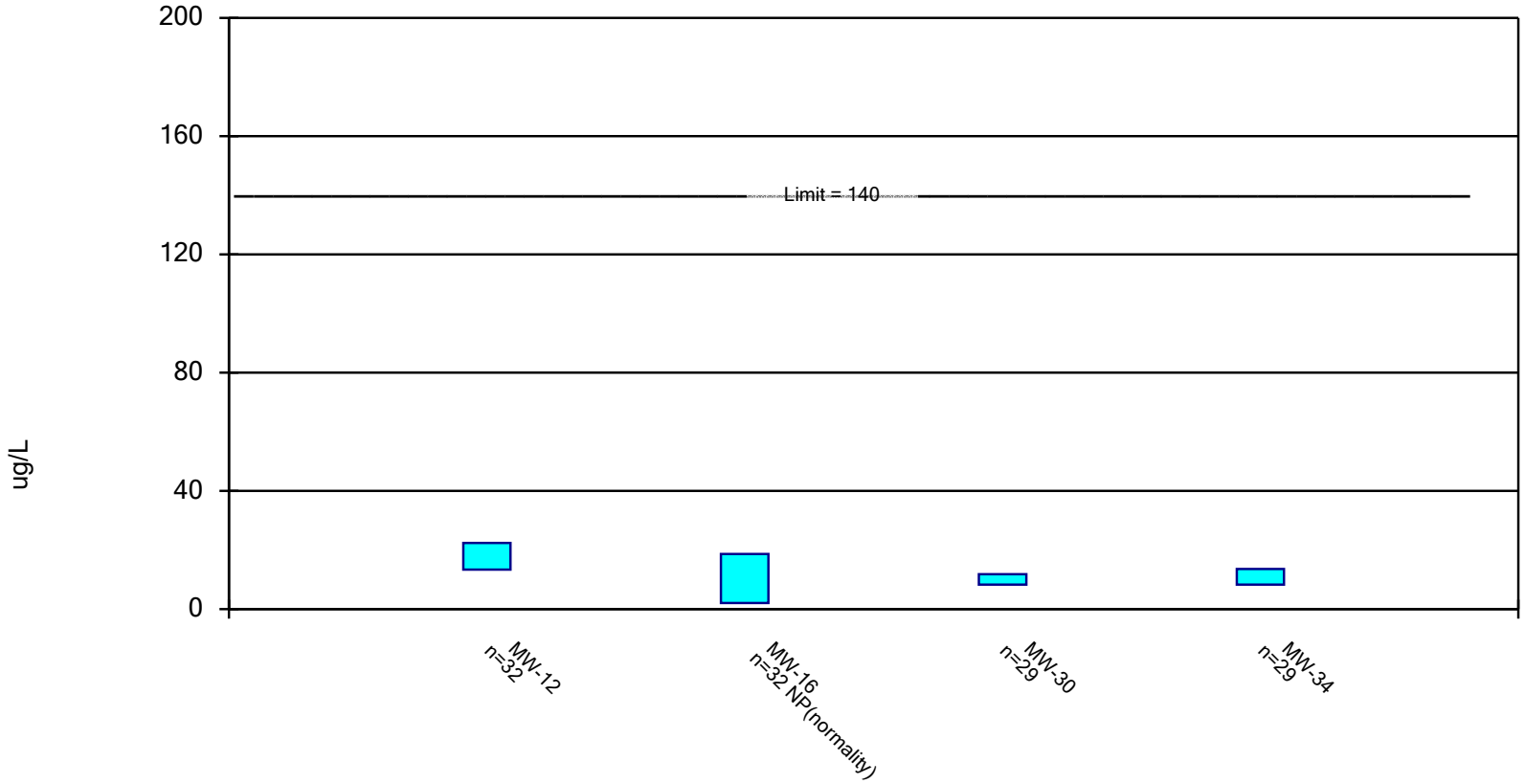
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

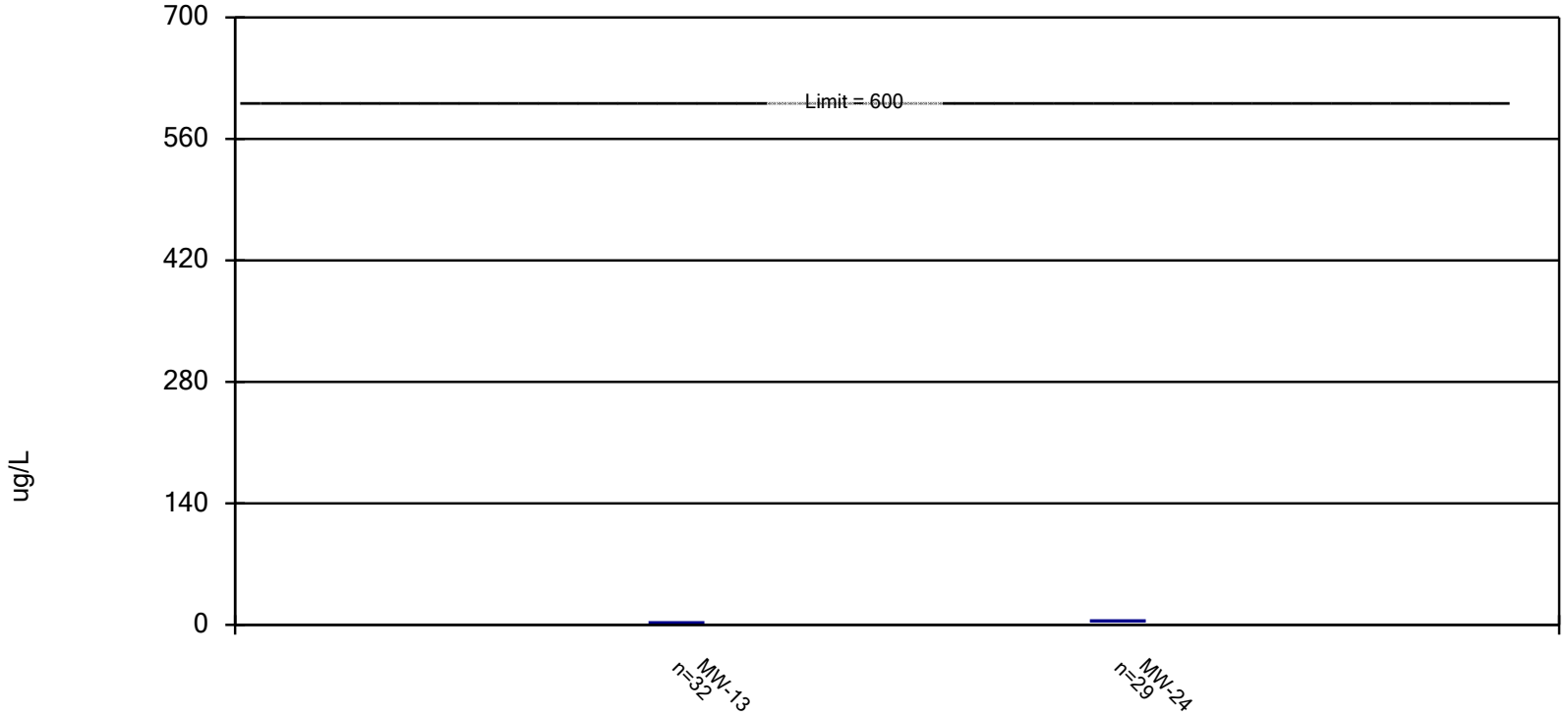


Constituent: 1,1-Dichloroethane Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: 1,2-Dichlorobenzene Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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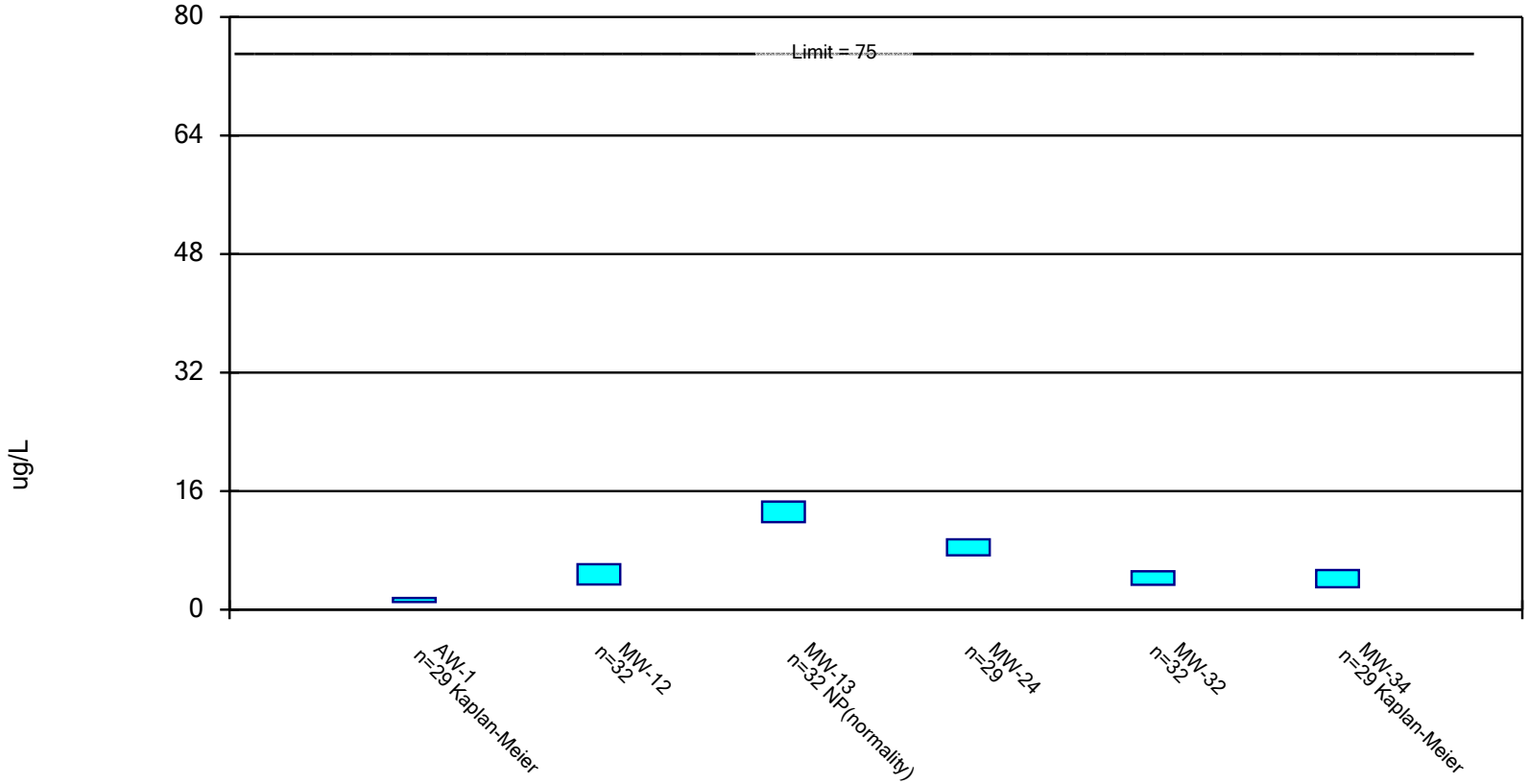
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

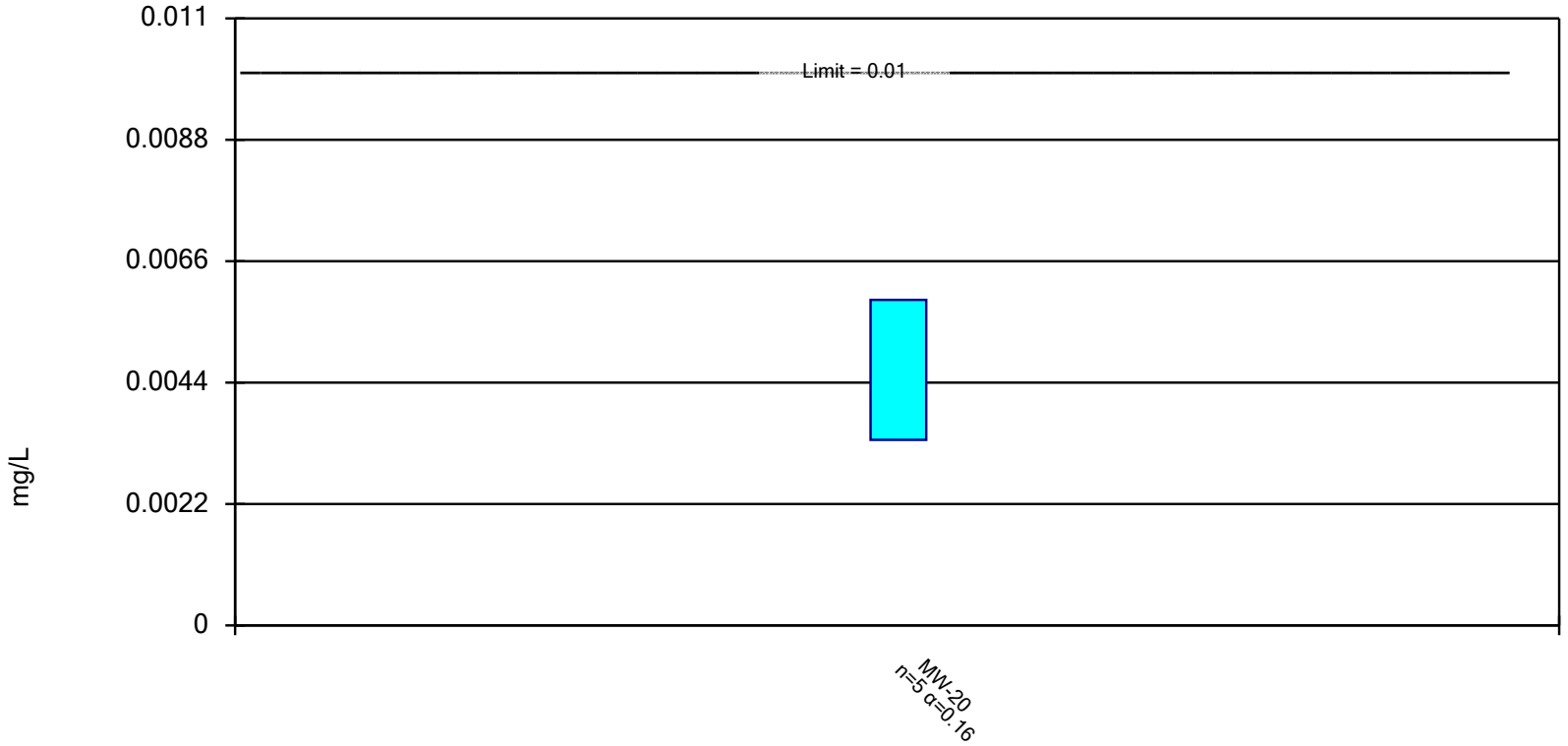


Constituent: 1,4-Dichlorobenzene Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/13/2023 1:03 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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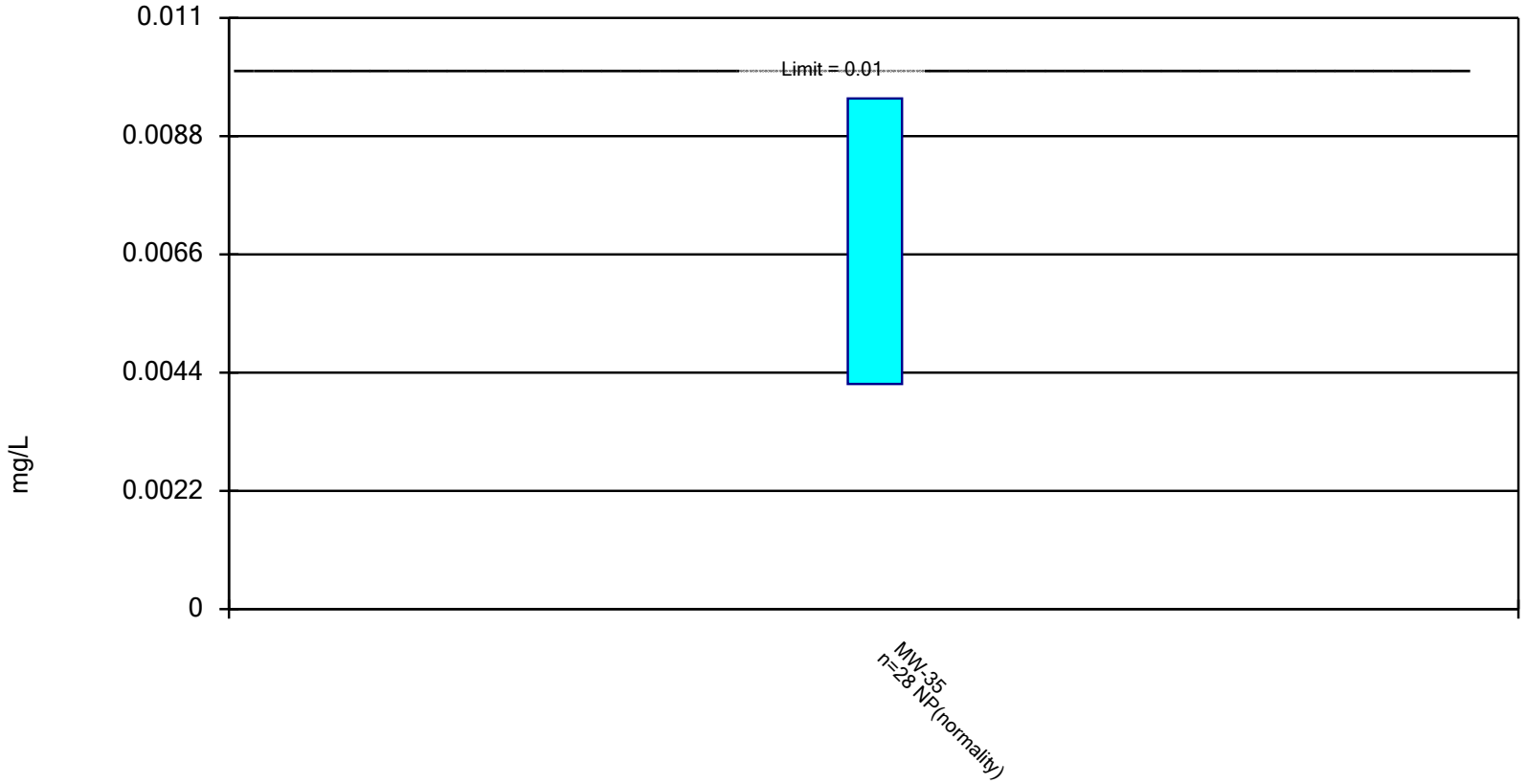
Non-Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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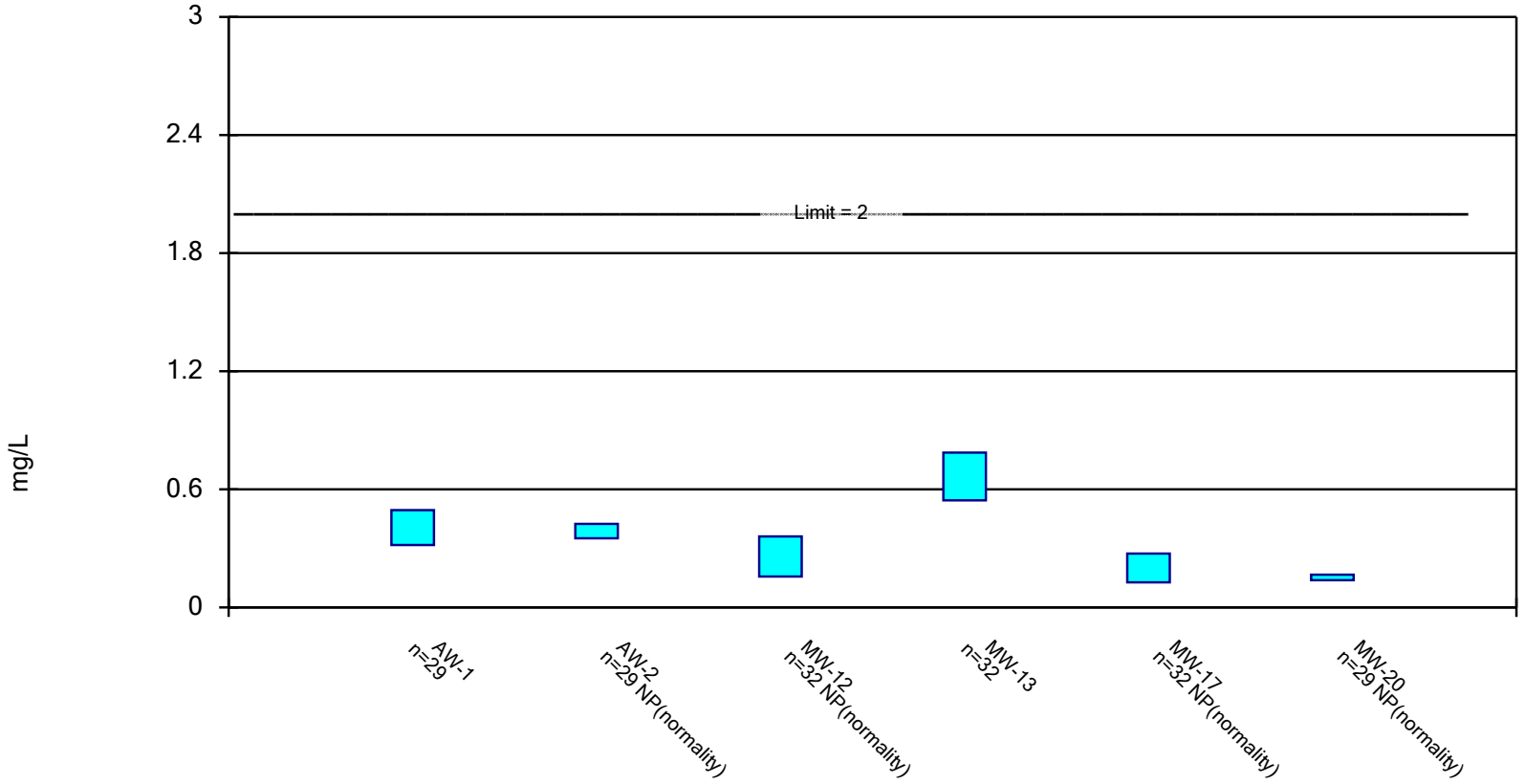
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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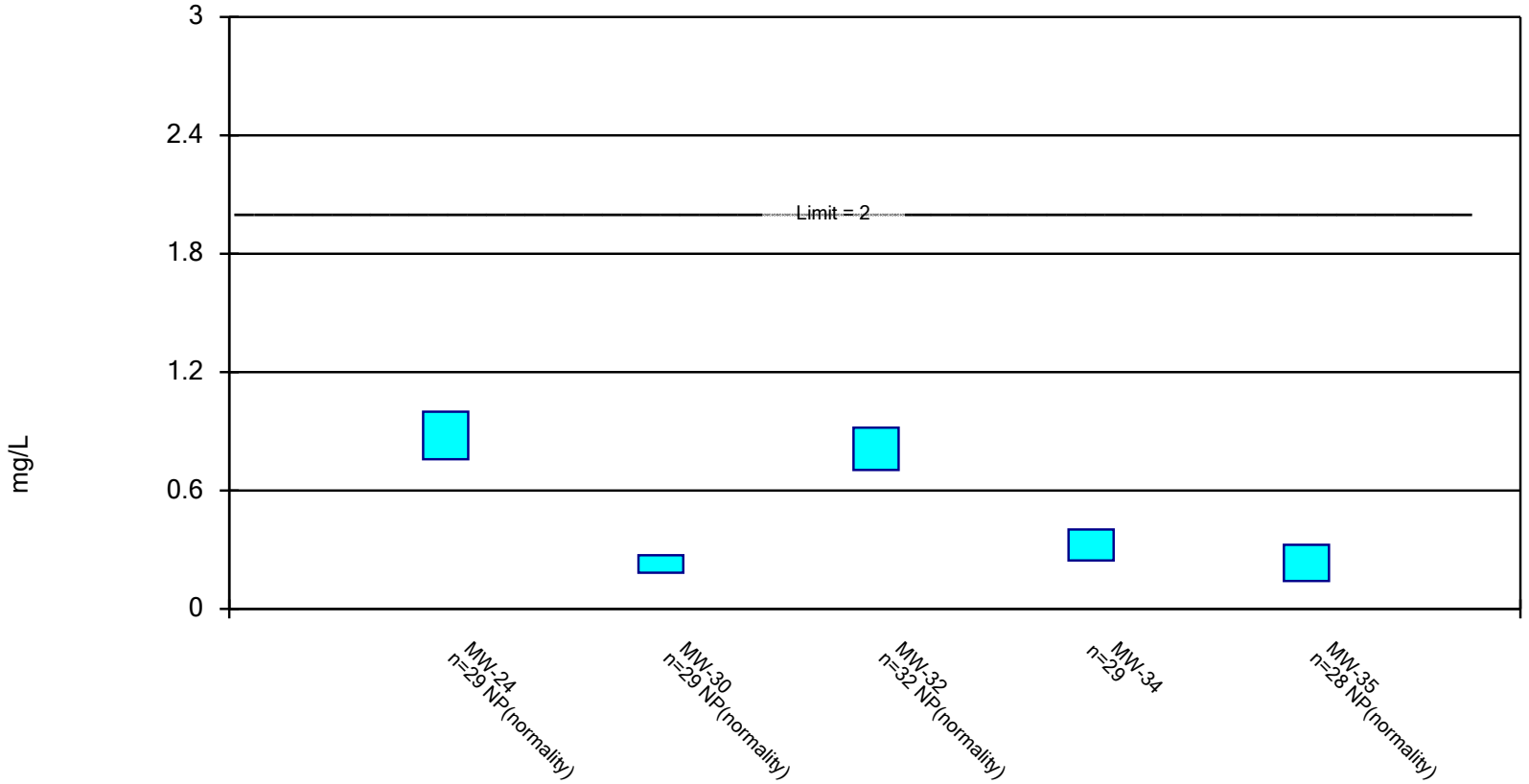
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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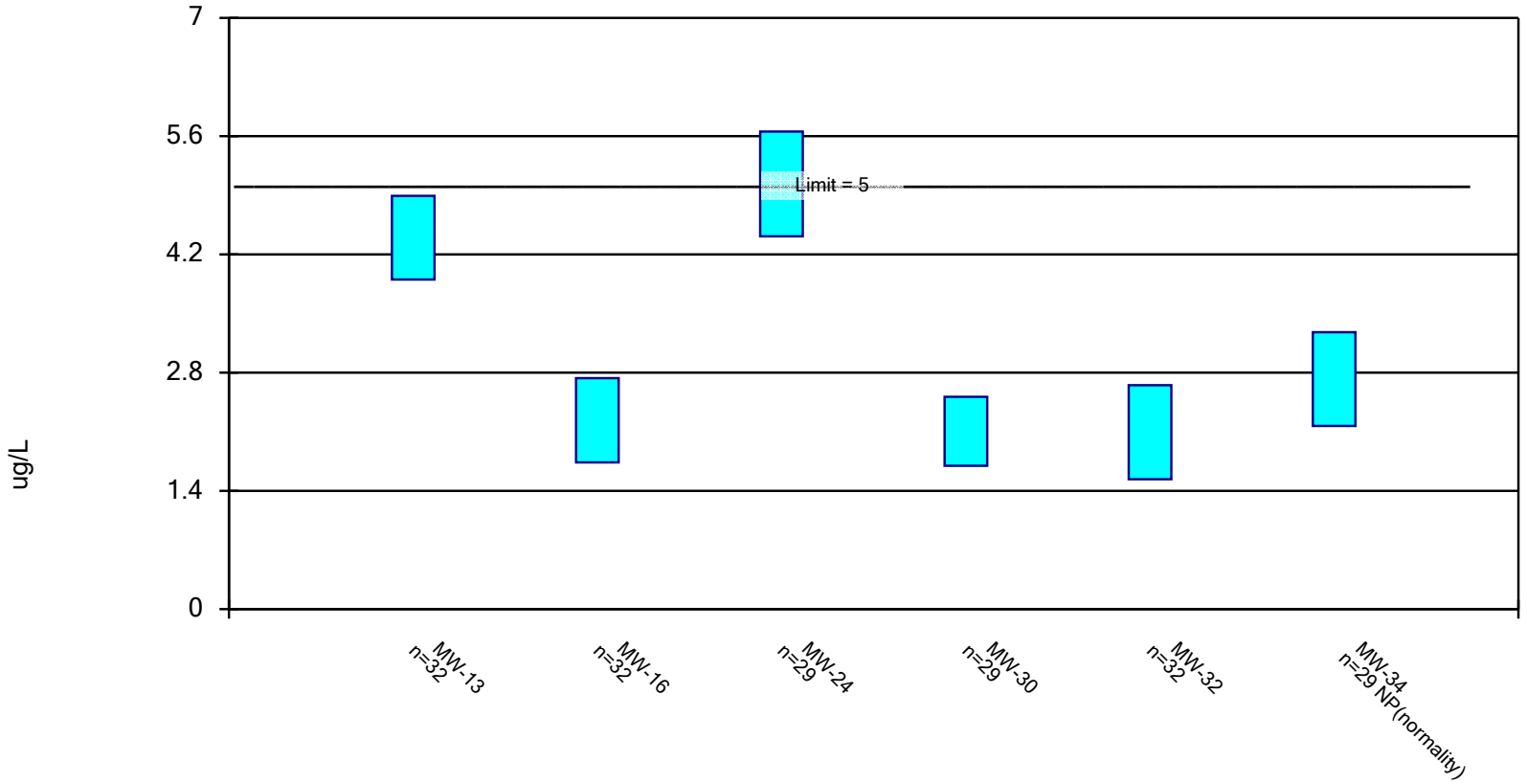
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Benzene Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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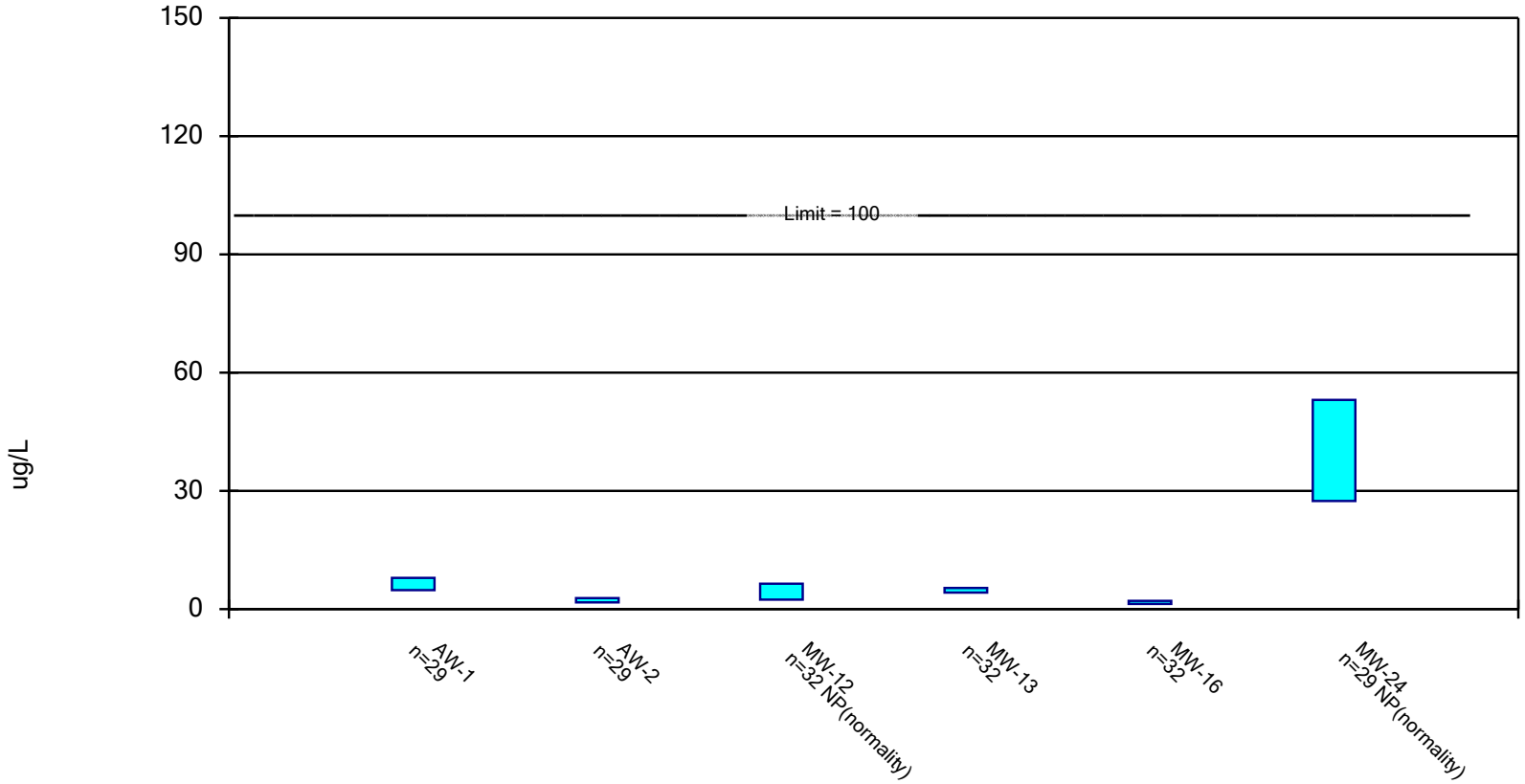
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chlorobenzene Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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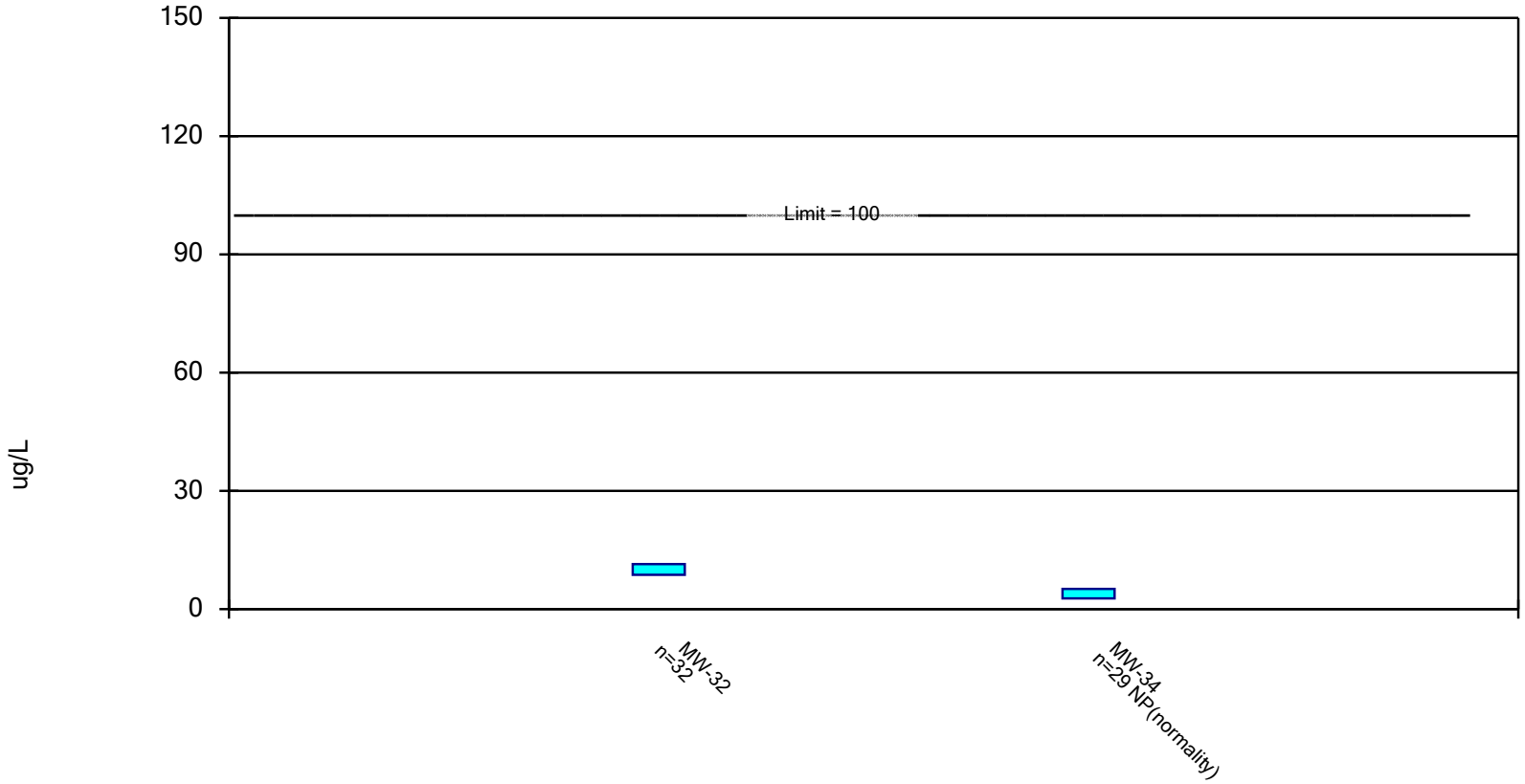
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

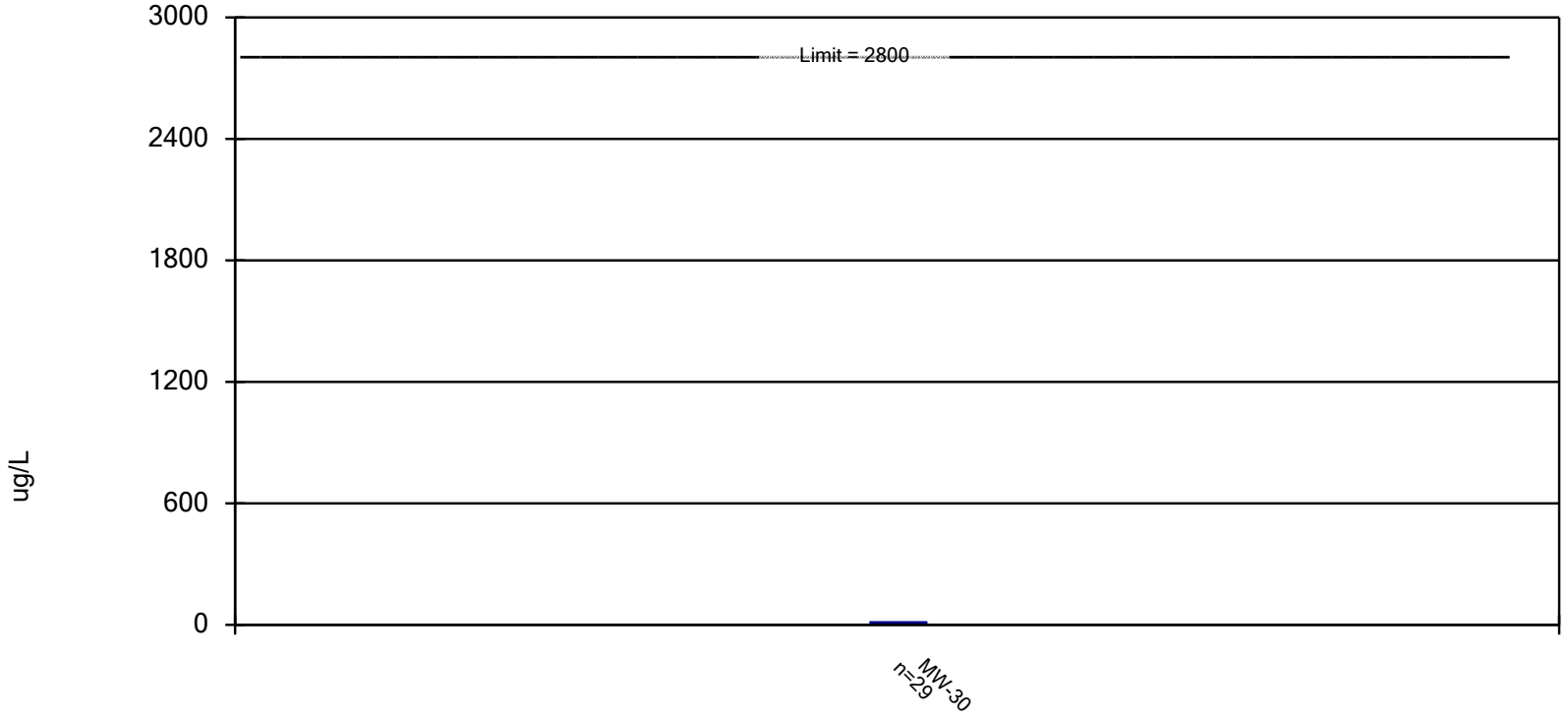


Constituent: Chlorobenzene Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chloroethane Analysis Run 11/13/2023 9:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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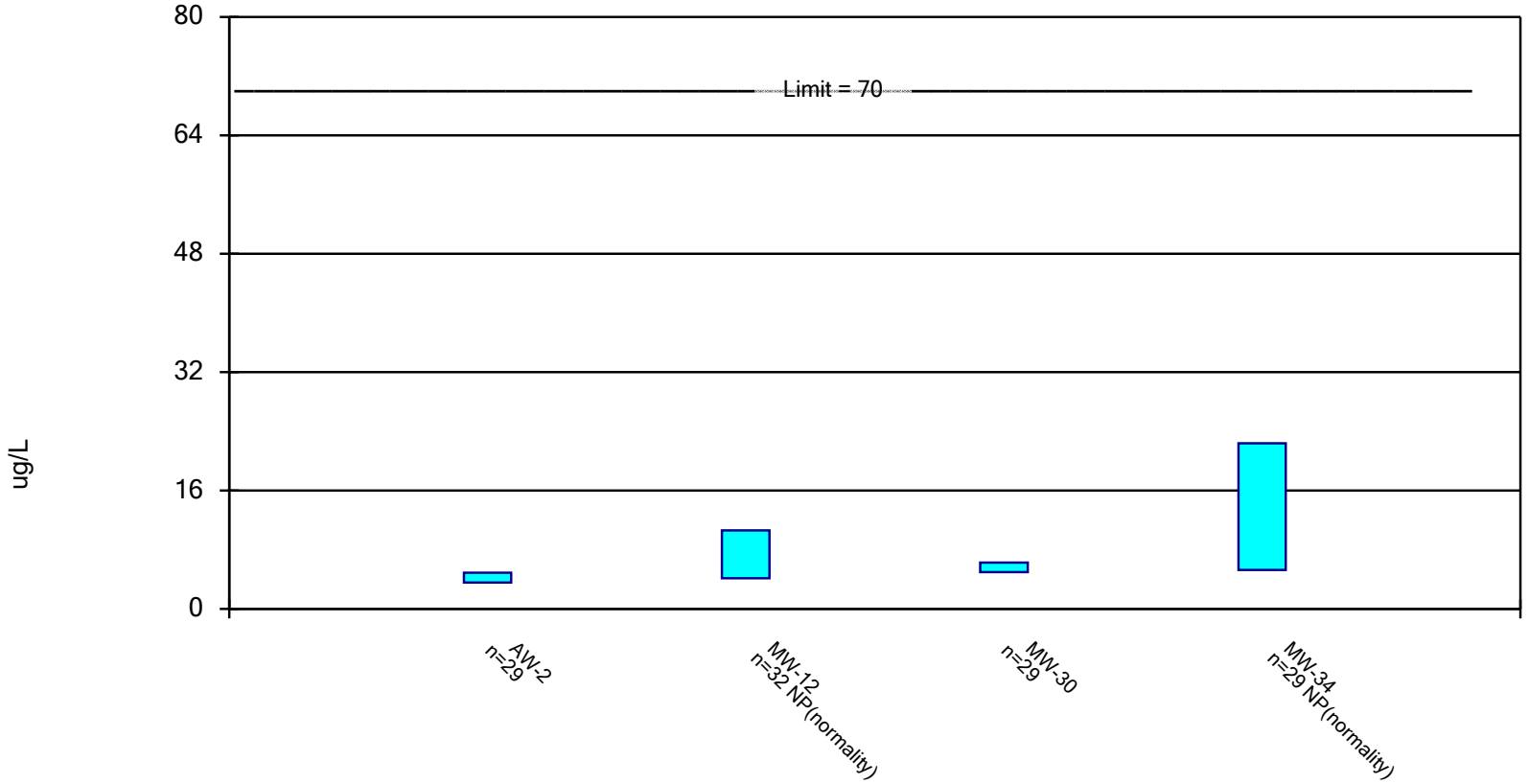
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

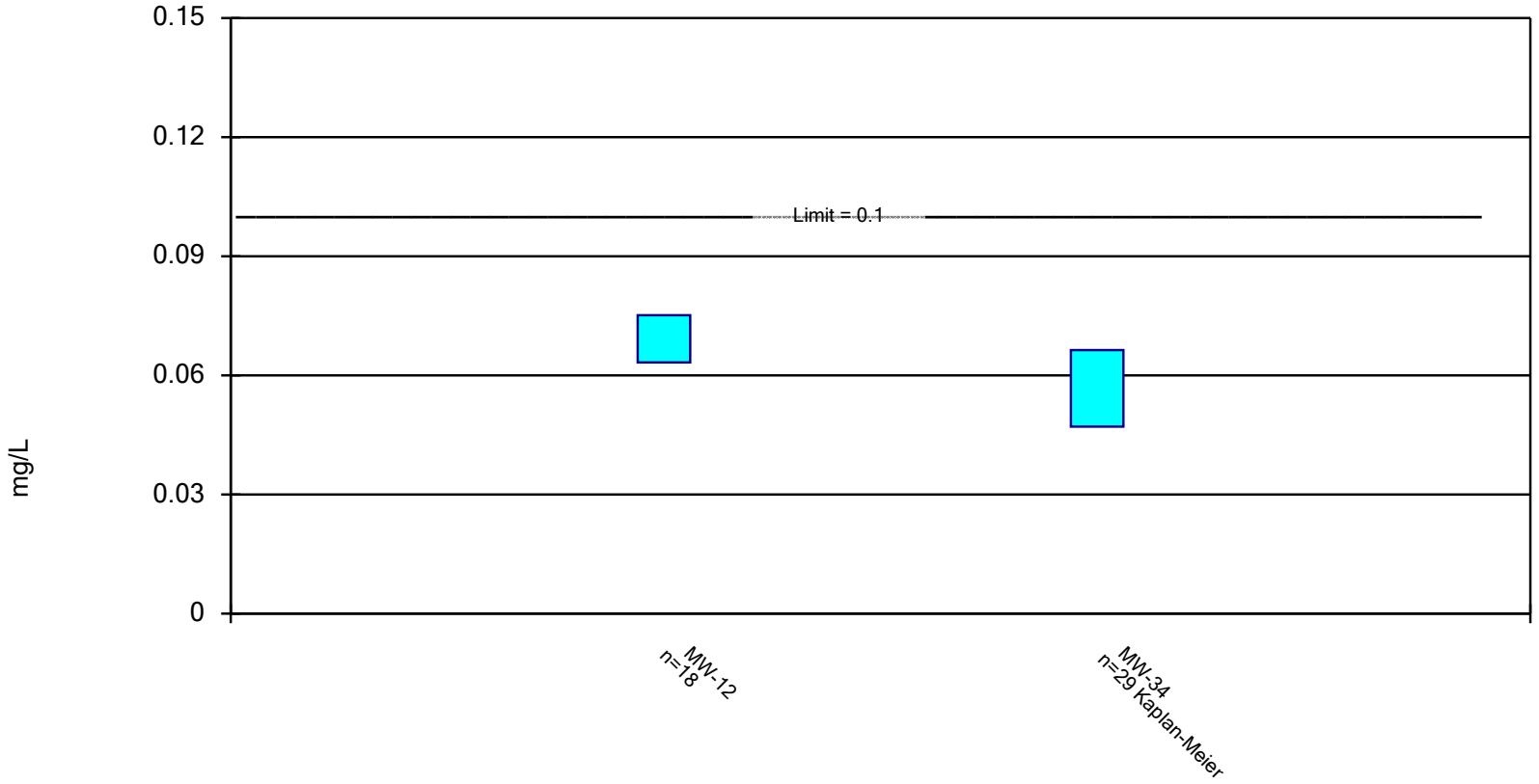


Constituent: cis-1,2-Dichloroethene Analysis Run 11/13/2023 3:28 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 11/13/2023 9:39 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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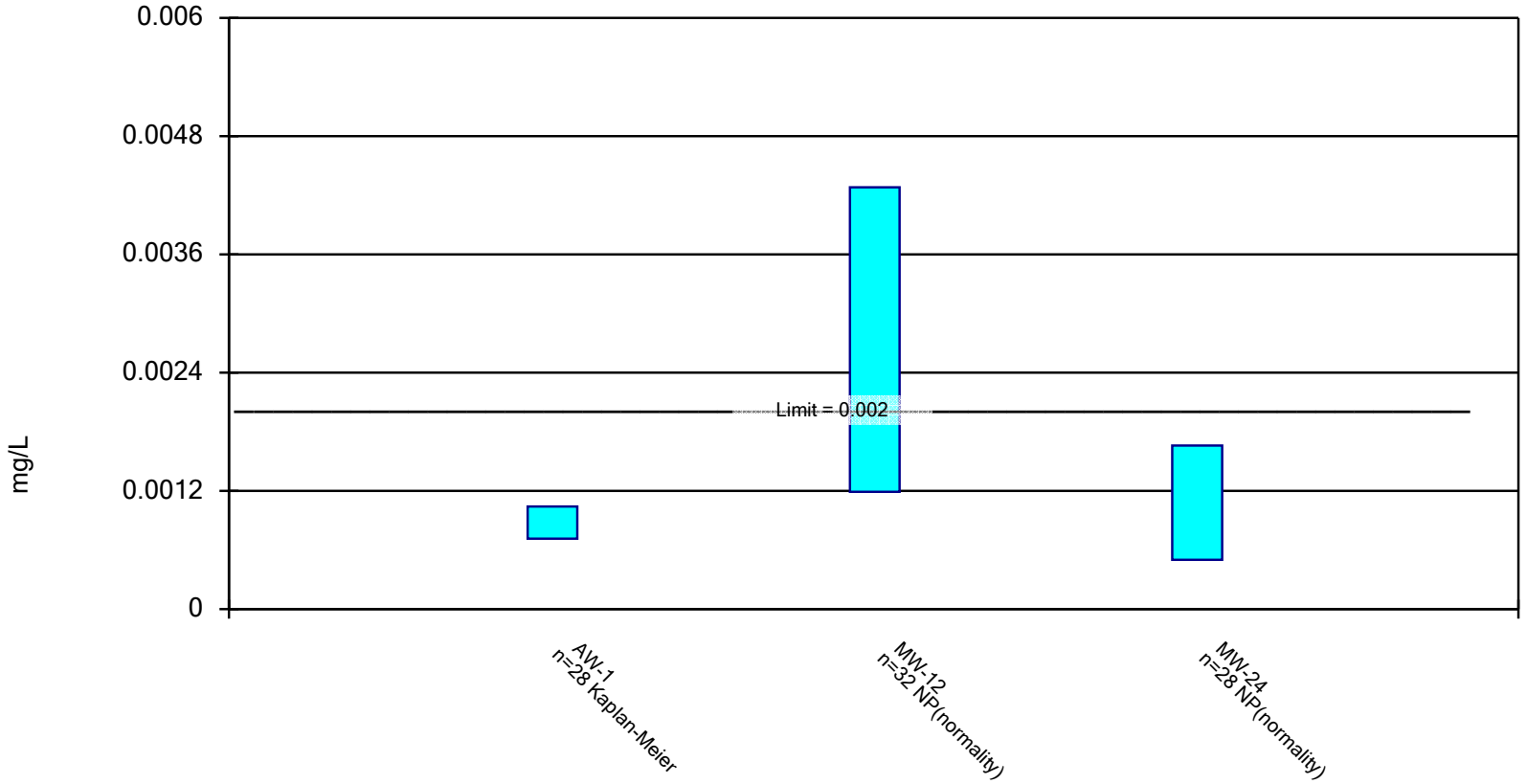
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

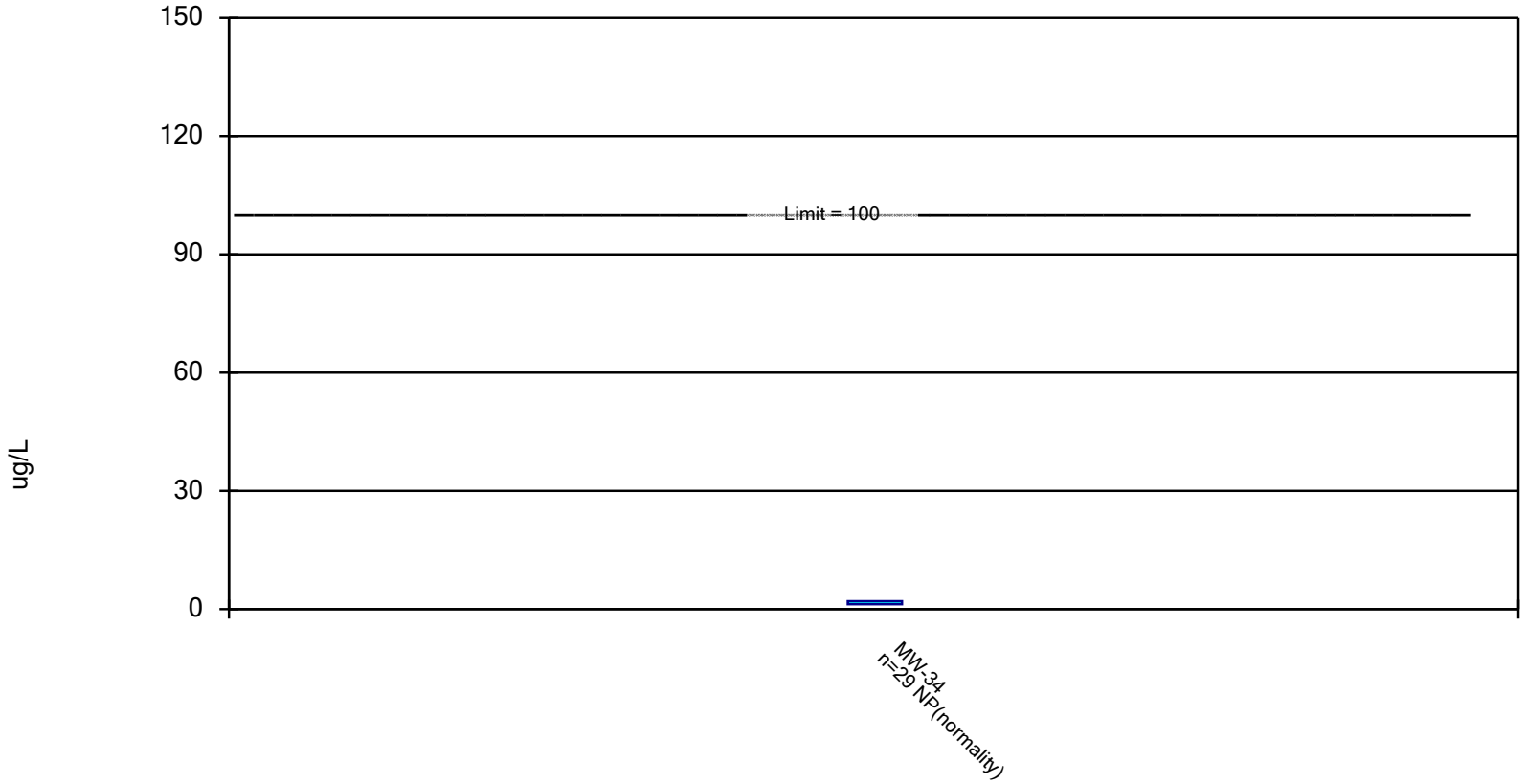


Constituent: Thallium Analysis Run 11/13/2023 9:39 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Non-Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.

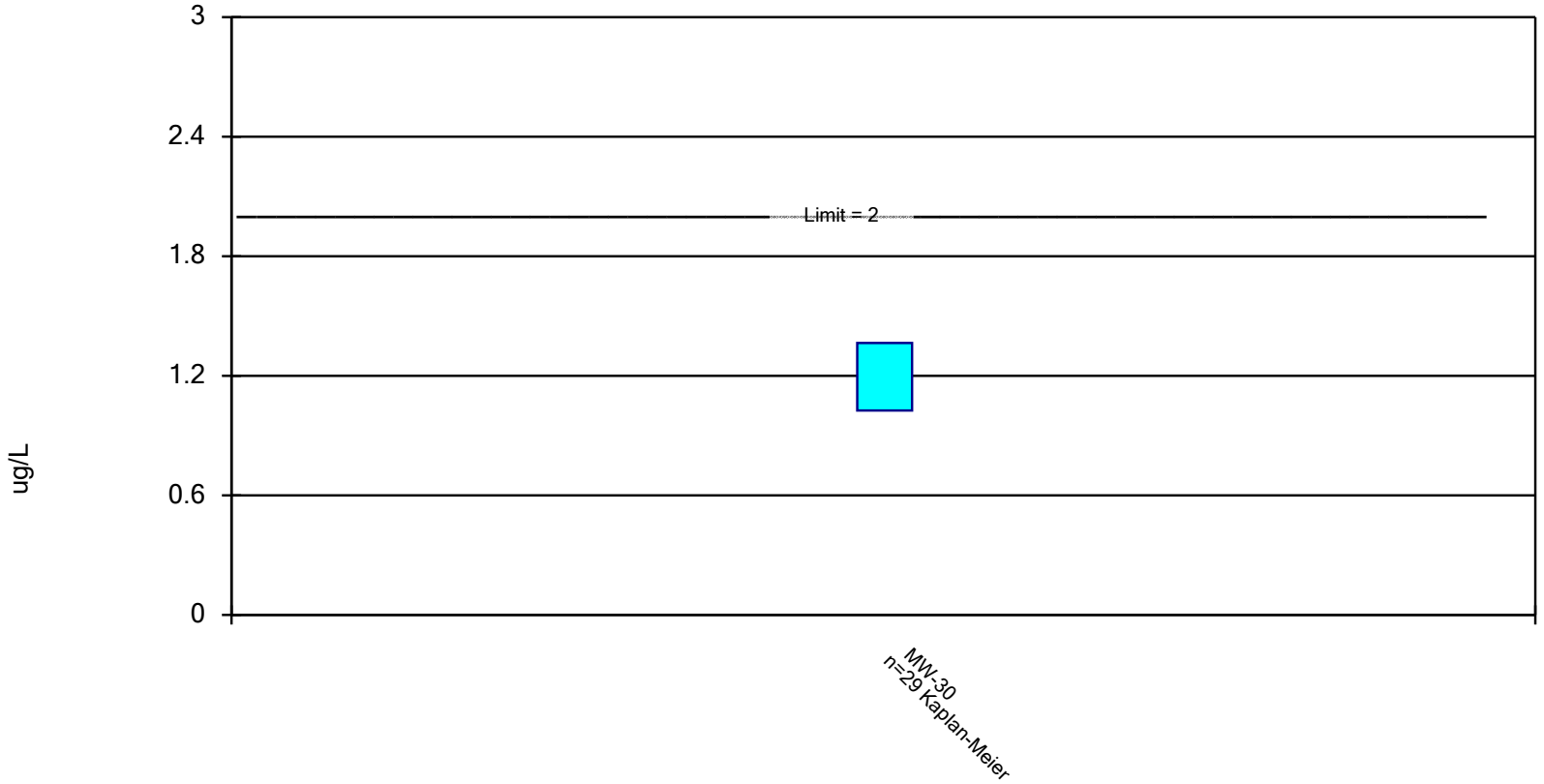


Constituent: trans-1,2-Dichloroethene Analysis Run 11/13/2023 9:39 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

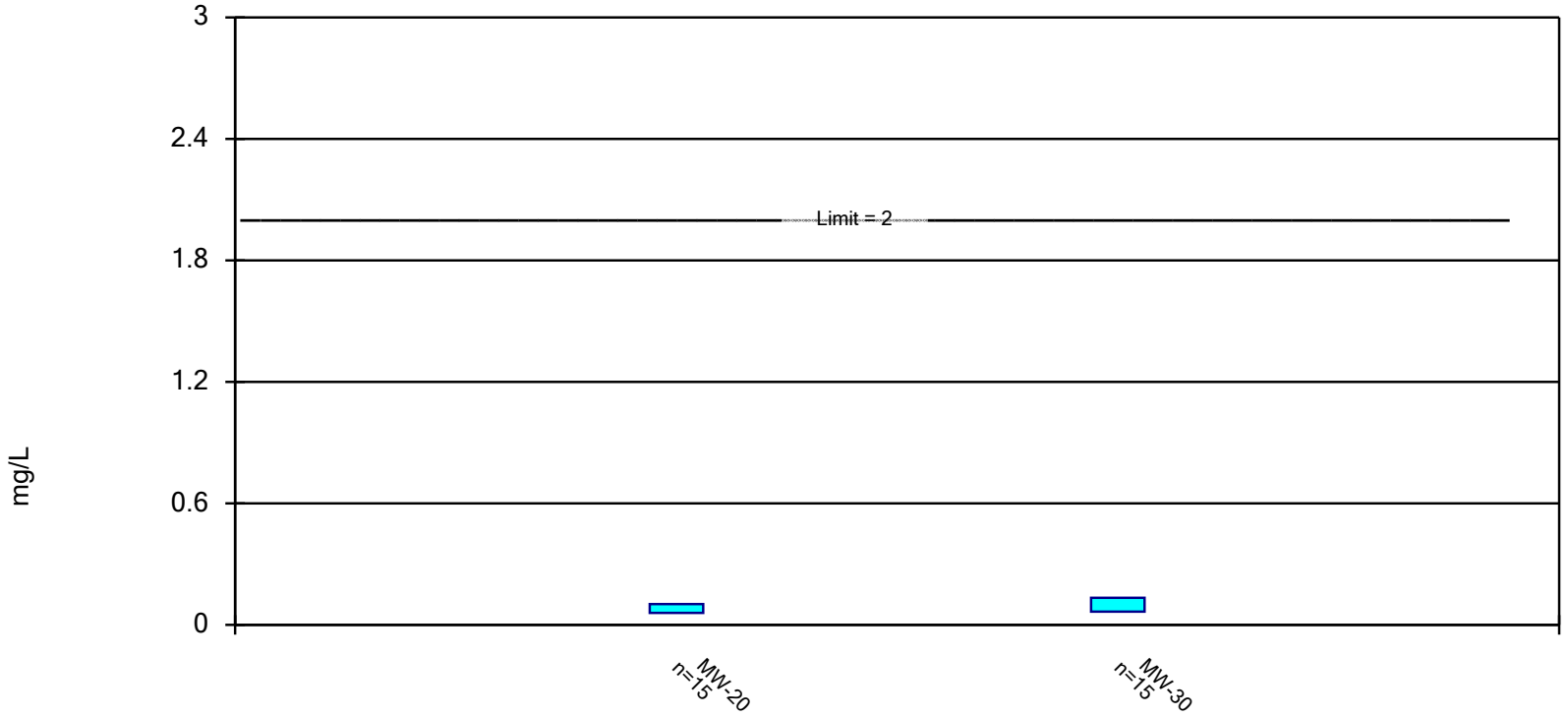


Constituent: Vinyl Chloride Analysis Run 11/13/2023 9:39 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Zinc Analysis Run 11/13/2023 9:39 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Deeper Bedrock

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations - Assessment Constituents																
1,1-Dichloroethane (ug/L)	MW-105B	4.8	2.7	140	No	20	3.7	1.8	0.5	<0.01	<0.01	5	None	No	0.01	Param.
Barium (mg/L)	MW-105B	0.14	0.11	2	No	20	0.13	0.02	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-107B	0.36	0.28	2	No	20	0.34	0.10	0.3	0.02	<0.01	0	None	No	0.02	NP (normality)
Barium (mg/L)	MW-108B	0.21	0.17	2	No	12	0.19	0.03	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-109B	0.72	0.66	2	No	15	0.69	0.05	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-109B	7.2	6.3	100	No	15	6.8	0.6	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-102B	0.00092	0.00069	0.0021	No	14	0.00081	0.00016	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-107B	0.00323	0.00115	0.0021	No	16	0.00261	0.00154	0.6	0.03	<0.01	0	None	No	0.03	NP (normality)
Nickel (mg/L)	MW-105B	0.012	0.010	0.1	No	20	0.011	0.003	0.2	0.02	<0.01	0	None	No	0.02	NP (normality)
Nickel (mg/L)	MW-107B	0.016	0.011	0.1	No	20	0.014	0.006	0.4	0.02	<0.01	5	None	No	0.02	NP (normality)
Nickel (mg/L)	MW-109B	0.041	0.035	0.1	No	15	0.038	0.004	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Thallium (mg/L)	MW-107B	0.00328	0.00189	0.002	No	20	0.00258	0.00123	0.5	<0.01	<0.01	5	None	No	0.01	Param.
Assessment Monitoring Locations																
Barium (mg/L)	MW-25	0.22	0.18	2	No	29	0.20	0.04	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-15	0.00255	0.00142	0.0021	No	17	0.00199	0.00090	0.5	<0.01	<0.01	0	None	No	0.01	Param.
Lead (mg/L)	MW-25	0.0020	0.0003	0.015	No	29	0.0014	0.0015	1.1	<0.01	<0.01	93	None	No	0.01	NP (NDs)
Nickel (mg/L)	MW-15	0.009	0.006	0.1	No	17	0.007	0.002	0.3	<0.01	<0.01	6	None	No	0.01	Param.
Nickel (mg/L)	MW-19	0.012	0.008	0.1	No	17	0.010	0.003	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Thallium (mg/L)	MW-25	0.00100	0.00050	0.002	No	28	0.00081	0.00051	0.6	<0.01	<0.01	96	None	No	0.01	NP (NDs)
Corrective Action Monitoring Locations - Assessment Constituents																
1,1-Dichloroethane (ug/L)	AW-6	6.1	2.1	140	No	29	5.4	5.7	1.1	<0.01	<0.01	7	None	No	0.01	NP (normality)
1,1-Dichloroethane (ug/L)	MW-14	12.9	1.8	140	No	32	7.6	6.6	0.9	<0.01	<0.01	3	None	No	0.01	NP (normality)
1,1-Dichloroethane (ug/L)	MW-22	7.7	1.6	140	No	29	4.7	4.1	0.9	<0.01	<0.01	3	None	No	0.01	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW-14	7.9	4.9	75	No	32	6.4	3.6	0.6	<0.01	<0.01	16	Kaplan-Meier	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-33	0.8	0.5	75	No	32	0.7	0.2	0.3	<0.01	<0.01	41	None	No	0.01	NP (normality)
1,4-Dichlorobenzene (ug/L)	MW-36	2.6	1.8	75	No	29	2.2	0.9	0.4	<0.01	<0.01	10	None	No	0.01	Param.
Barium (mg/L)	AW-6	0.13	0.10	2	No	29	0.11	0.03	0.3	<0.01	<0.01	3	None	No	0.01	Param.
Barium (mg/L)	CRL-9	0.59	0.43	2	No	29	0.53	0.14	0.3	<0.01	<0.01	0	None	No	0.01	NP (normality)
Barium (mg/L)	MW-14	0.79	0.13	2	No	32	0.52	0.40	0.8	<0.01	<0.01	3	None	No	0.01	NP (normality)
Barium (mg/L)	MW-22	0.68	0.62	2	No	29	0.65	0.07	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.54	0.44	2	No	32	0.49	0.12	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Barium (mg/L)	MW-36	0.65	0.60	2	No	29	0.64	0.07	0.1	<0.01	<0.01	0	None	No	0.01	NP (normality)
Benzene (ug/L)	CRL-9	2.41	1.48	5	No	29	1.94	1.02	0.5	<0.01	<0.01	0	None	No	0.01	Param.
Benzene (ug/L)	MW-14	3.32	2.30	5	No	32	2.81	1.17	0.4	<0.01	<0.01	3	None	No	0.01	Param.
Benzene (ug/L)	MW-33	0.36	0.25	5	No	32	0.31	0.10	0.3	<0.01	<0.01	44	None	No	0.01	NP (normality)
Chlorobenzene (ug/L)	MW-14	3.7	2.8	100	No	32	3.3	1.1	0.4	<0.01	<0.01	9	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-33	4.8	3.5	100	No	32	4.2	1.6	0.4	<0.01	<0.01	3	None	No	0.01	Param.
Chlorobenzene (ug/L)	MW-36	9.1	6.5	100	No	29	7.8	2.9	0.4	<0.01	<0.01	3	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.00132	0.00113	0.0021	No	19	0.00123	0.00016	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-36	0.00171	0.00135	0.0021	No	16	0.00153	0.00027	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	AW-6	0.029	0.025	0.1	No	16	0.027	0.002	0.1	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	CRL-9	0.025	0.018	0.1	No	16	0.021	0.006	0.3	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-14	0.019	0.013	0.1	No	19	0.019	0.011	0.6	0.02	<0.01	0	None	No	0.02	NP (normality)
Nickel (mg/L)	MW-22	0.037	0.029	0.1	No	16	0.033	0.006	0.2	0.03	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-33	0.008	0.006	0.1	No	19	0.007	0.001	0.2	0.03	<0.01	0	None	No	0.01	Param.

Deeper Bedrock

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents (Continued)																
Thallium (mg/L)	MW-22	0.00100	0.00050	0.002	No	28	0.00110	0.00119	1.1	<0.01	<0.01	96	None	No	0.01	NP (NDs)

[1] Under assessment mode, an SSL is indicated when the lower confidence limit exceeds the groundwater protection standard (compliance limit).

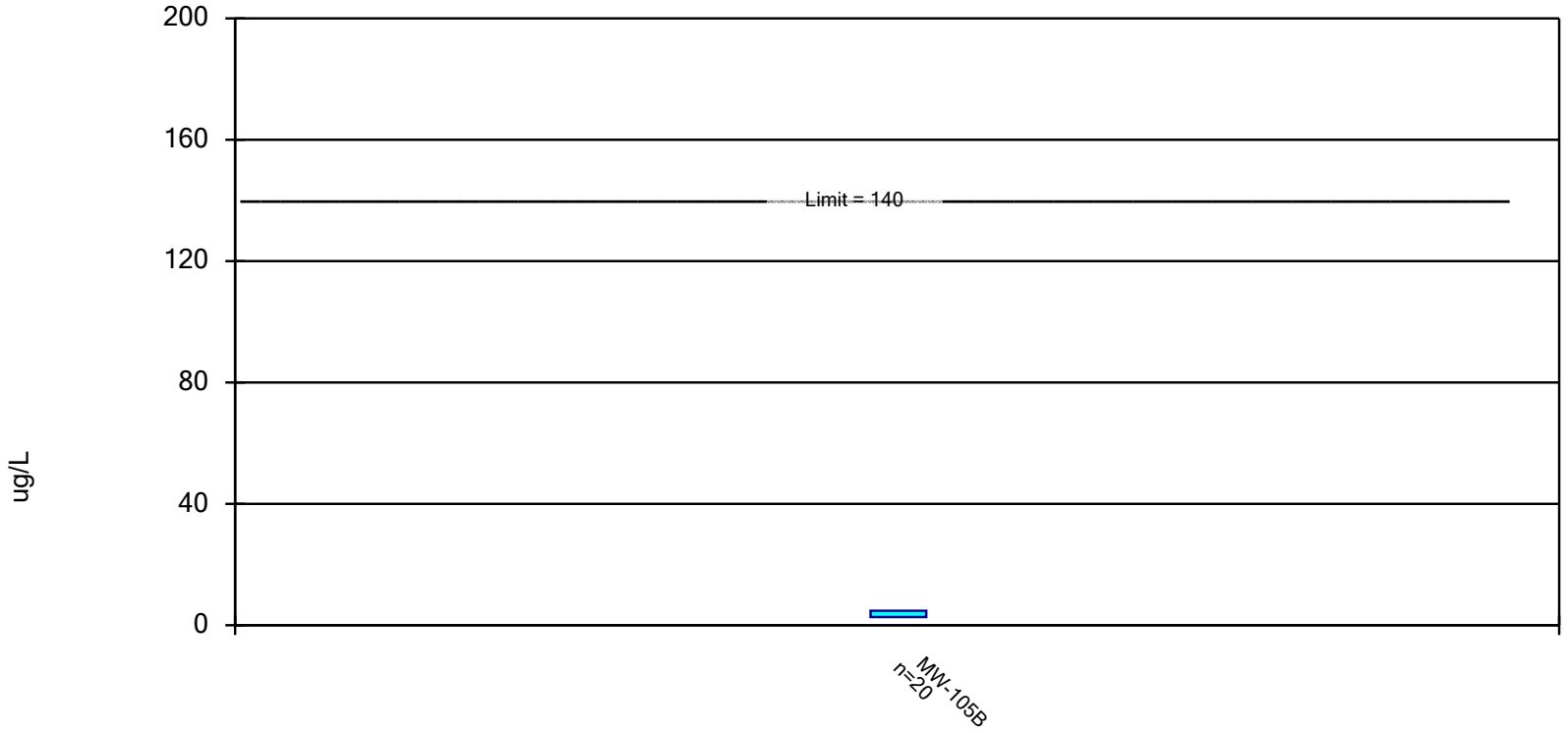
[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] For parametric confidence intervals: Except where otherwise indicated, based on Unified Guidance Equation 22.2, i.e., $\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right)$
where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{1-b,n-1}$ is the (1−b) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

[4] For non-parametric confidence intervals: Based on Unified Guidance Equation 22.1, i.e., $1-\beta = G_{T,n-1}\left(t_{1-\alpha,n-1} \middle| \Delta = \sqrt{n}(R-1)\right)$
where R is the desired risk ratio, $t_{1-a,n-1}$ is the (1−a) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter D.

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

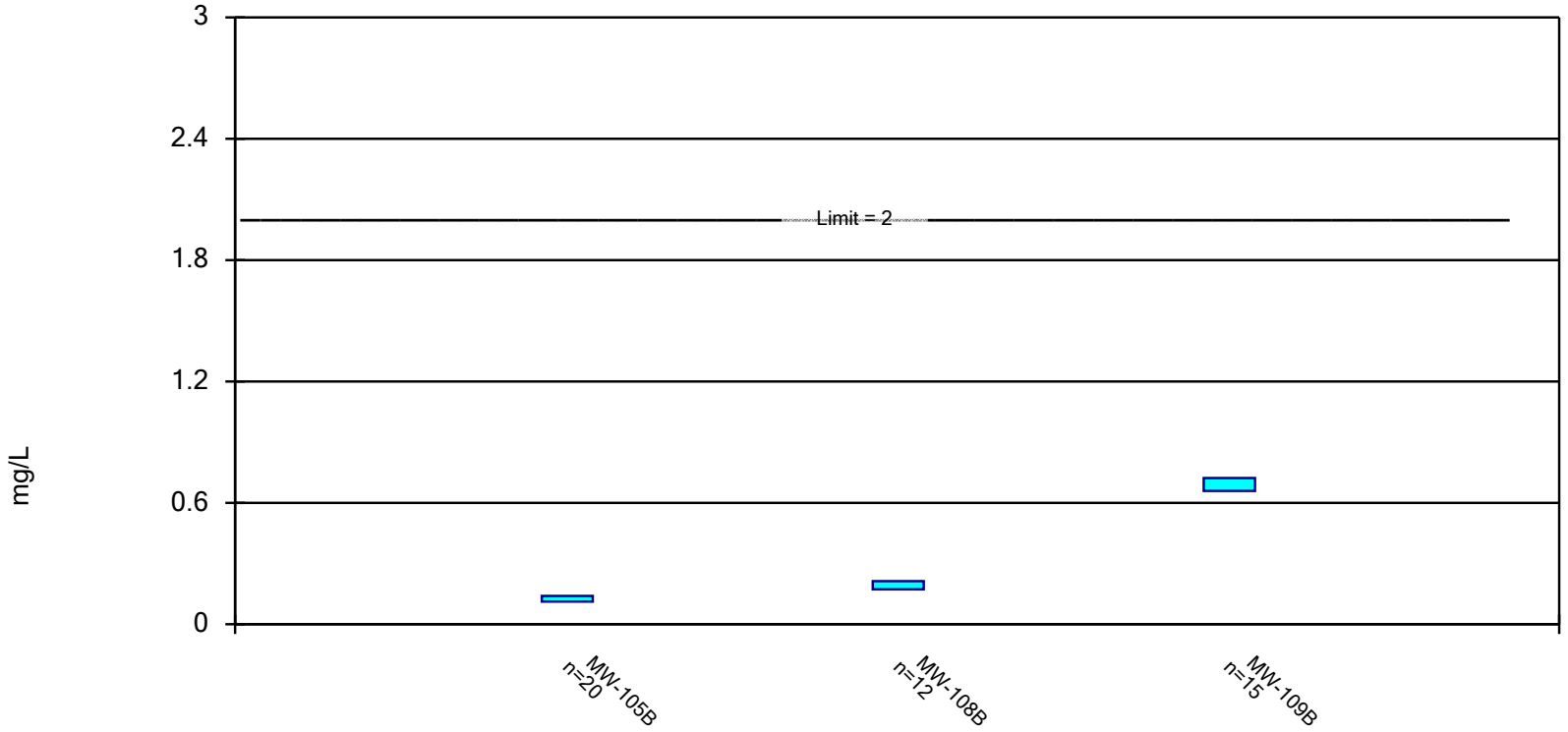


Constituent: 1,1-Dichloroethane Analysis Run 11/13/2023 9:33 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 9:33 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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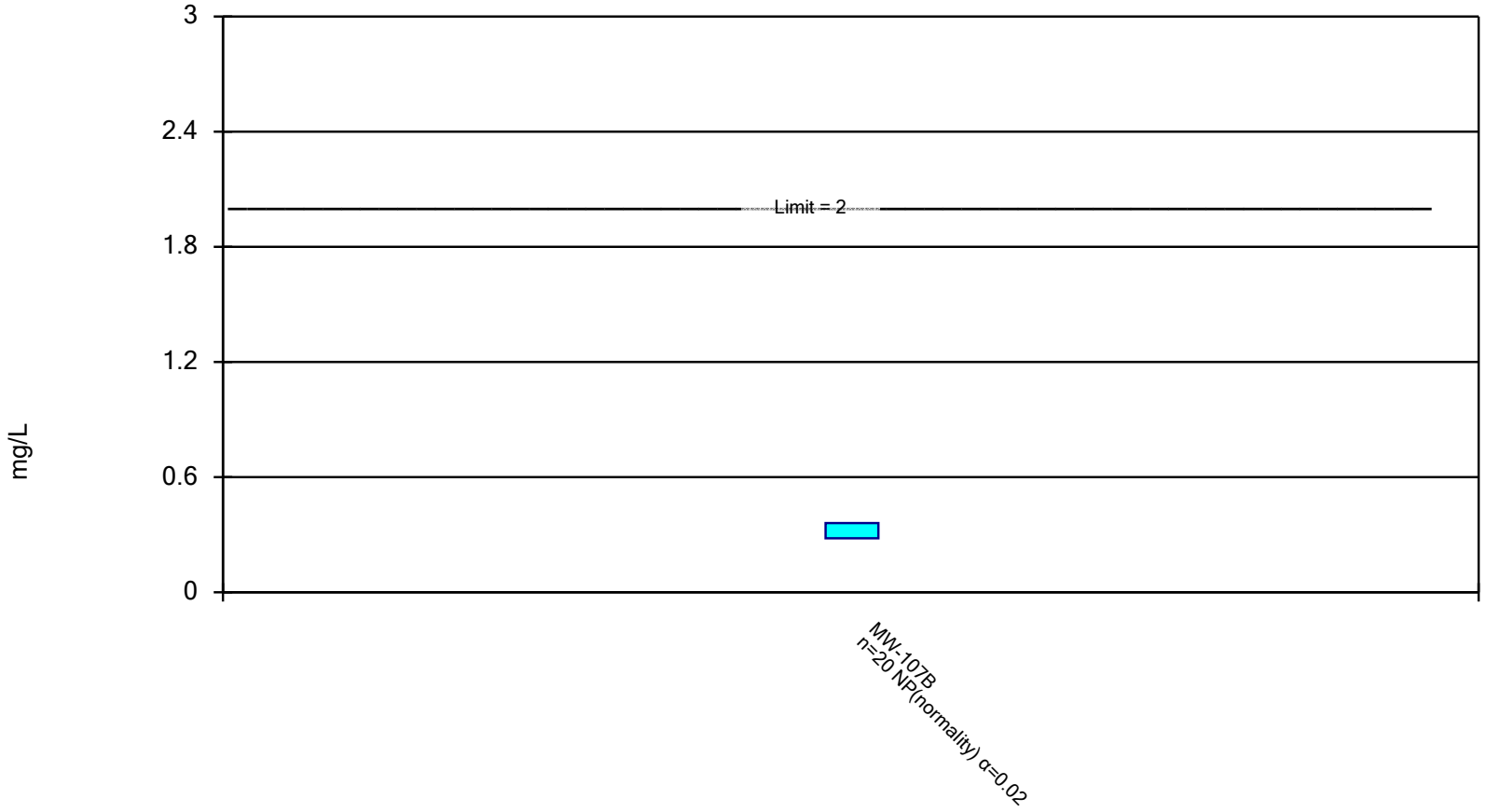
Non-Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded.

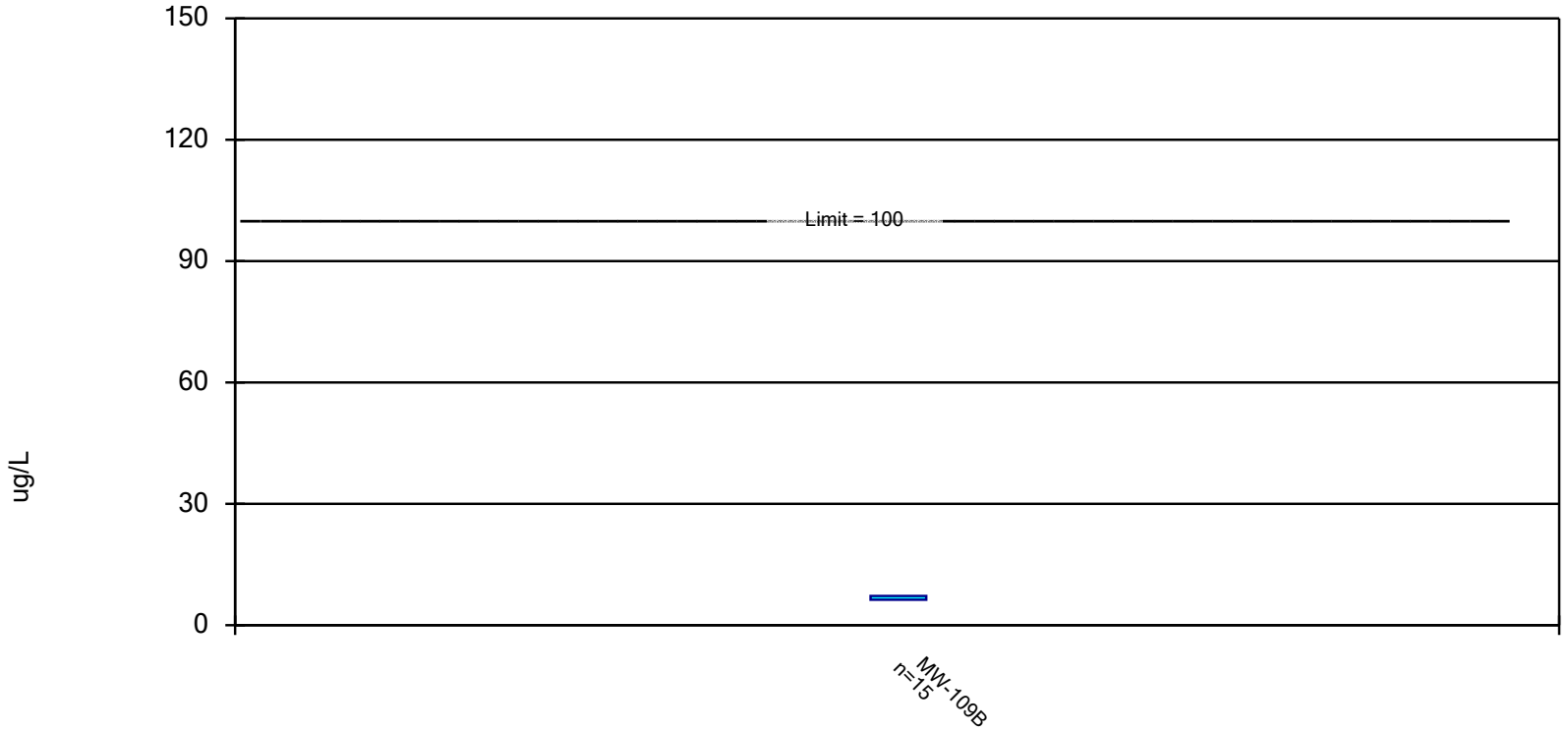


Constituent: Barium Analysis Run 11/13/2023 9:23 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

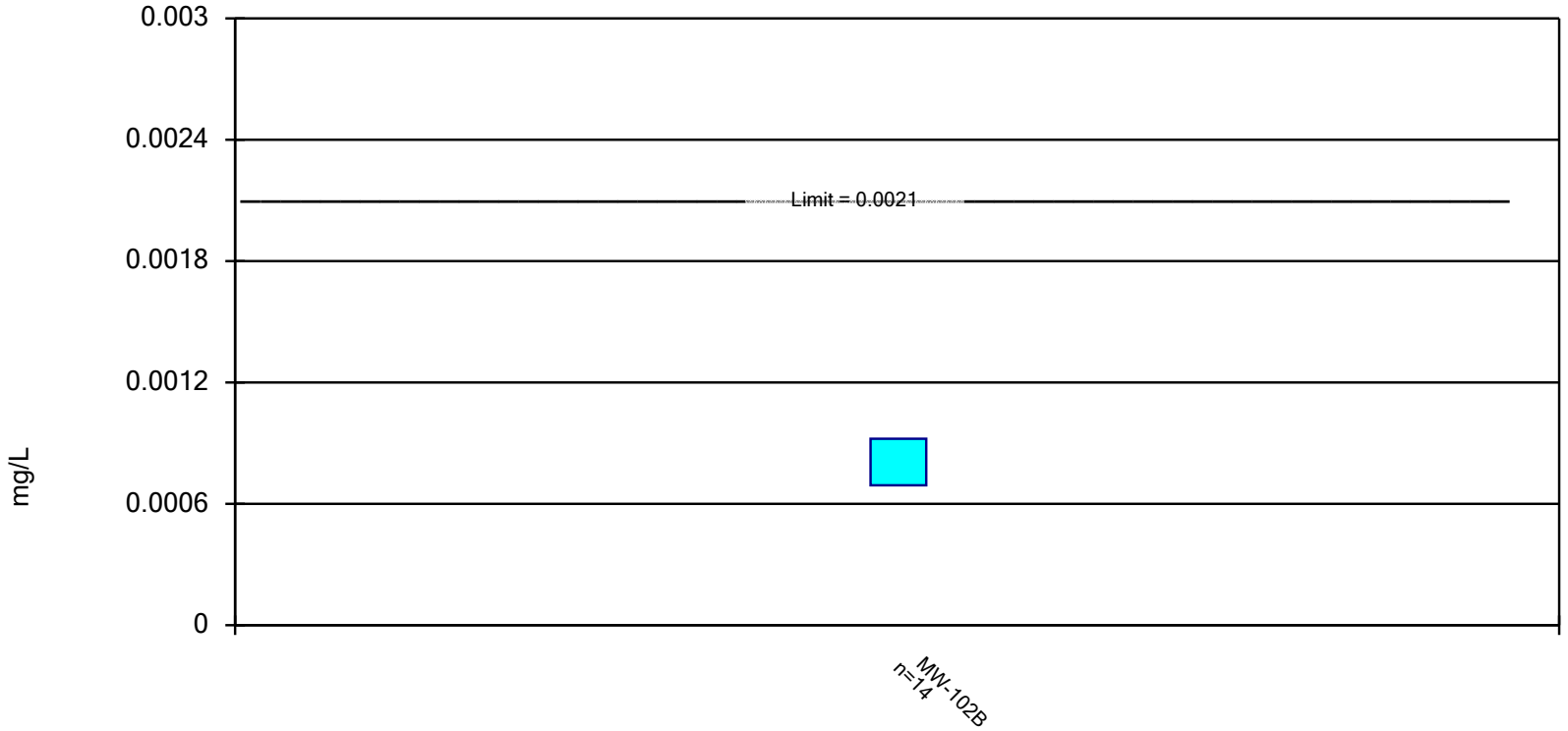


Constituent: Chlorobenzene Analysis Run 11/13/2023 9:33 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/13/2023 9:33 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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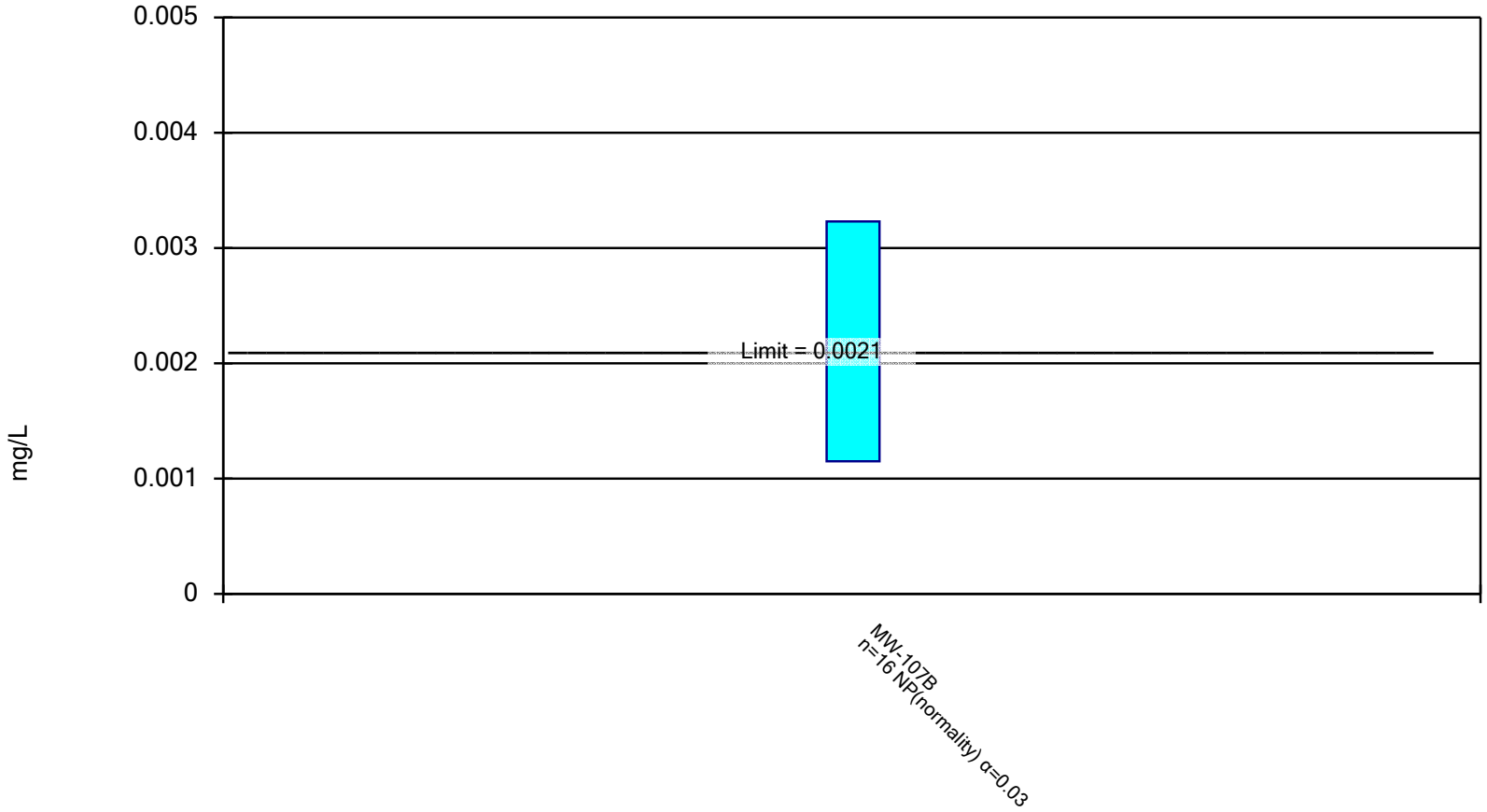
Non-Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded.



Constituent: Cobalt Analysis Run 11/13/2023 9:30 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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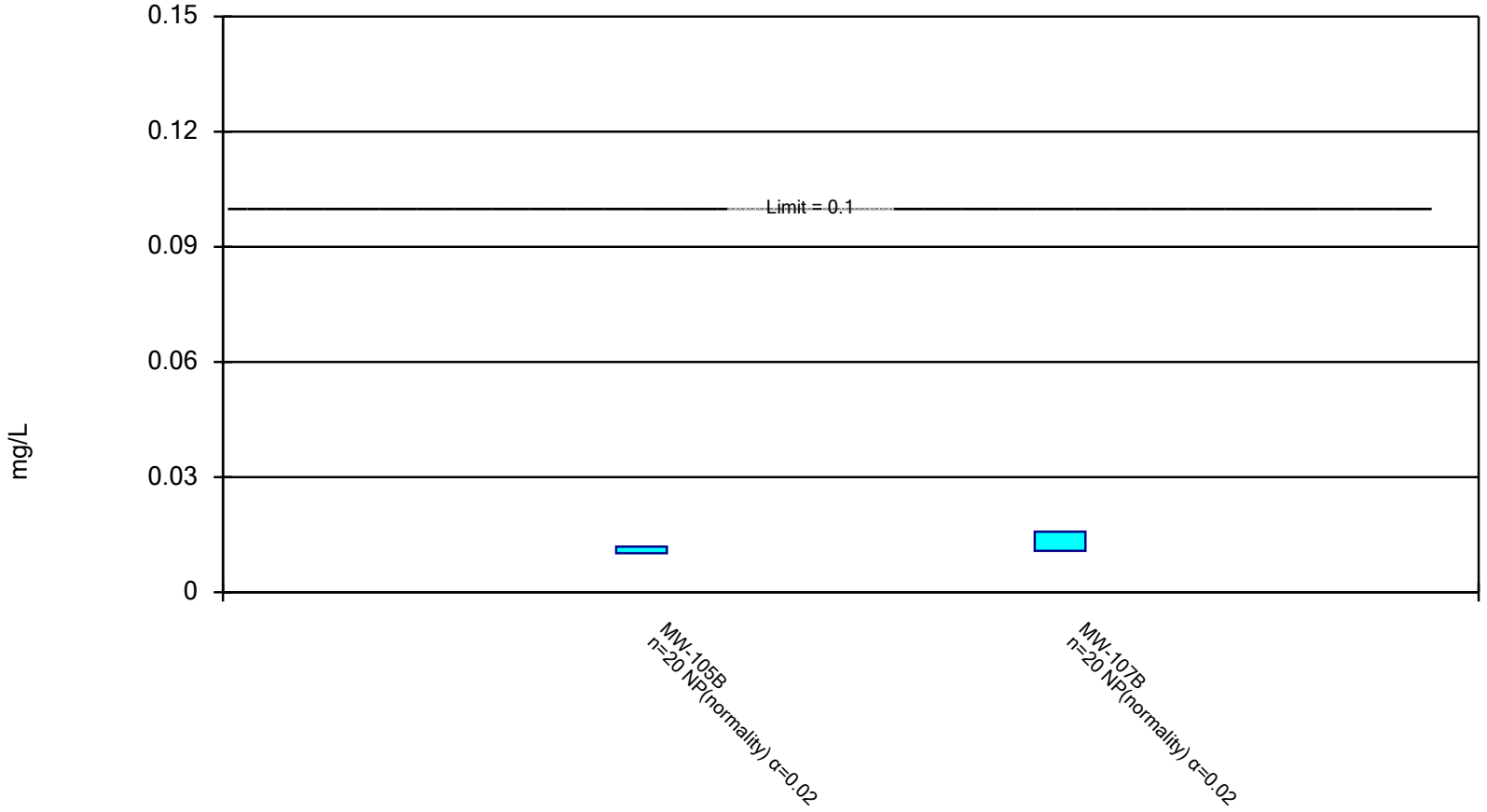
Non-Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded.

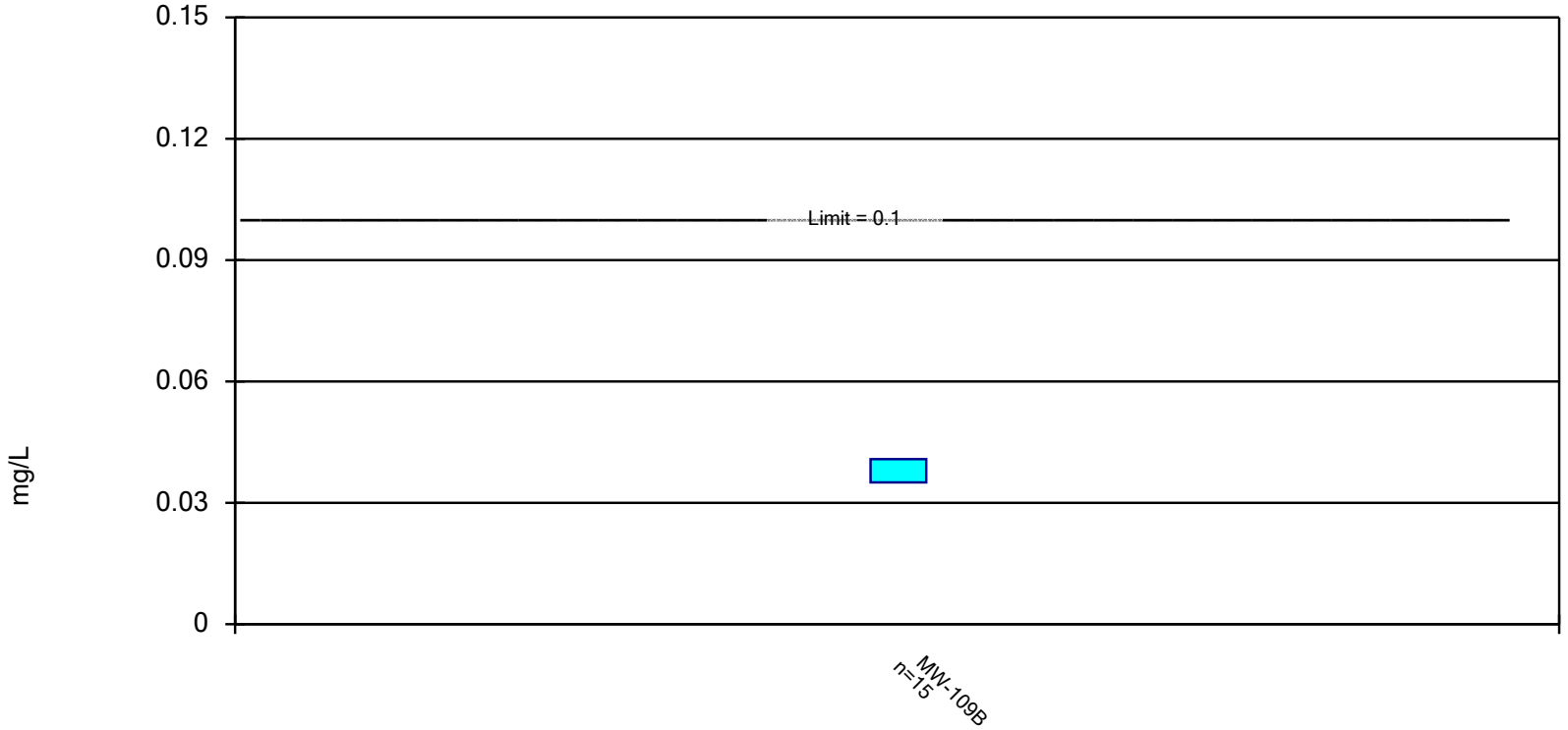


Constituent: Nickel Analysis Run 11/13/2023 9:23 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 11/13/2023 9:33 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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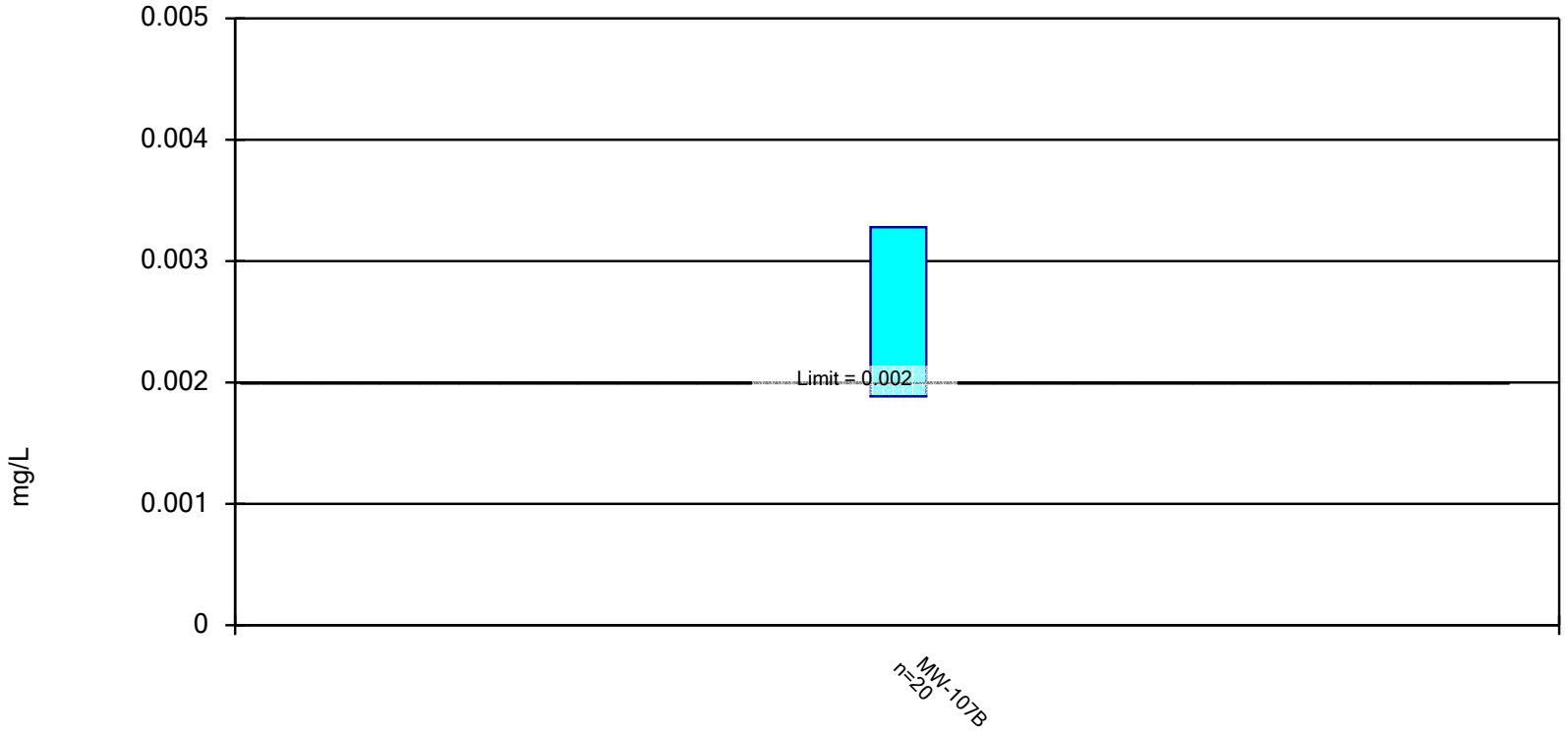
Parametric Confidence Interval - Delineation Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

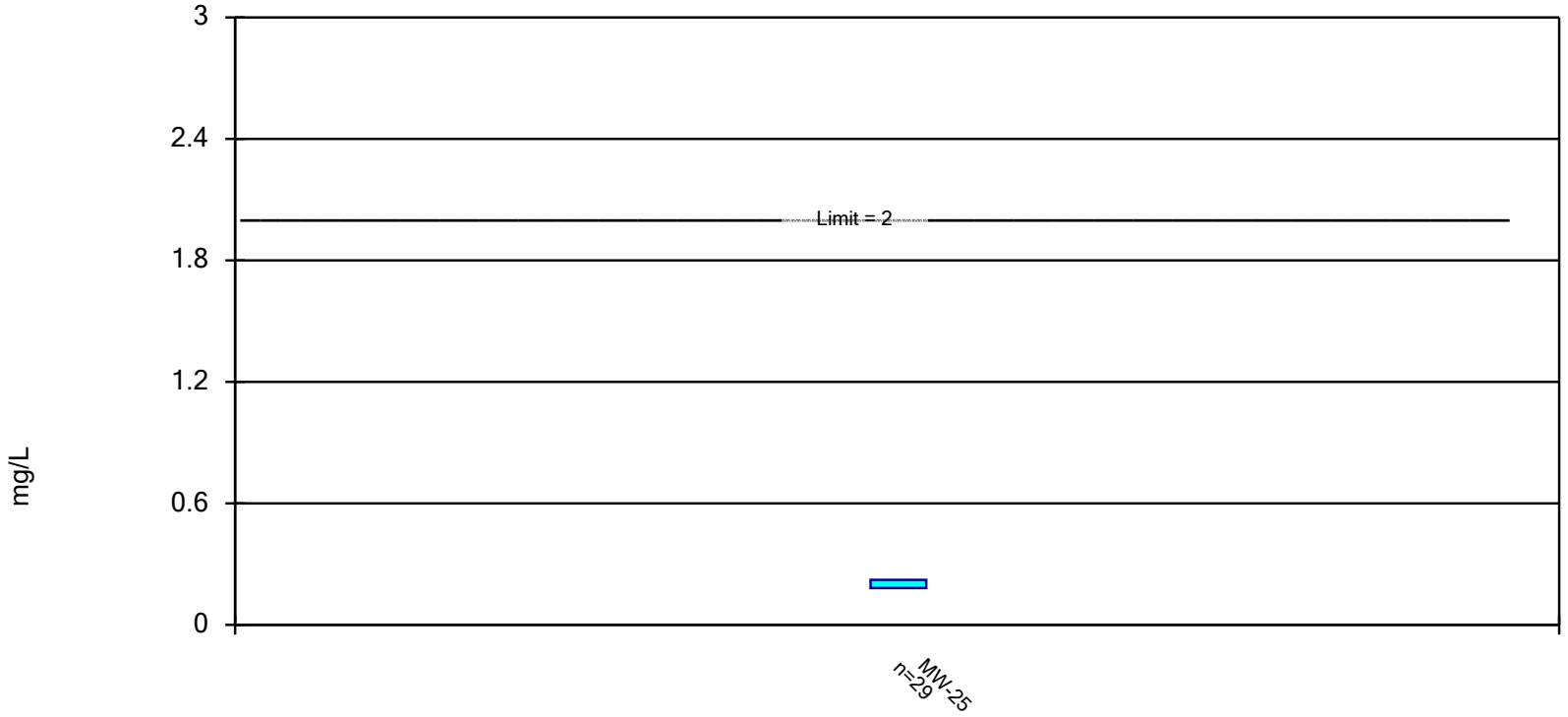


Constituent: Thallium Analysis Run 11/13/2023 9:33 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 9:43 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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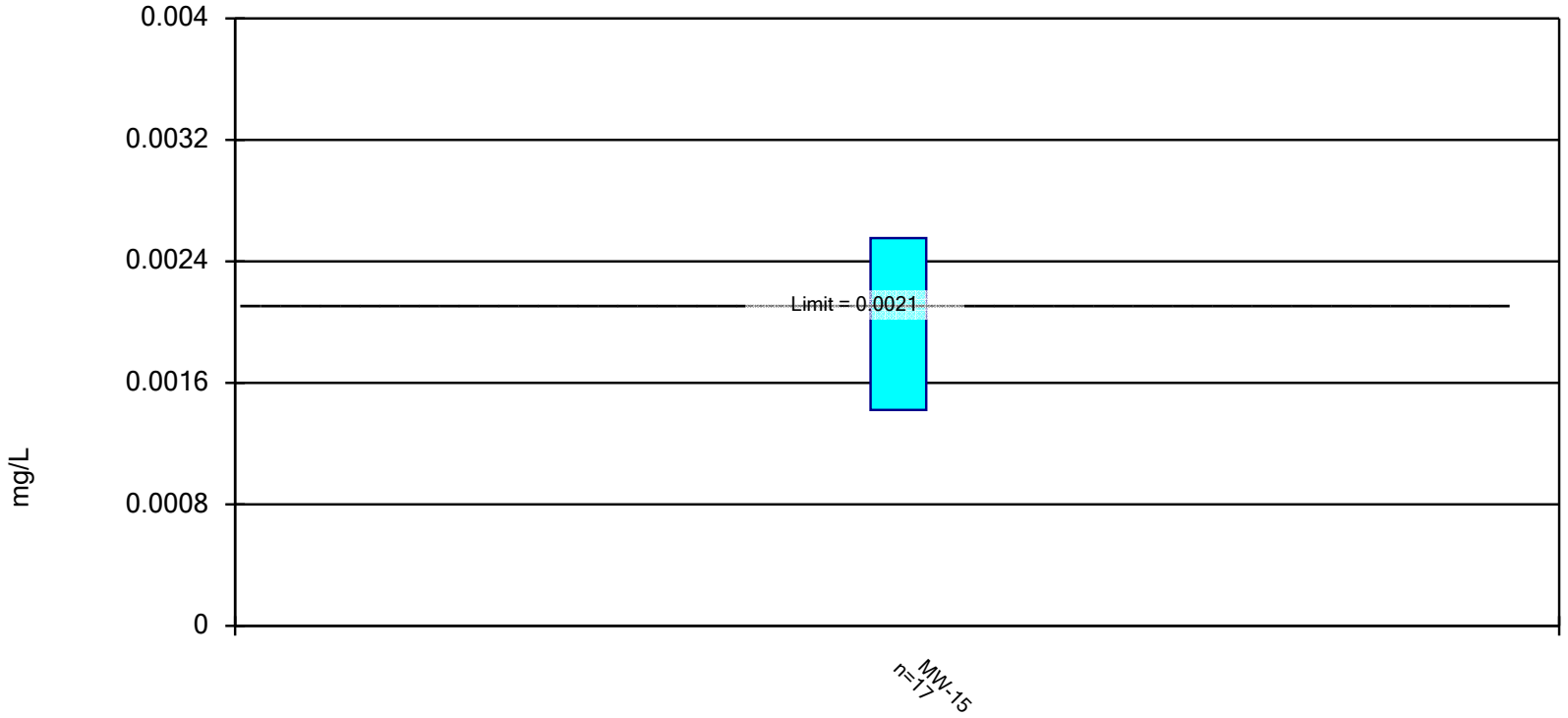
Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/13/2023 9:43 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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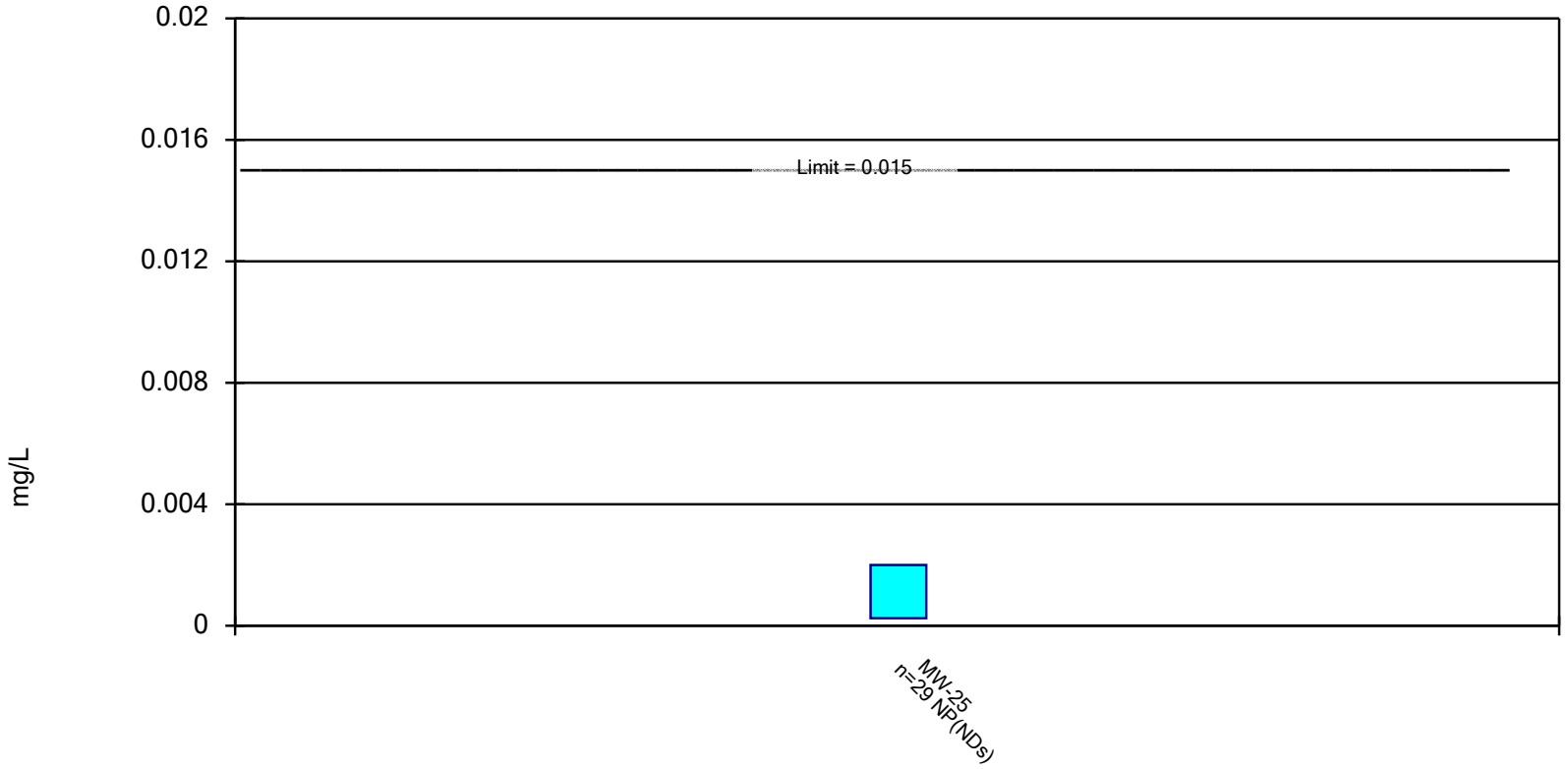
Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 11/13/2023 9:43 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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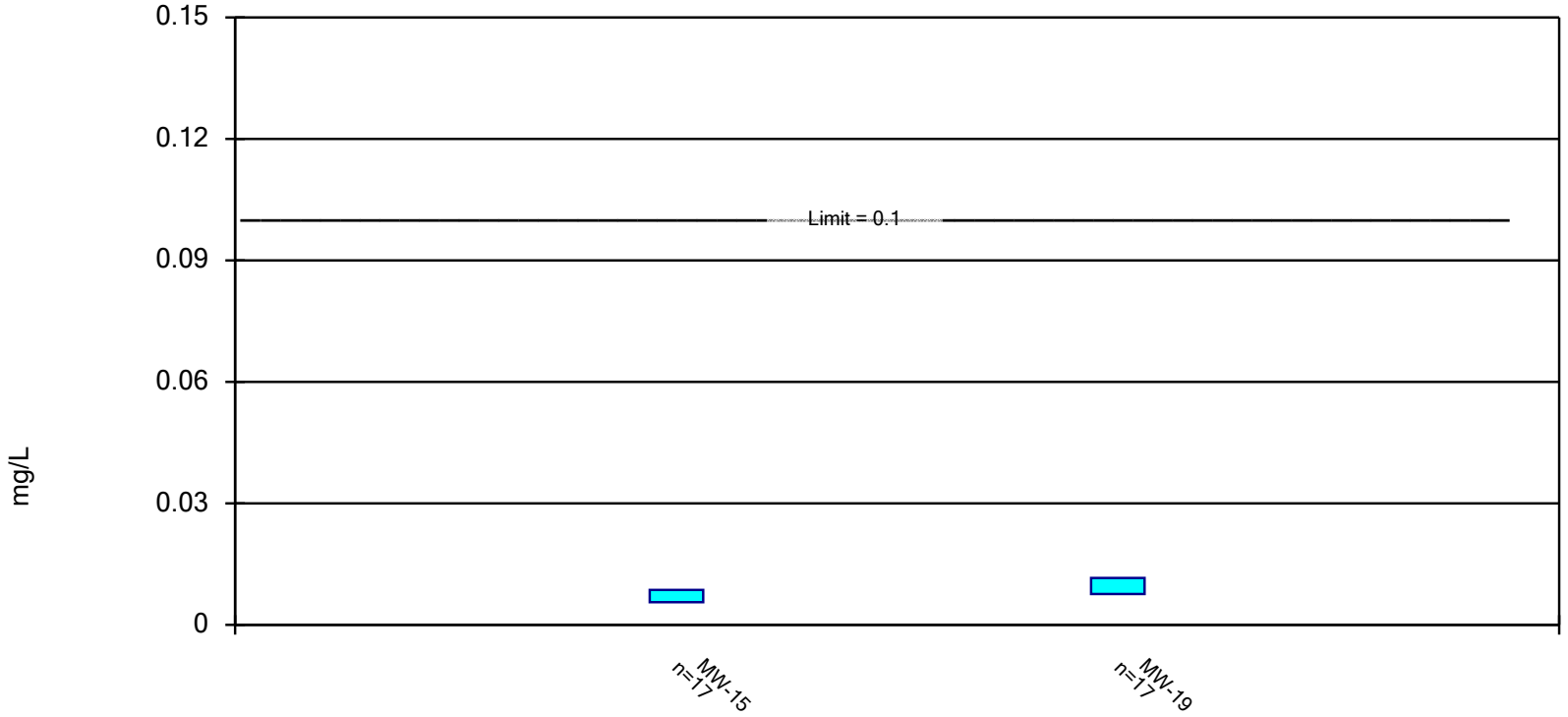
Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 11/13/2023 9:43 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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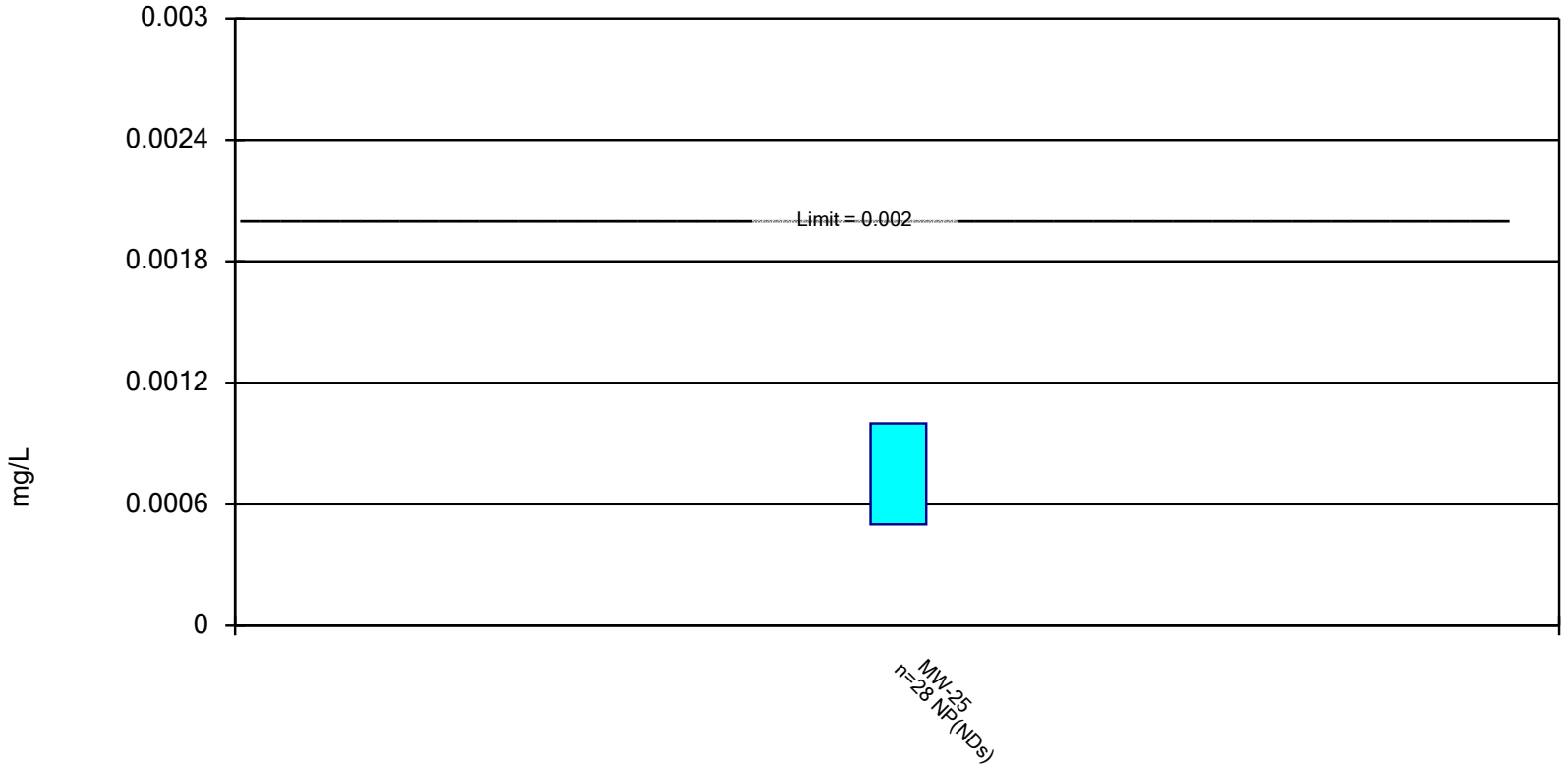
Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.

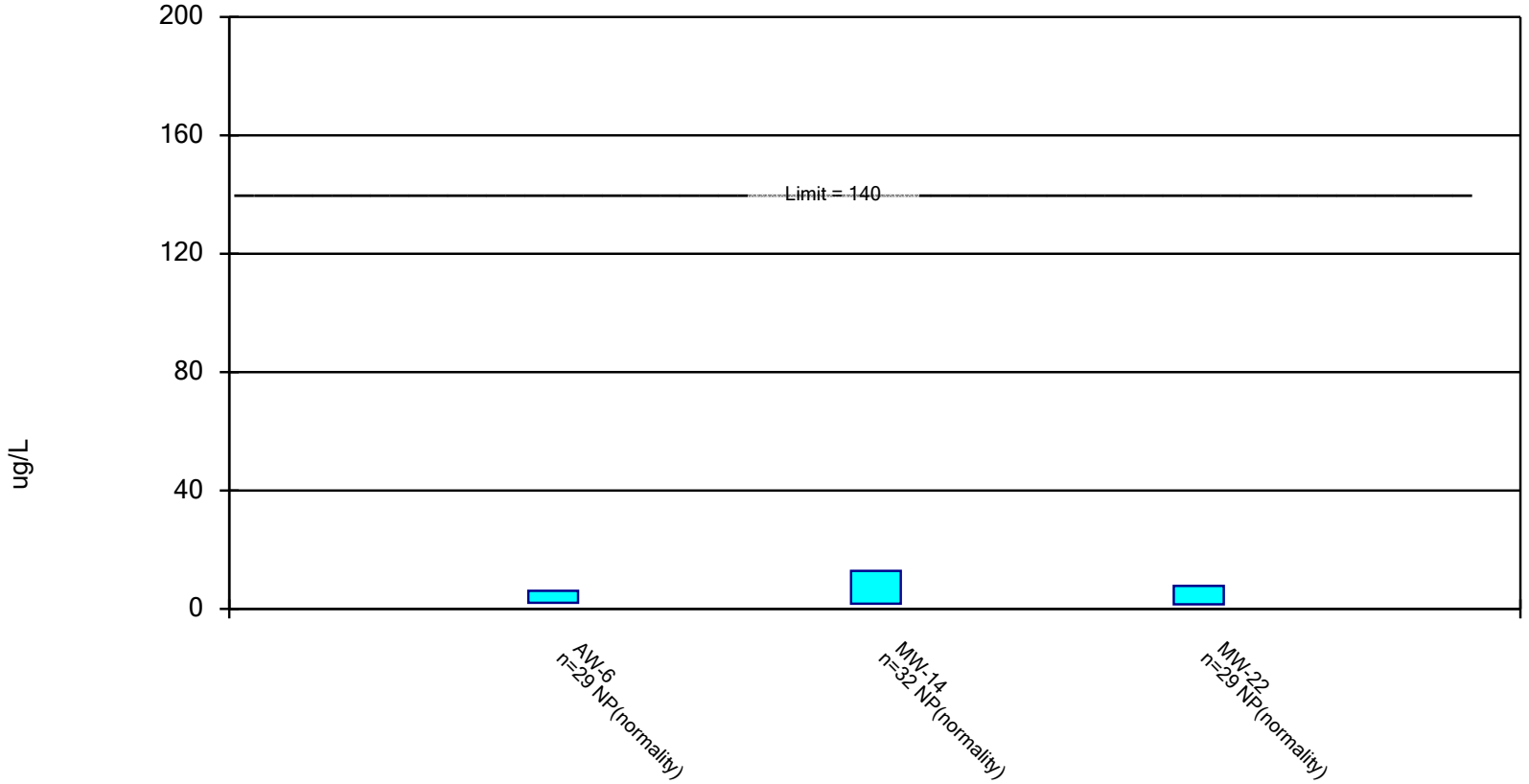


Constituent: Thallium Analysis Run 11/13/2023 9:43 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.

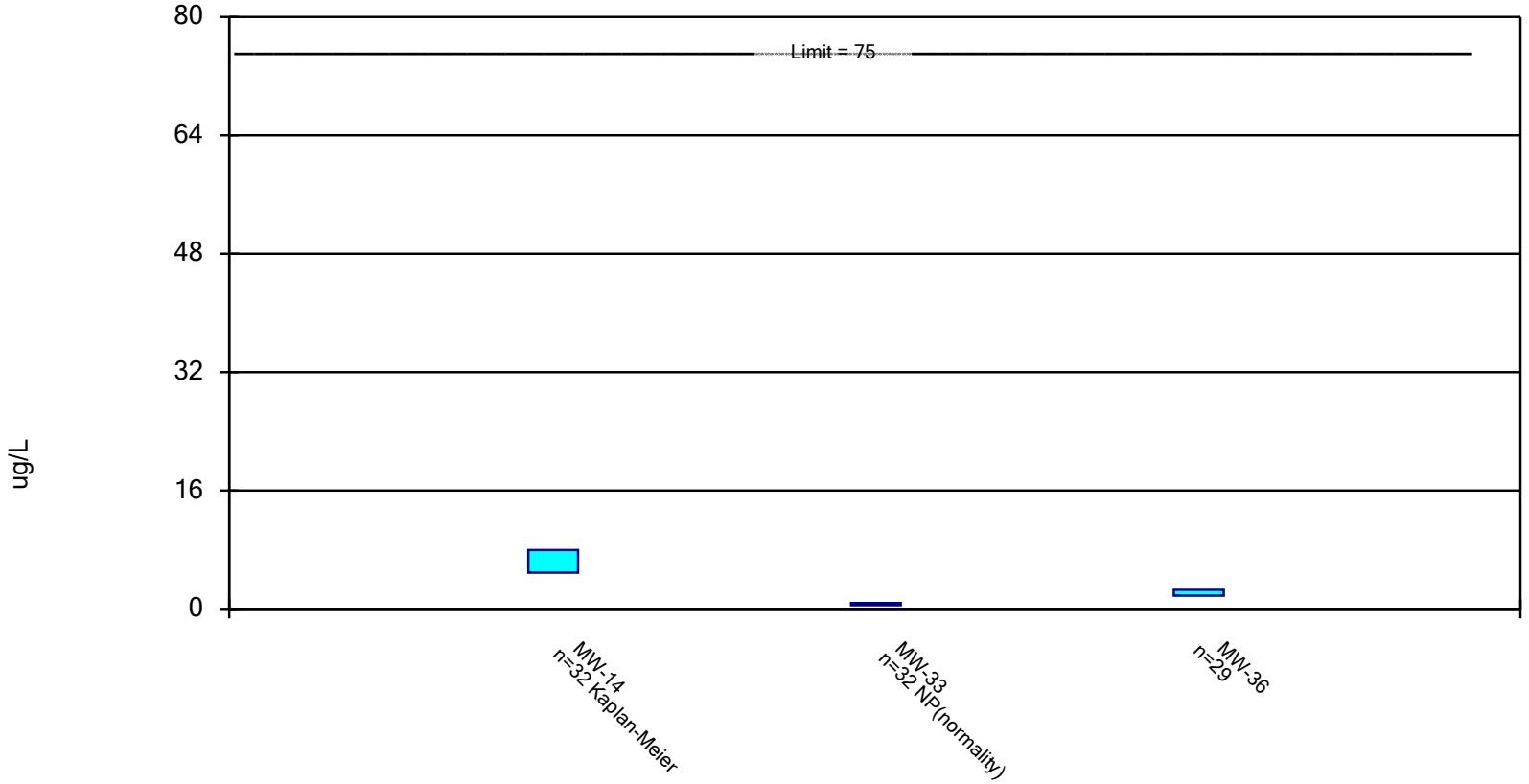


Constituent: 1,1-Dichloroethane Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: 1,4-Dichlorobenzene Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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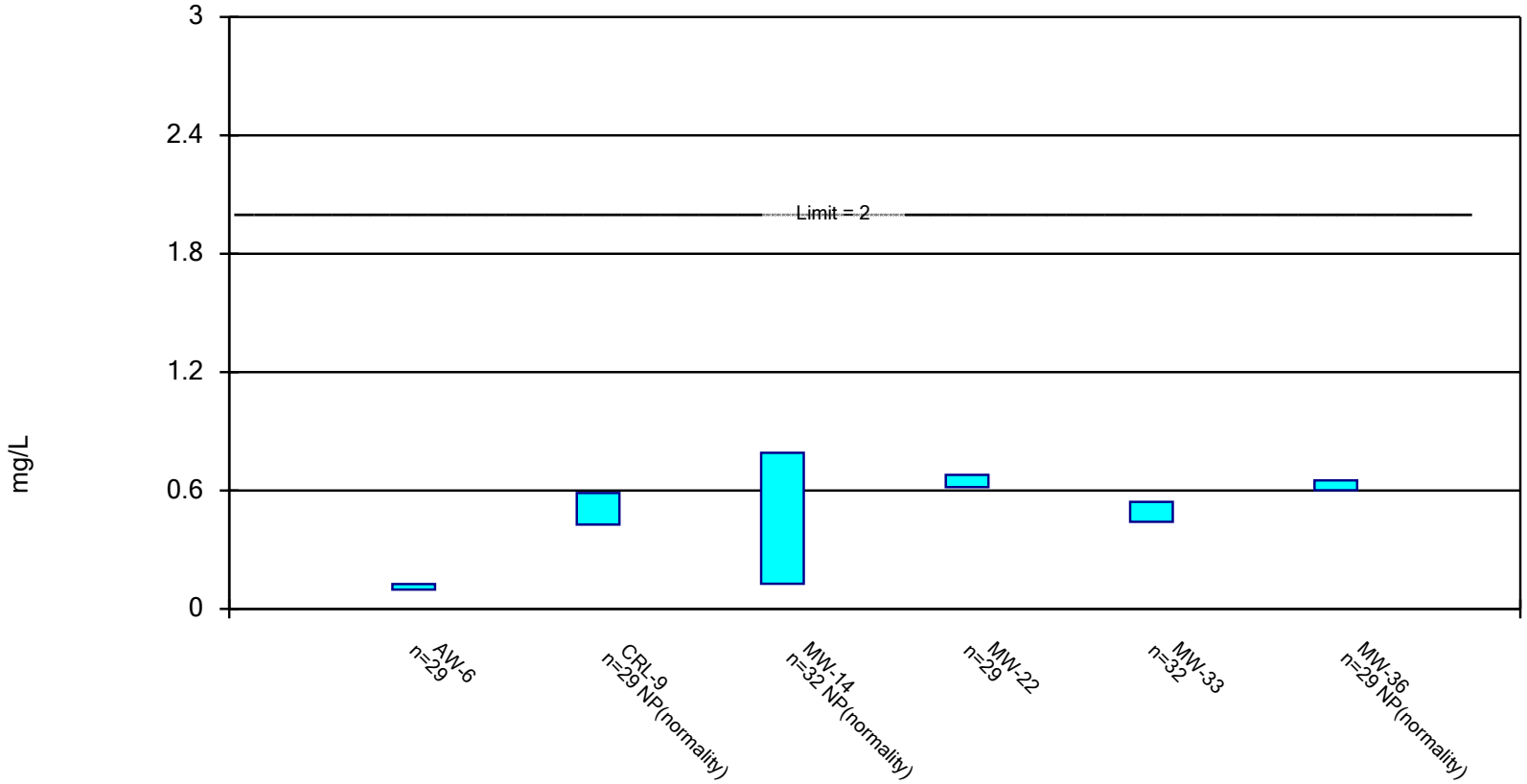
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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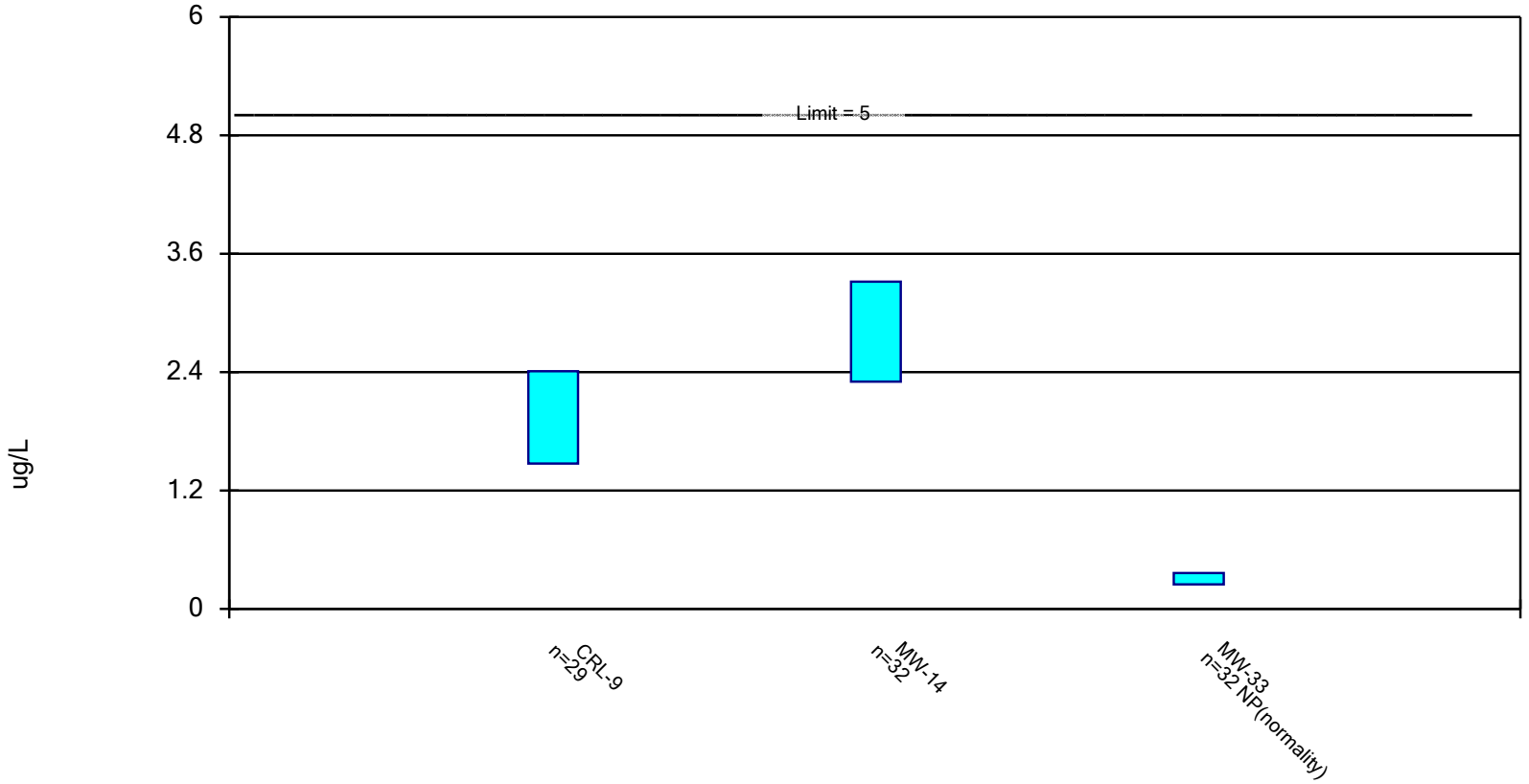
Parametric and Non-Parametric (NP) Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

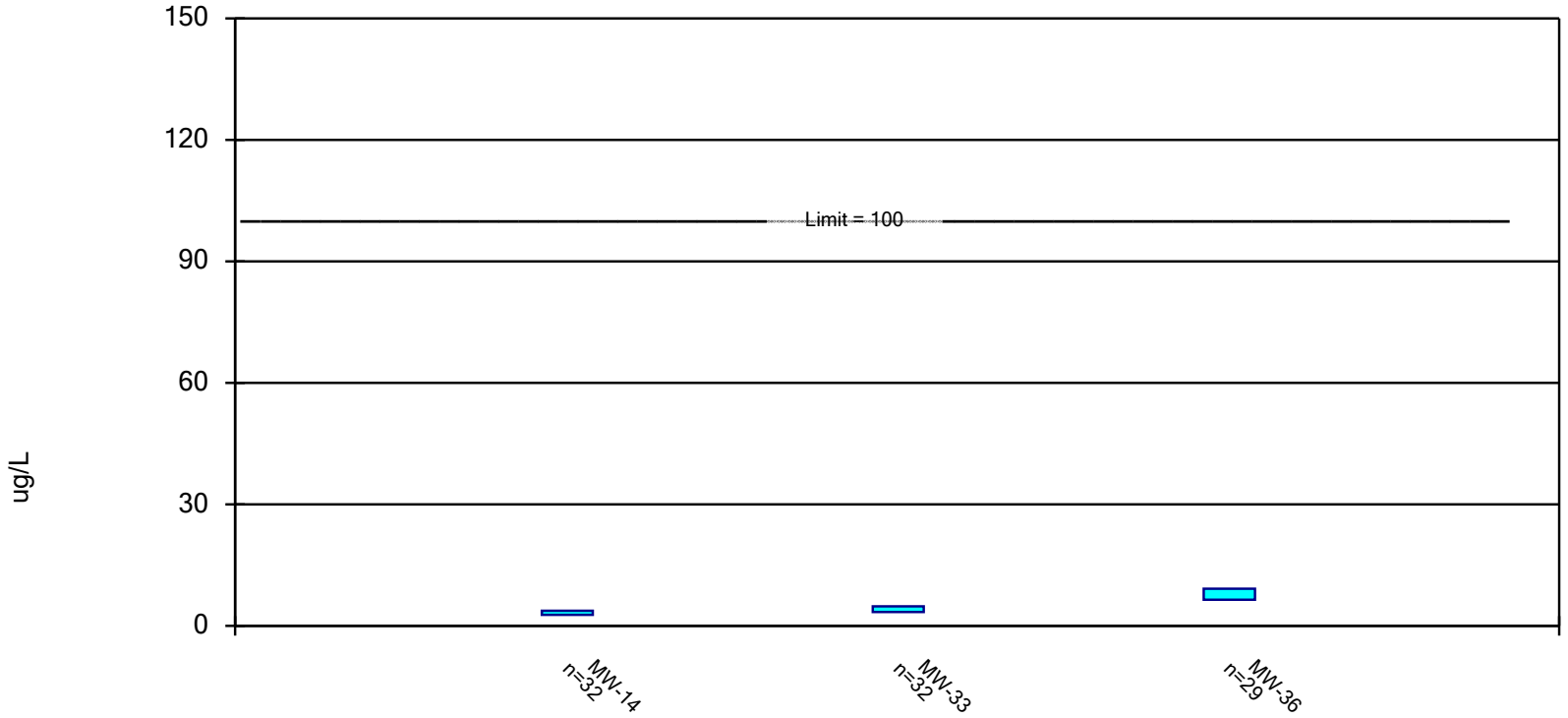


Constituent: Benzene Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chlorobenzene Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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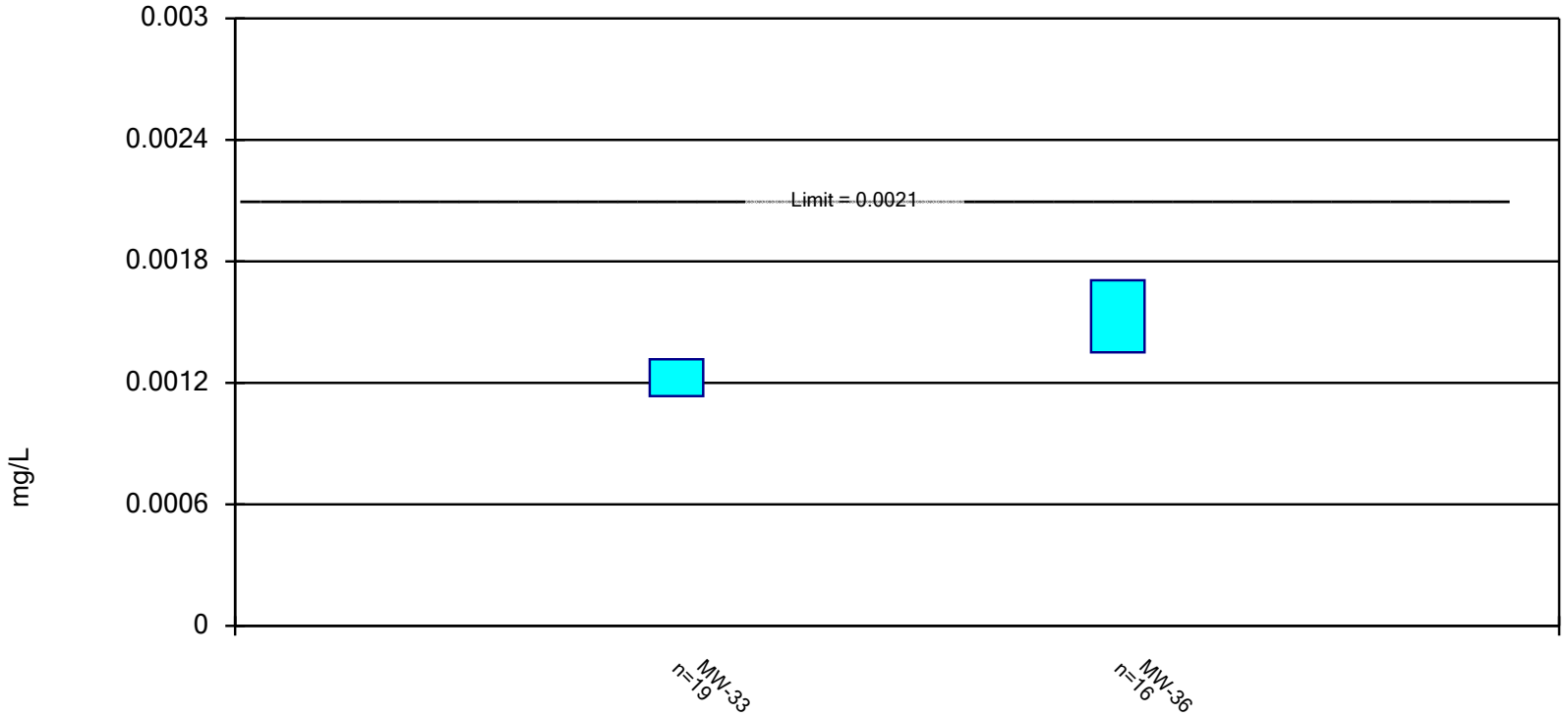
Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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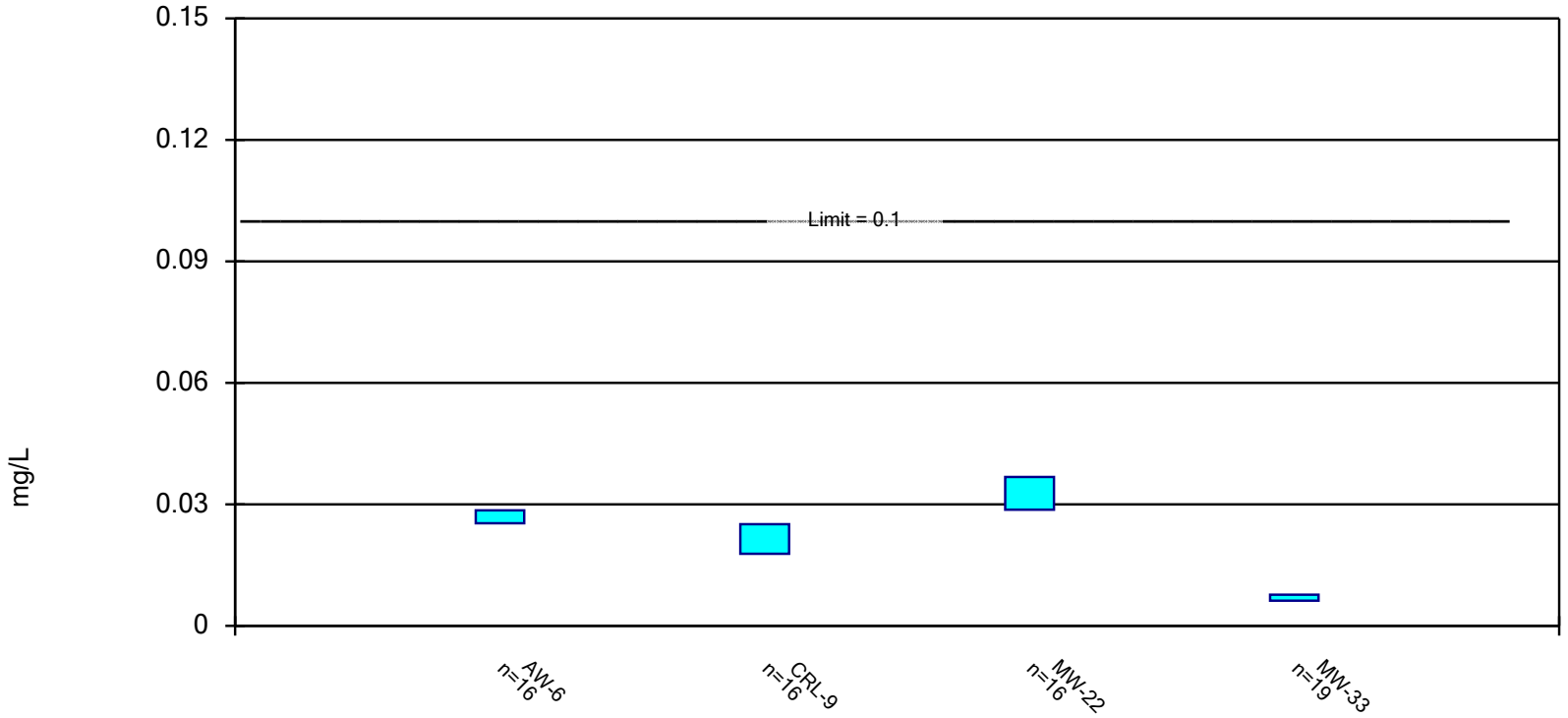
Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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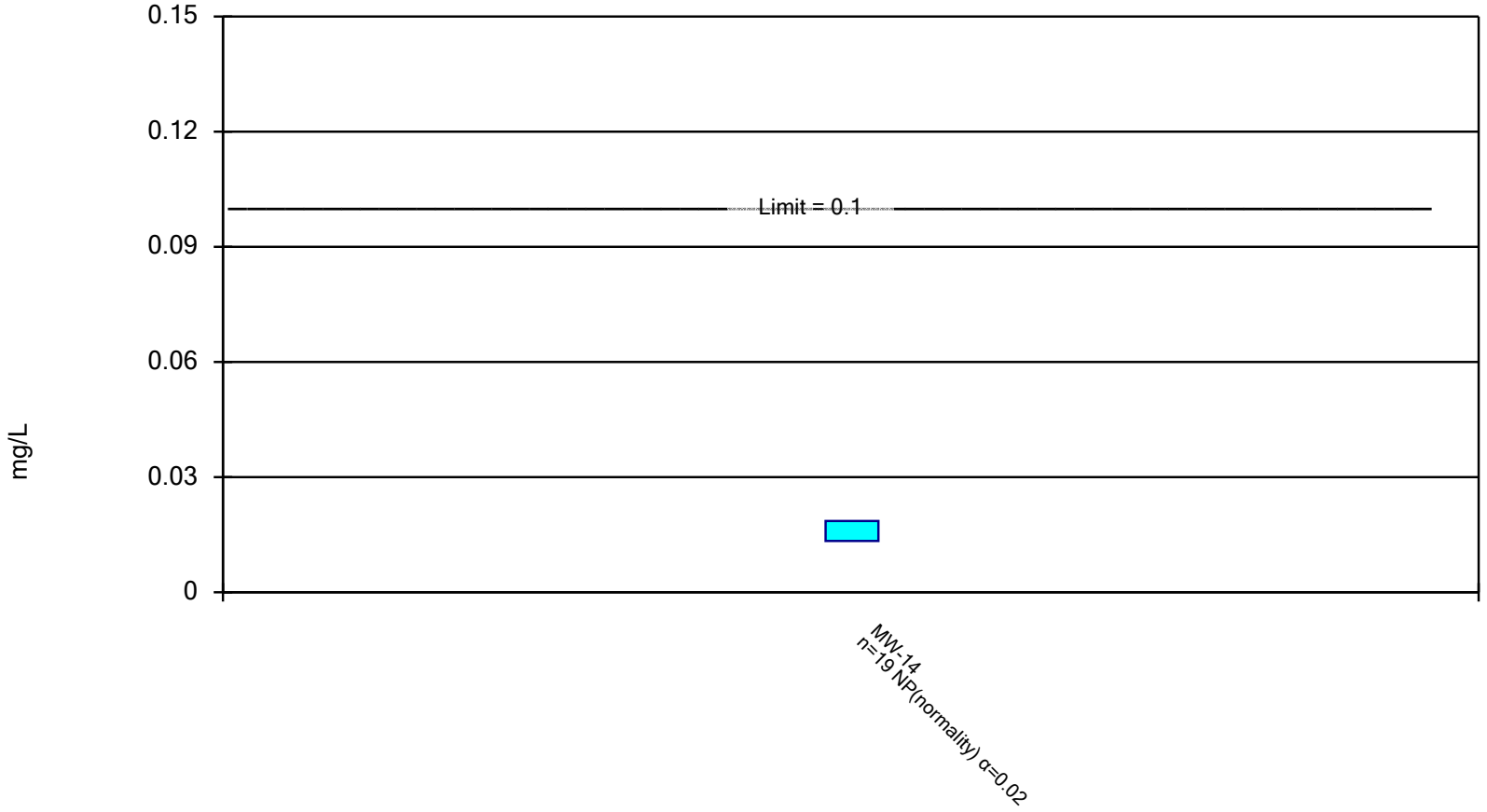
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded.



Constituent: Nickel Analysis Run 11/13/2023 9:48 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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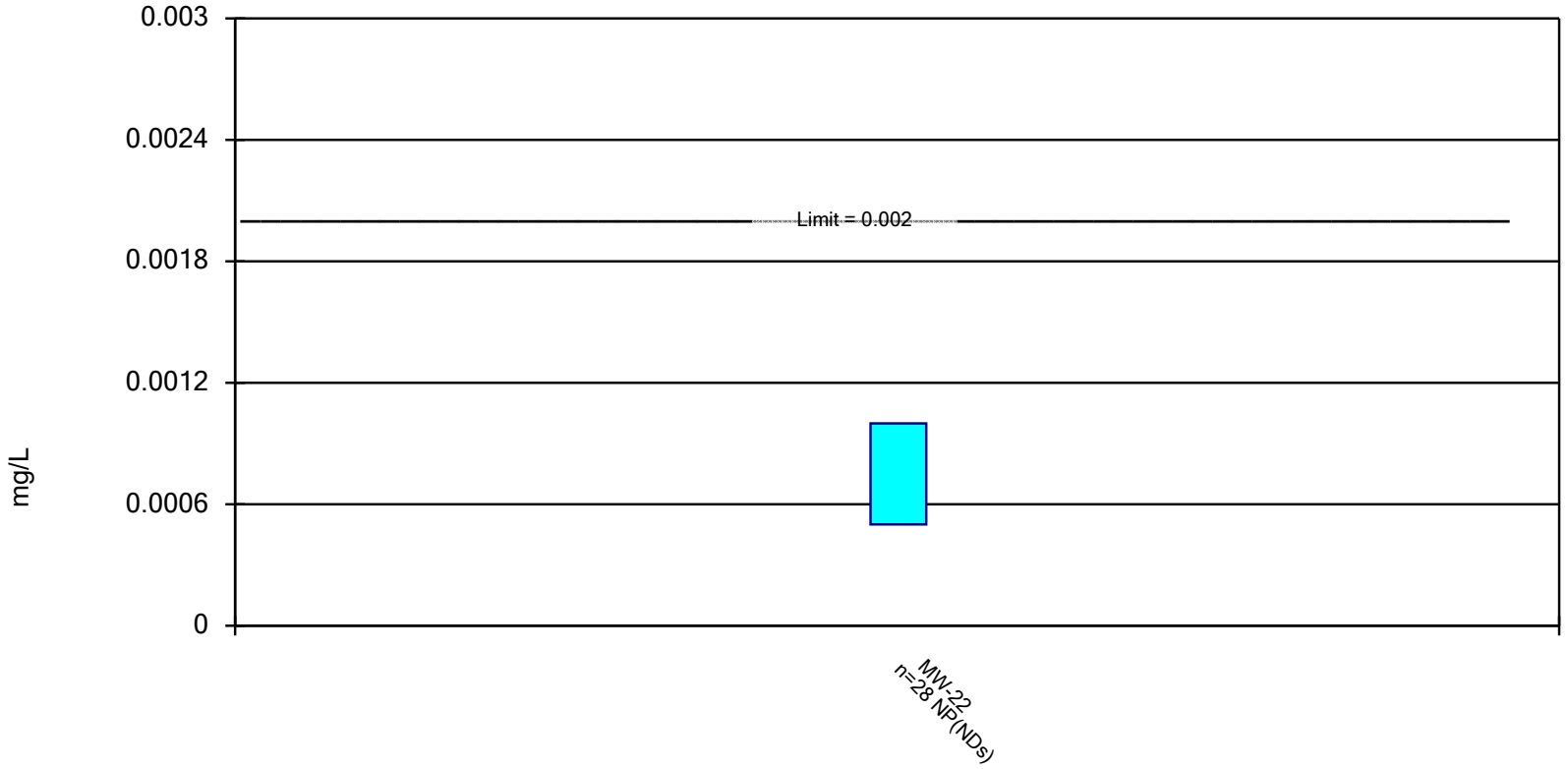
Non-Parametric Confidence Interval - Corrective Action Monitoring Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 11/13/2023 9:52 AM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Attachment 5

Sanitas Report Output for Confidence Interval Calculations and Regression Summary
Corrective Action Mode

Upper Bedrock Cobalt
GWPS as Background - One-Sample Confidence Interval Testing Method
Calculations of Cobalt Upper Tolerance Limit with 95% Coverage[1] and 95% Confidence

Constituent Name	Upper Limit	Background N	Background Wells	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method	Minimum Achieved Coverage
Cobalt (mg/l)	0.008	36	MW-37,101A	n/a	n/a	33	n/a	n/a	0.1578	NP Inter(normality)	92%

[1] Note that a nonparametric tolerance limit was utilized in the cobalt background calculation. The nonparametric limit achieves 90% coverage.

Upper Bedrock

Confidence Interval - Corrective Action Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2,3]	Exceed	N	Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations													
Arsenic (mg/L)	MW-106A	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Cobalt (mg/l)	MW-105A	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Cobalt (mg/L)	MW-106A	0.01818	0.0111	0.008	Yes	20	0.01464	0.01191	0	None	No	0.1	Param.
Corrective Action Monitoring Locations													
Arsenic (mg/l)	AW-1	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Arsenic (mg/L)	AW-2	0.017	0.016	0.01	Yes	29	0.026	0.035	0	None	No	0.1	NP (normality)
Arsenic (mg/L)	MW-12	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Arsenic (mg/L)	MW-13	0.055	0.046	0.01	Yes	32	0.050	0.021	0	None	No	0.1	Param.
Arsenic (mg/L)	MW-16	0.130	0.101	0.01	Yes	32	0.115	0.061	0	None	No	0.1	Param.
Arsenic (mg/L)	MW-17	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Arsenic (mg/l)	MW-24	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data .											
Arsenic (mg/l)	MW-30	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data .											
Arsenic (mg/L)	MW-32	0.085	0.047	0.01	Yes	32	0.085	0.069	0	None	No	0.1	NP (normality)
Arsenic (mg/l)	MW-34	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data .											
Cobalt (mg/L)	MW-35	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Thallium (mg/L)	AW-2	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Thallium (mg/L)	MW-20	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Vinyl Chloride (ug/l)	MW-34	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											

[1] Under corrective action mode, an SSL is rejected when the upper confidence limit lies below the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] Using the one-sample testing method, the fixed GWPS for cobalt was calculated as the background upper tolerance limit with 95% confidence and 95% coverage. Note that a nonparametric tolerance limit was utilized in the cobalt background calculation. The nonparametric limit achieves 90% coverage.

MW-106A Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.689375032
R Square	0.475237935
Adjusted R Square	0.43775493
Standard Error	0.002584177
Observations	16

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	8.46684E-05	8.467E-05	12.678758	0.00313348
Residual	14	9.34916E-05	6.678E-06		
Total	15	0.00017816			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.121137685	0.029674504	4.0822143	0.0011204	0.0574922	0.1847832	0.0574922	0.184783167
X Variable 1	-2.43825E-06	6.84762E-07	-3.560724	0.0031335	-3.907E-06	-9.7E-07	-3.907E-06	-9.6958E-07

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
9/16/2014	0.0184	0.0190	0.0210	0.0169	0.0240	0.0140
3/17/2015	0.0163	0.0185	0.0204	0.0167	0.0235	0.0136
10/1/2015	0.0192	0.0181	0.0198	0.0164	0.0229	0.0132
3/17/2016	0.0177	0.0176	0.0192	0.0161	0.0225	0.0128
8/23/2016	0.0168	0.0173	0.0187	0.0158	0.0220	0.0125
3/7/2017	0.0173	0.0168	0.0181	0.0155	0.0215	0.0120
8/23/2017	0.0235	0.0164	0.0176	0.0152	0.0211	0.0117
3/12/2018	0.0151	0.0159	0.0170	0.0147	0.0206	0.0112
8/23/2018	0.0128	0.0155	0.0166	0.0143	0.0202	0.0108
3/27/2019	0.0133	0.0149	0.0161	0.0138	0.0196	0.0103
8/21/2019	0.0168	0.0146	0.0158	0.0134	0.0193	0.0099
4/2/2020	0.0102	0.0140	0.0154	0.0127	0.0188	0.0093
8/18/2020	0.0135	0.0137	0.0151	0.0123	0.0185	0.0089
8/23/2021	0.0141	0.0128	0.0146	0.0111	0.0177	0.0079
8/23/2022	0.0106	0.0119	0.0140	0.0098	0.0169	0.0069
8/22/2023	0.0124	0.0110	0.0135	0.0085	0.0162	0.0058

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

7/15/2025 -4.605 0.01

Projected Year to Completion

7/14/2028

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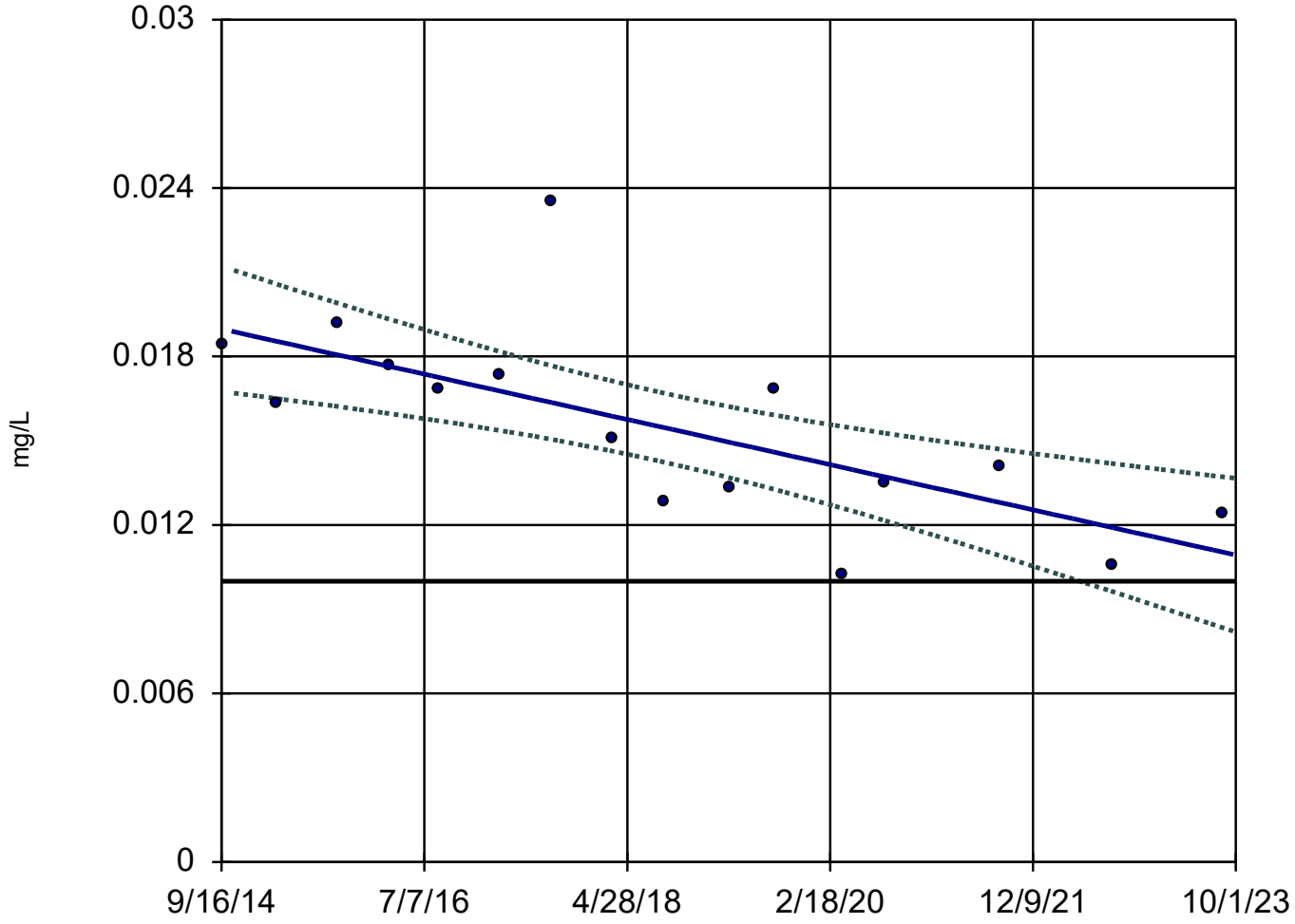
Linear Regression and 90% Confidence Band

MW-106A



n = 16

Slope = -0.0008905 units/year.

alpha = 0.02
t = -3.559
critical = -2.264

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.8989, critical
= 0.844.

GWPS = 0.01 mg/L.

Constituent: Arsenic Analysis Run 11/14/2023 1:24 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-105A Cobalt Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.86612704
R Square	0.750176049
Adjusted R Square	0.736296941
Standard Error	0.0042572
Observations	20

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.000979602	0.0009796	54.050738	7.9877E-07
Residual	18	0.000326228	1.812E-05		
Total	19	0.00130583			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.298421859	0.038031485	7.8467054	3.225E-07	0.21852067	0.378323	0.2185207	0.378323044
X Variable 1	-6.5018E-06	8.84367E-07	-7.351921	7.988E-07	-8.36E-06	-4.64E-06	-8.36E-06	-4.64381E-06

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
9/10/2013	0.0278	0.02842	0.03120	0.02563	0.03631	0.02053
11/11/2013	0.0351	0.02802	0.03073	0.02531	0.03588	0.02015
3/11/2014	0.0326	0.02724	0.02980	0.02467	0.03505	0.01942
6/10/2014	0.0253	0.02664	0.02911	0.02418	0.03443	0.01886
9/13/2014	0.025	0.02603	0.02838	0.02367	0.03378	0.01828
3/17/2015	0.0216	0.02482	0.02699	0.02266	0.03252	0.01713
10/1/2015	0.0245	0.02353	0.02551	0.02156	0.03118	0.01589
3/17/2016	0.0162	0.02244	0.02429	0.02059	0.03005	0.01483
8/23/2016	0.0181	0.02141	0.02316	0.01966	0.02900	0.01382
3/6/2017	0.0099	0.02014	0.02182	0.01847	0.02772	0.01257
8/24/2017	0.0187	0.01903	0.02068	0.01738	0.02660	0.01147
3/12/2018	0.0177	0.01773	0.01941	0.01606	0.02530	0.01016
8/23/2018	0.0213	0.01667	0.01840	0.01493	0.02425	0.00908
3/19/2019	0.0196	0.01531	0.01717	0.01346	0.02293	0.00770
8/23/2019	0.0158	0.01429	0.01627	0.01232	0.02194	0.00665
3/26/2020	0.0175	0.01289	0.01507	0.01071	0.02059	0.00519
8/18/2020	0.0143	0.01195	0.01427	0.00962	0.01969	0.00421
8/19/2021	0.00794	0.00957	0.01232	0.00681	0.01745	0.00169
8/23/2022	0.00471	0.00717	0.01039	0.00394	0.01522	-0.00089
8/23/2023	0.00445	0.00479	0.00851	0.00108	0.01306	-0.00347

GWPS (Background) [(1)] = 0.008 mg//L

[(1)] Using the *one-sample* testing method, the fixed GWPS was calculated as the background upper tolerance limit with 95% confidence and 95% coverage.
Note that a nonparametric tolerance limit was utilized in the cobalt background calculation. The nonparametric limit achieves 90% coverage.

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)*

4/9/2022 -4.828 0.008

Projected Year to Completion

4/8/2025

*The first order attenuation rate projected that compliance with the GWPS has already been achieved. However, the confidence band placed around the linear trend line (above), has not yet indicated compliance with the GWPS (although it is noted that upper 95% confidence limit is close to statistically achieving compliance with the GWPS and the Aug. 2022 and Aug. 2023 individual results were below the GWPS). For cobalt in MW-105A, it is assumed that compliance with the GWPS will be attained in 2024.

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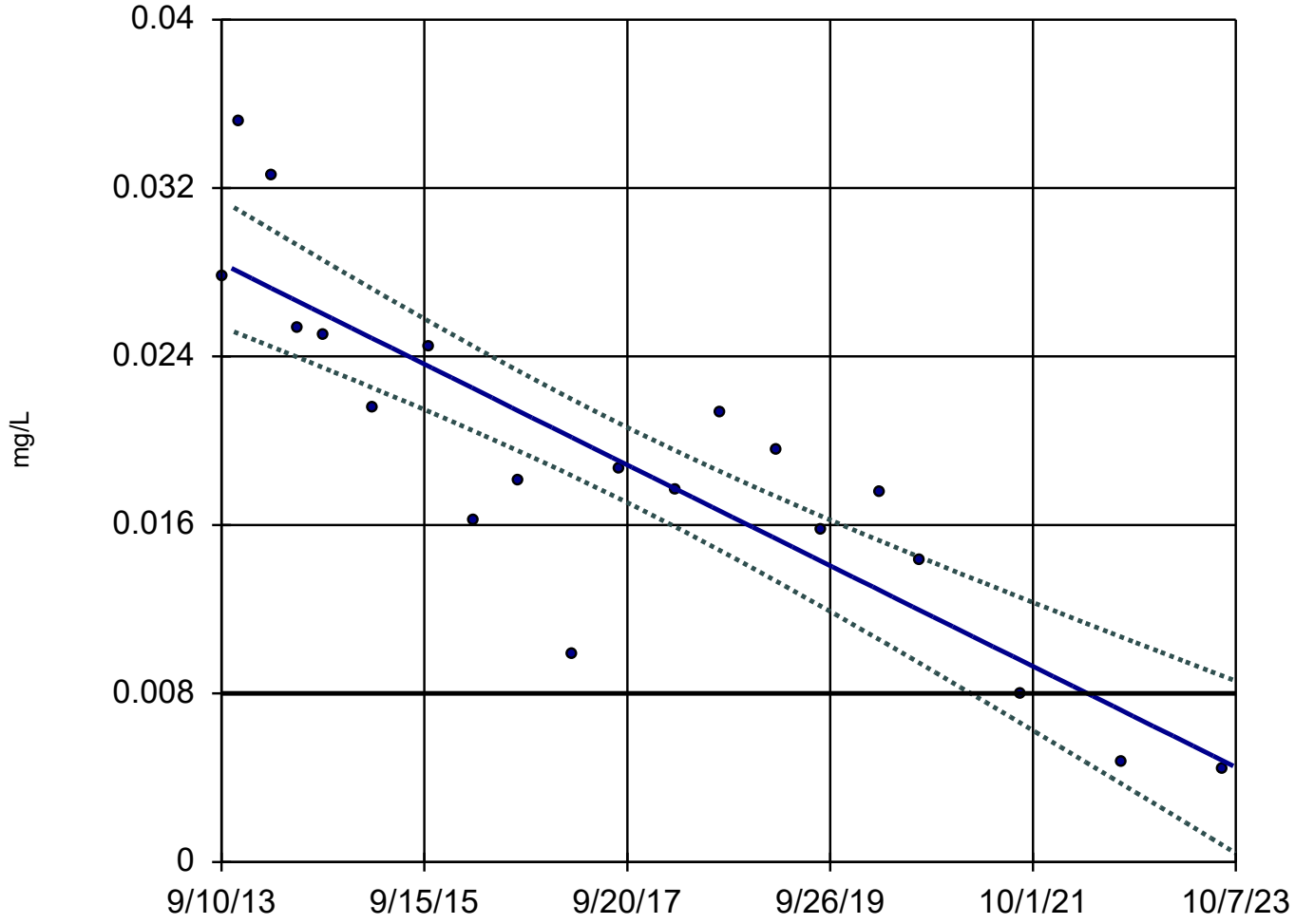
Linear Regression and 90% Confidence Band

MW-105A



n = 20

Slope = -0.002374 units/year.

alpha = 0.02
t = -7.35
critical = -2.214

Significant decreasing trend.

Normality test on residuals: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.868.

GWPS = 0.008 mg/L.

Constituent: Cobalt Analysis Run 11/14/2023 1:44 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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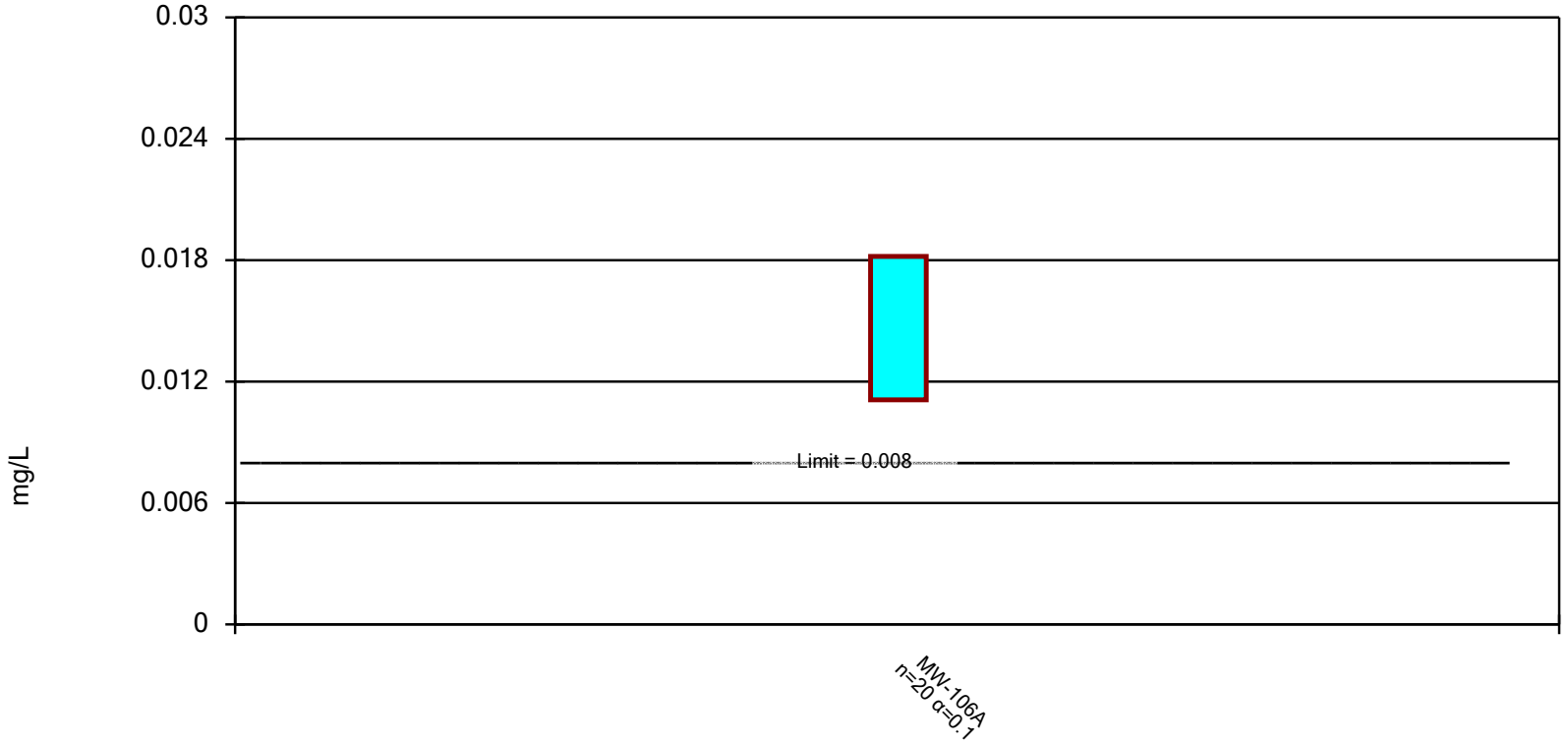
Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/15/2023 6:49 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

AW-1 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.461783452
R Square	0.213243957
Adjusted R Square	0.184104844
Standard Error	0.031945326
Observations	29

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.007468185	0.0074682	7.3181349	0.01167738
Residual	27	0.027553605	0.0010205		
Total	28	0.03502179			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.489126599	0.159875416	3.0594235	0.0049643	0.16108934	0.8171639	0.1610893	0.817163858
X Variable 1	-1.02604E-05	3.79284E-06	-2.705205	0.0116774	-1.804E-05	-2.48E-06	-1.804E-05	-2.47814E-06

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
8/5/2008	0.0791	0.0821	0.1010	0.0633	0.1397	0.0246
3/5/2009	0.0916	0.0800	0.0976	0.0623	0.1372	0.0228
7/14/2009	0.209	0.0786	0.0956	0.0616	0.1356	0.0216
9/10/2009	0.0716	0.0780	0.0947	0.0613	0.1349	0.0211
3/16/2010	0.00949	0.0761	0.0919	0.0604	0.1328	0.0195
9/8/2010	0.0636	0.0743	0.0892	0.0594	0.1307	0.0179
3/7/2011	0.0741	0.0725	0.0865	0.0584	0.1287	0.0163
9/1/2011	0.0509	0.0706	0.0839	0.0573	0.1266	0.0146
3/9/2012	0.0679	0.0687	0.0812	0.0562	0.1245	0.0128
9/6/2012	0.059	0.0668	0.0787	0.0550	0.1225	0.0111
3/21/2013	0.0721	0.0648	0.0761	0.0536	0.1204	0.0092
9/3/2013	0.057	0.0631	0.0739	0.0523	0.1186	0.0076
3/11/2014	0.067	0.0612	0.0716	0.0507	0.1166	0.0058
9/11/2014	0.0515	0.0593	0.0695	0.0491	0.1146	0.0039
3/10/2015	0.0557	0.0574	0.0675	0.0473	0.1128	0.0021
9/17/2015	0.0427	0.0555	0.0656	0.0453	0.1108	0.0001
3/7/2016	0.048	0.0537	0.0640	0.0434	0.1091	-0.0017
8/9/2016	0.0409	0.0521	0.0627	0.0416	0.1075	-0.0033
3/2/2017	0.026	0.0500	0.0610	0.0390	0.1055	-0.0055
8/23/2017	0.042	0.0482	0.0597	0.0367	0.1038	-0.0074
3/8/2018	0.0562	0.0462	0.0584	0.0341	0.1020	-0.0095
8/23/2018	0.0458	0.0445	0.0573	0.0317	0.1004	-0.0114
3/25/2019	0.00174	0.0423	0.0560	0.0286	0.0984	-0.0138
8/22/2019	0.0424	0.0408	0.0551	0.0264	0.0970	-0.0155
3/25/2020	0.0221	0.0385	0.0539	0.0232	0.0951	-0.0180
8/19/2020	0.0466	0.0370	0.0531	0.0209	0.0938	-0.0197
8/18/2021	0.0484	0.0333	0.0513	0.0153	0.0906	-0.0240
8/29/2022	0.0407	0.0294	0.0495	0.0094	0.0874	-0.0285
8/28/2023	0.0678	0.0257	0.0478	0.0036	0.0844	-0.0330

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

8/21/2039 -4.605 0.01

Projected Year to Completion

8/20/2042

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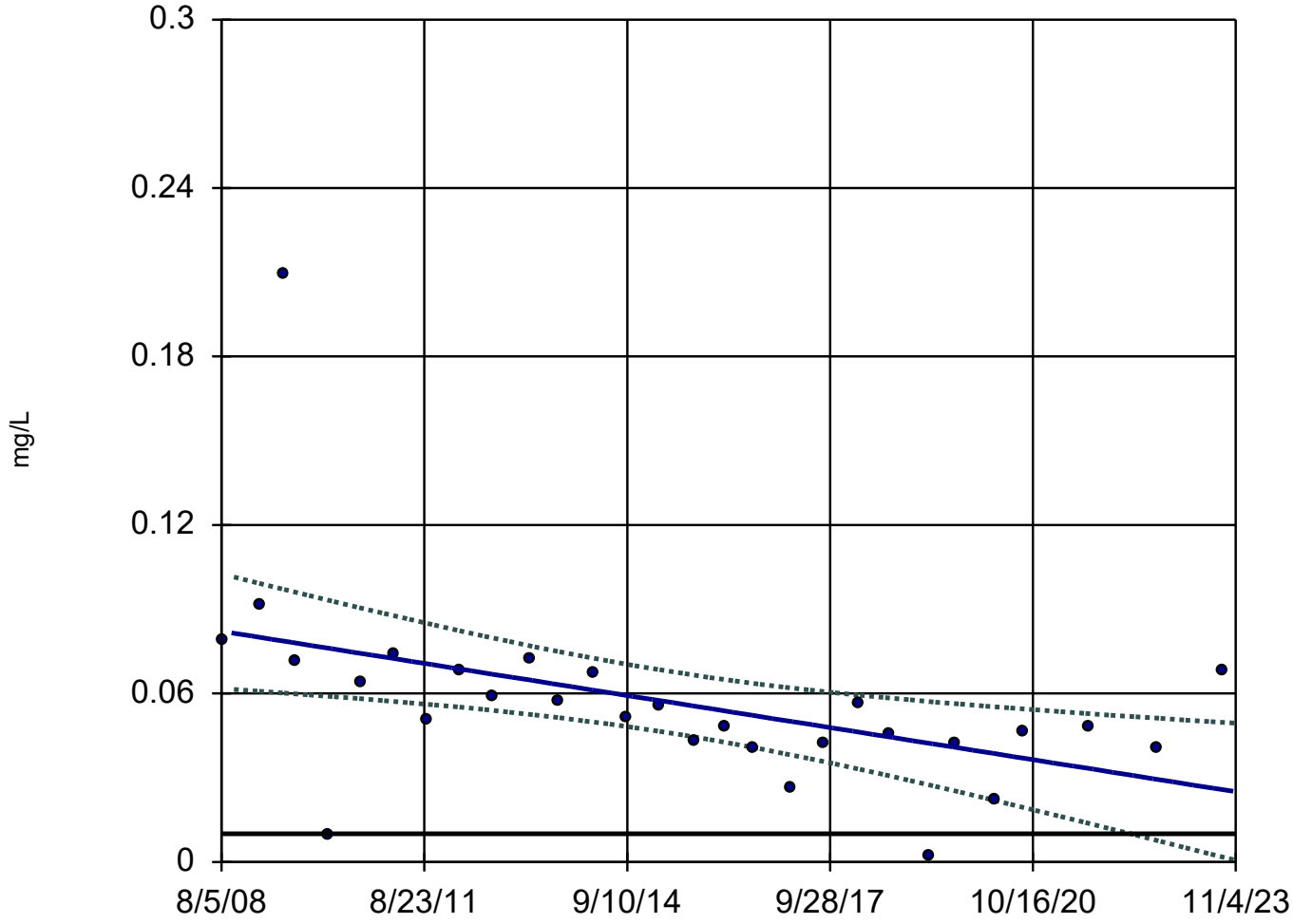
Linear Regression and 90% Confidence Band

AW-1



n = 29

Slope = -0.003747 units/year.

alpha = 0.02
t = -2.704
critical = -2.158

Significant decreasing trend.

GWPS = 0.01 mg/L

Constituent: Arsenic Analysis Run 11/14/2023 11:30 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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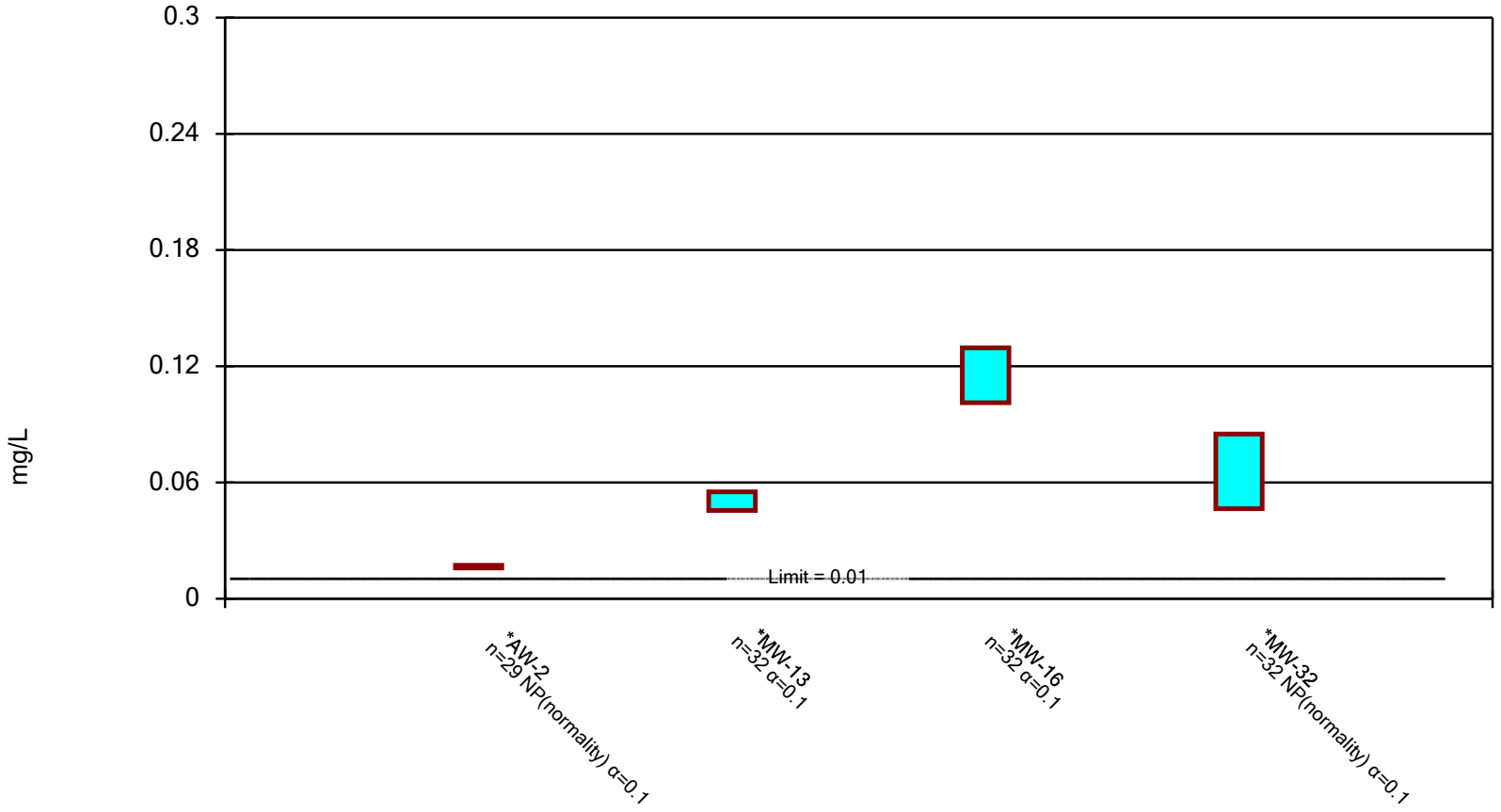
Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/15/2023 6:49 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-12 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.447953818
R Square	0.200662623
Adjusted R Square	0.174018044
Standard Error	0.026594507
Observations	32

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.005326495	0.0053265	7.5310862	0.01013954
Residual	30	0.021218035	0.0007073		
Total	31	0.02654453			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.471467022	0.119855383	3.9336324	0.0004581	0.22668967	0.7162444	0.2266897	0.71624437
X Variable 1	-7.75824E-06	2.82706E-06	-2.744282	0.0101395	-1.353E-05	-1.98E-06	-1.353E-05	-1.98462E-06

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
8/6/2008	0.113	0.1637	0.1789	0.1485	0.2114	0.1161
3/6/2009	0.1632	0.1621	0.1764	0.1477	0.2094	0.1147
7/17/2009	0.15	0.1610	0.1749	0.1472	0.2083	0.1138
9/17/2009	0.137	0.1606	0.1741	0.1470	0.2077	0.1134
3/17/2010	0.177	0.1592	0.1720	0.1463	0.2061	0.1122
9/7/2010	0.163	0.1578	0.1701	0.1456	0.2046	0.1110
3/4/2011	0.238	0.1564	0.1680	0.1448	0.2030	0.1098
9/7/2011	0.169	0.1550	0.1660	0.1440	0.2014	0.1085
3/12/2012	0.154	0.1535	0.1639	0.1432	0.1998	0.1072
9/11/2012	0.177	0.1521	0.1619	0.1423	0.1983	0.1059
3/26/2013	0.156	0.1506	0.1599	0.1413	0.1967	0.1045
9/4/2013	0.138	0.1493	0.1583	0.1404	0.1953	0.1033
3/10/2014	0.139	0.1479	0.1565	0.1393	0.1938	0.1019
9/17/2014	0.135	0.1464	0.1547	0.1381	0.1923	0.1005
3/12/2015	0.155	0.1450	0.1531	0.1369	0.1909	0.0992
10/6/2015	0.172	0.1434	0.1514	0.1354	0.1893	0.0976
3/14/2016	0.13	0.1422	0.1502	0.1342	0.1880	0.0963
8/19/2016	0.128	0.1410	0.1490	0.1329	0.1868	0.0951
3/13/2017	0.14	0.1394	0.1476	0.1311	0.1852	0.0935
8/28/2017	0.124	0.1381	0.1466	0.1295	0.1840	0.0921
3/14/2018	0.149	0.1365	0.1454	0.1276	0.1825	0.0905
8/30/2018	0.128	0.1352	0.1445	0.1259	0.1813	0.0891
3/26/2019	0.126	0.1336	0.1434	0.1238	0.1798	0.0874
8/28/2019	0.0702	0.1324	0.1426	0.1221	0.1787	0.0861
4/1/2020	0.104	0.1307	0.1416	0.1198	0.1772	0.0843
8/18/2020	0.0963	0.1296	0.1410	0.1182	0.1762	0.0831
3/25/2021	0.133	0.1279	0.1401	0.1158	0.1747	0.0812
8/23/2021	0.149	0.1268	0.1395	0.1140	0.1737	0.0799
3/30/2022	0.144	0.1251	0.1386	0.1115	0.1722	0.0779
8/30/2022	0.14	0.1239	0.1380	0.1097	0.1712	0.0766
3/23/2023	0.116	0.1223	0.1373	0.1073	0.1698	0.0747
8/24/2023	0.156	0.1211	0.1367	0.1055	0.1689	0.0733

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

8/19/2147 -4.605 0.01

Projected Year to Completion

8/18/2150

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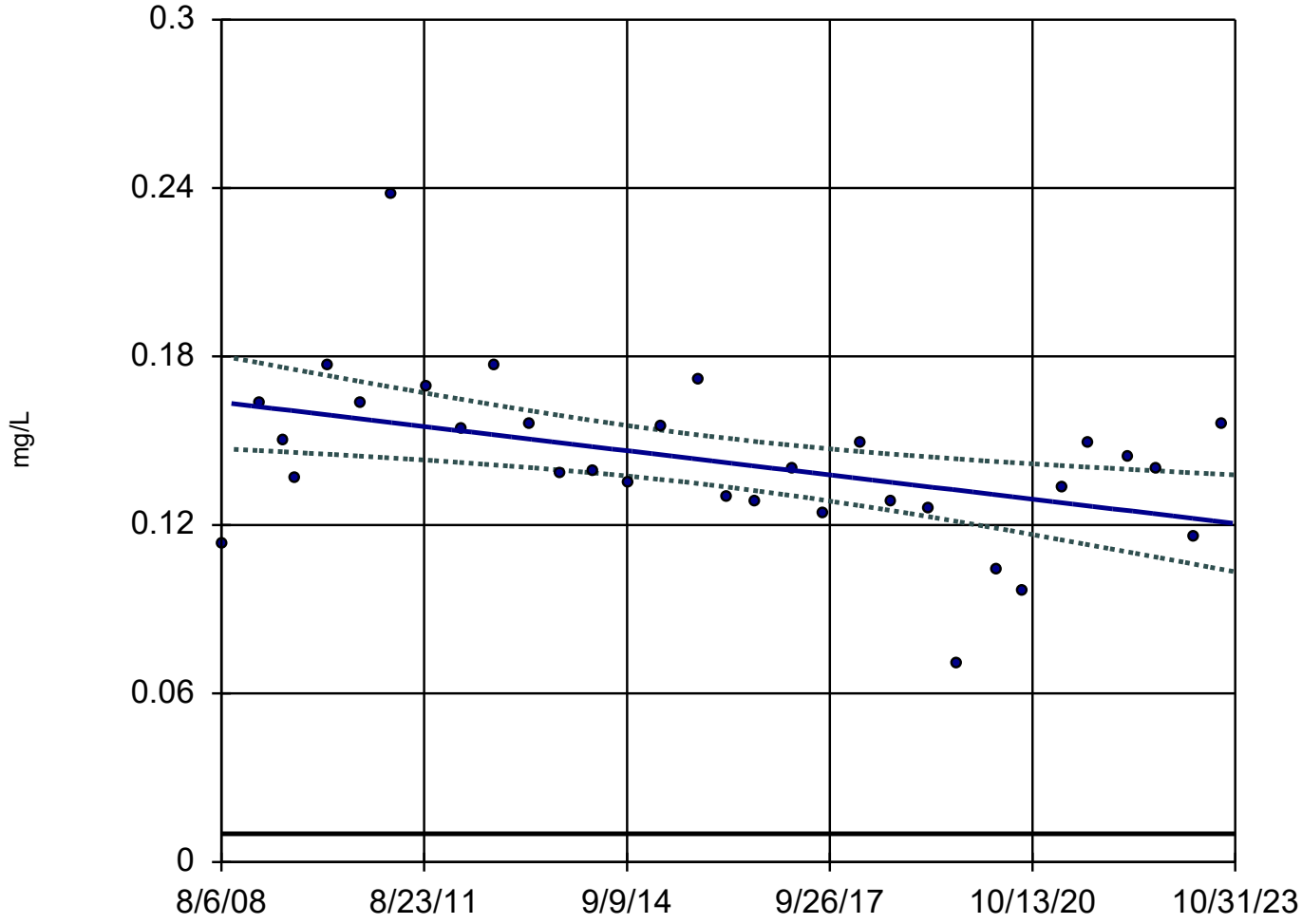
Linear Regression and 90% Confidence Band

MW-12



n = 32

Slope = -0.002833 units/year.

alpha = 0.02
t = -2.744
critical = -2.147

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9521, critical
= 0.904.

GWPS = 0.01 mg/L.

Constituent: Arsenic Analysis Run 11/14/2023 11:38 AM

Linn County SWAL Client: Foth Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-17 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.642803902
R Square	0.413196856
Adjusted R Square	0.347996507
Standard Error	0.017593822
Observations	11

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.001961677	0.0019617	6.3373411	0.03290833
Residual	9	0.002785883	0.0003095		
Total	10	0.00474756			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.093640023	0.406063462	2.6932737	0.0246639	0.17506065	2.0122194	0.1750607	2.012219392
X Variable 1	-2.30918E-05	9.17285E-06	-2.517408	0.0329083	-4.384E-05	-2.34E-06	-4.384E-05	-2.34137E-06

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
8/30/2018	0.105	0.0928	0.1111	0.0745	0.1299	0.0557
3/21/2019	0.0729	0.0881	0.1036	0.0726	0.1239	0.0523
8/22/2019	0.095	0.0846	0.0981	0.0710	0.1196	0.0496
3/30/2020	0.066	0.0794	0.0908	0.0681	0.1136	0.0453
8/20/2020	0.096	0.0761	0.0864	0.0658	0.1100	0.0423
3/25/2021	0.0638	0.0711	0.0809	0.0614	0.1048	0.0374
8/24/2021	0.0599	0.0676	0.0778	0.0575	0.1014	0.0338
3/31/2022	0.0316	0.0626	0.0743	0.0509	0.0969	0.0283
8/25/2022	0.0808	0.0592	0.0724	0.0459	0.0940	0.0243
3/24/2023	0.0675	0.0543	0.0702	0.0384	0.0902	0.0184
8/29/2023	0.048	0.0507	0.0687	0.0326	0.0876	0.0137

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

9/12/2036 -4.605 0.01

Projected Year to Completion

9/12/2039

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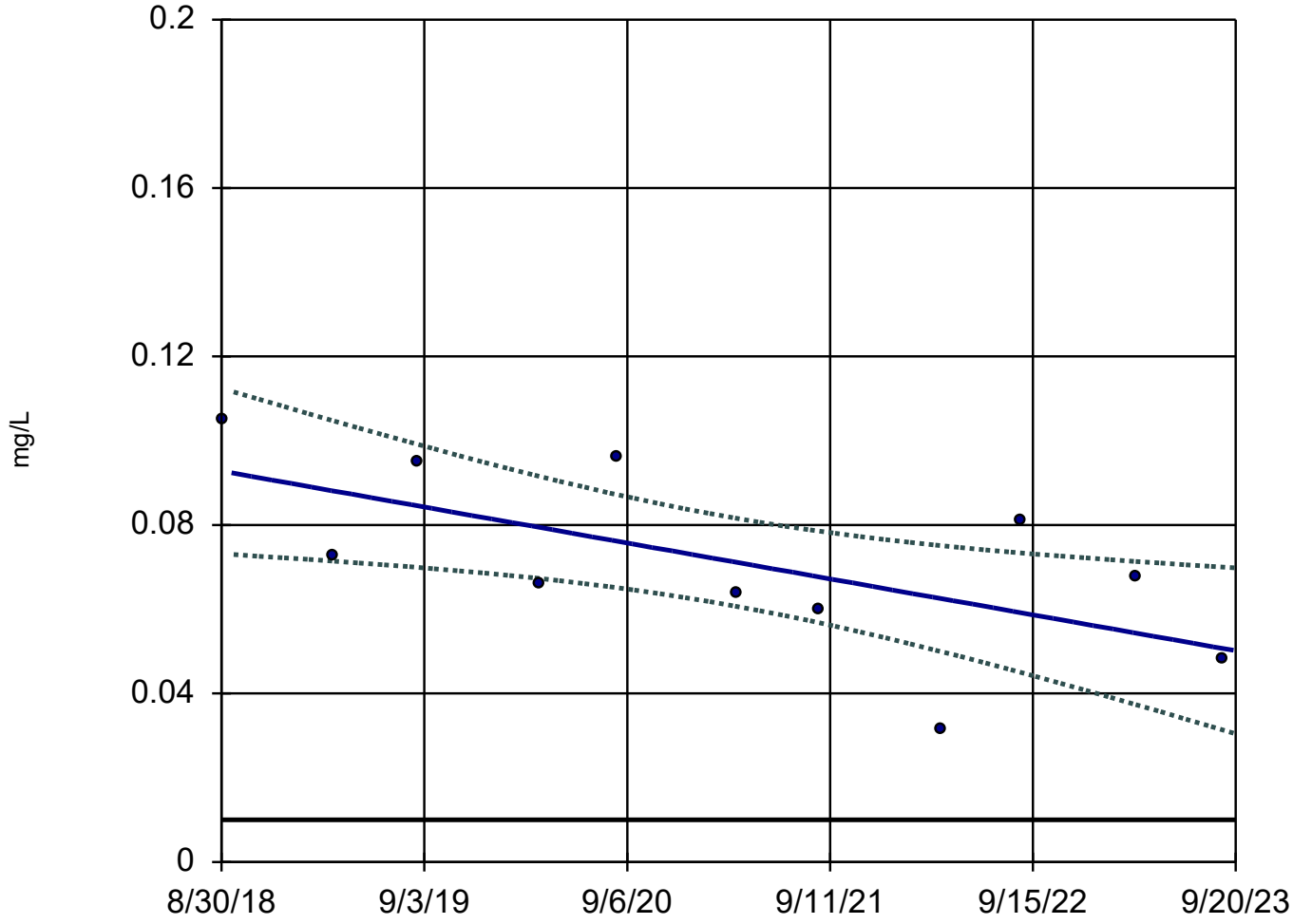
Linear Regression and 90% Confidence Band

MW-17



n = 11

Slope = -0.008434 units/year.

alpha = 0.02
t = -2.515
critical = -2.398

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha = 0.01, calculated = 0.9405, critical = 0.792.

GWPS = 0.01 mg/L.

Constituent: Arsenic Analysis Run 11/14/2023 4:07 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-24 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.615071802
R Square	0.378313322
Adjusted R Square	0.343775173
Standard Error	0.736250971
Observations	20

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	5.937509807	5.9375098	10.953492	0.003897762
Residual	18	9.757178858	0.5420655		
Total	19	15.69468867			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	17.39268223	6.212942684	2.7994274	0.0118513	4.339774013	30.44559045	4.339774013	30.44559045
X Variable 1	-0.00047863	0.000144617	-3.309606	0.0038978	-0.000782455	-0.000174796	-0.00078245	-0.000174796

X	Y	ln(Y)	Predicted-Log Scale	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
9/6/2012	0.205	-1.5847	-2.3066	0.0996	0.1695	0.0585	0.3971	0.0250
3/22/2013	0.143	-1.9449	-2.4009	0.0906	0.1480	0.0555	0.3559	0.0231
9/4/2013	0.0697	-2.6636	-2.4803	0.0837	0.1323	0.0530	0.3249	0.0216
3/10/2014	0.209	-1.5654	-2.5698	0.0765	0.1167	0.0502	0.2937	0.0200
9/13/2014	0.139	-1.9733	-2.6593	0.0700	0.1032	0.0475	0.2659	0.0184
3/11/2015	0.0307	-3.4835	-2.7450	0.0642	0.0921	0.0448	0.2420	0.0171
9/25/2015	0.0413	-3.1869	-2.8398	0.0584	0.0814	0.0419	0.2186	0.0156
3/9/2016	0.052	-2.9565	-2.9192	0.0540	0.0738	0.0395	0.2009	0.0145
8/10/2016	0.0409	-3.1966	-2.9929	0.0501	0.0676	0.0372	0.1861	0.0135
3/7/2017	0.0122	-4.4063	-3.0930	0.0454	0.0605	0.0340	0.1679	0.0123
8/25/2017	0.0252	-3.6809	-3.1748	0.0418	0.0556	0.0314	0.1547	0.0113
3/13/2018	0.0238	-3.7381	-3.2705	0.0380	0.0508	0.0284	0.1407	0.0103
8/27/2018	0.0645	-2.7411	-3.3505	0.0351	0.0474	0.0259	0.1302	0.0094
3/20/2019	0.02	-3.9120	-3.4486	0.0318	0.0439	0.0230	0.1186	0.0085
8/26/2019	0.0132	-4.3275	-3.5247	0.0295	0.0415	0.0209	0.1105	0.0079
3/30/2020	0.0116	-4.4568	-3.6286	0.0266	0.0387	0.0182	0.1005	0.0070
8/26/2020	0.0237	-3.7423	-3.6999	0.0247	0.0369	0.0166	0.0943	0.0065
8/19/2021	0.0925	-2.3805	-3.8712	0.0208	0.0333	0.0130	0.0812	0.0053
8/24/2022	0.0279	-3.5791	-4.0483	0.0175	0.0301	0.0101	0.0699	0.0044
8/30/2023	0.024	-3.7297	-4.2259	0.0146	0.0273	0.0078	0.0606	0.0035

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS with First Order Attenuation

10/30/2025 -4.605 0.01

Projected Year to Completion

10/29/2028

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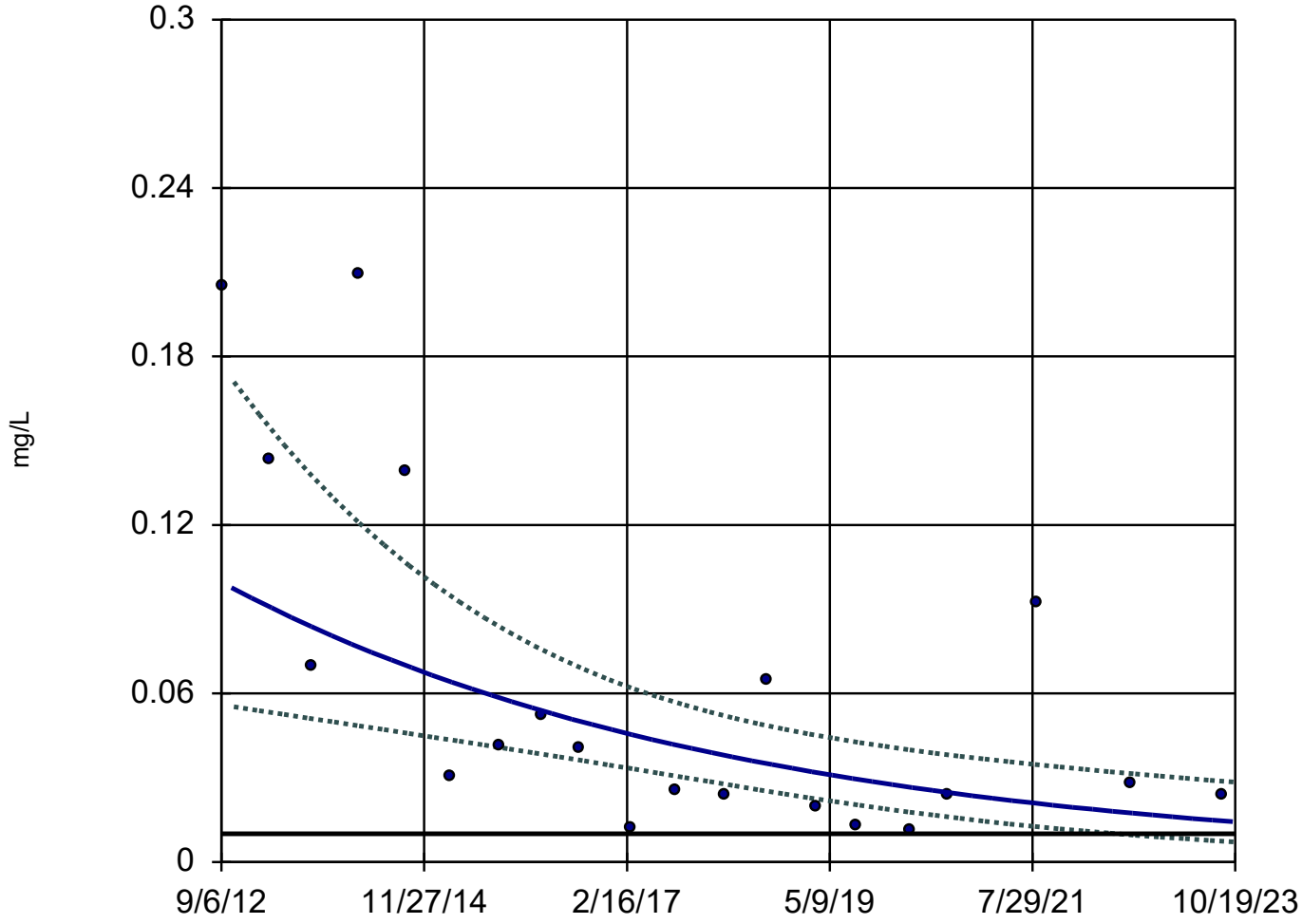
Linear Regression and 90% Confidence Band

MW-24



n = 20

Slope = -0.1748
natural log units/year.

alpha = 0.02
t = -3.308
critical = -2.214

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.973 after natural
log transformation,
critical = 0.868.

GWPS = 0.01 mg/L.

Constituent: Arsenic Analysis Run 11/14/2023 4:22 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-30 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.667649808
R Square	0.445756267
Adjusted R Square	0.408806685
Standard Error	0.742577075
Observations	17

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	6.652287338	6.6522873	12.063905	0.003404982
Residual	15	8.271310678	0.5514207		
Total	16	14.92359802			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	23.26321378	7.844000777	2.9657332	0.0096207	6.544121885	39.98230567	6.544121885	39.98230567
X Variable 1	-0.00063006	0.0001814	-3.473313	0.003405	-0.001016701	-0.000243413	-0.0010167	-0.000243413

X	Y	ln(Y)	Predicted-Log Scale	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
3/10/2014	0.0664	-2.7121	-3.0152	0.0490	0.0874	0.0275	0.2037	0.0118
9/17/2014	0.0607	-2.8018	-3.1356	0.0435	0.0737	0.0256	0.1772	0.0107
3/12/2015	0.0449	-3.1033	-3.2464	0.0389	0.0632	0.0240	0.1561	0.0097
10/1/2015	0.0885	-2.4248	-3.3744	0.0342	0.0530	0.0221	0.1352	0.0087
3/10/2016	0.0307	-3.4835	-3.4758	0.0309	0.0463	0.0207	0.1209	0.0079
8/18/2016	0.0215	-3.8397	-3.5772	0.0280	0.0406	0.0192	0.1083	0.0072
3/9/2017	0.0171	-4.0687	-3.7051	0.0246	0.0347	0.0174	0.0945	0.0064
8/25/2017	0.0107	-4.5375	-3.8116	0.0221	0.0306	0.0160	0.0846	0.0058
3/13/2018	0.0135	-4.3051	-3.9376	0.0195	0.0267	0.0142	0.0744	0.0051
8/29/2018	0.00912	-4.6973	-4.0441	0.0175	0.0241	0.0128	0.0669	0.0046
3/20/2019	0.0208	-3.8728	-4.1720	0.0154	0.0215	0.0111	0.0591	0.0040
8/29/2019	0.00519	-5.2610	-4.2741	0.0139	0.0198	0.0098	0.0536	0.0036
3/24/2020	0.0469	-3.0597	-4.4051	0.0122	0.0179	0.0083	0.0475	0.0031
8/27/2020	0.00257	-5.9638	-4.5034	0.0111	0.0167	0.0073	0.0434	0.0028
8/19/2021	0.0185	-3.9900	-4.7283	0.0088	0.0145	0.0054	0.0356	0.0022
8/25/2022	0.00856	-4.7607	-4.9621	0.0070	0.0126	0.0039	0.0292	0.0017
8/29/2023	0.00927	-4.6810	-5.1946	0.0055	0.0111	0.0028	0.0242	0.0013

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS with First Order Attenuation

2/4/2021 -4.605 0.01

Projected Year to Completion*

2027

*The first order attenuation rate projected that compliance with the GWPS has already been achieved. However, the confidence band placed around the linear trend line (above), has not yet indicated compliance with the GWPS (although it is noted that upper 95% confidence limit is close to statistically achieving compliance with the GWPS and the Aug. 2022 and Aug. 2023 individual results were below the GWPS). For arsenic in MW-30, it is assumed that compliance with the GWPS will be attained in 2024.

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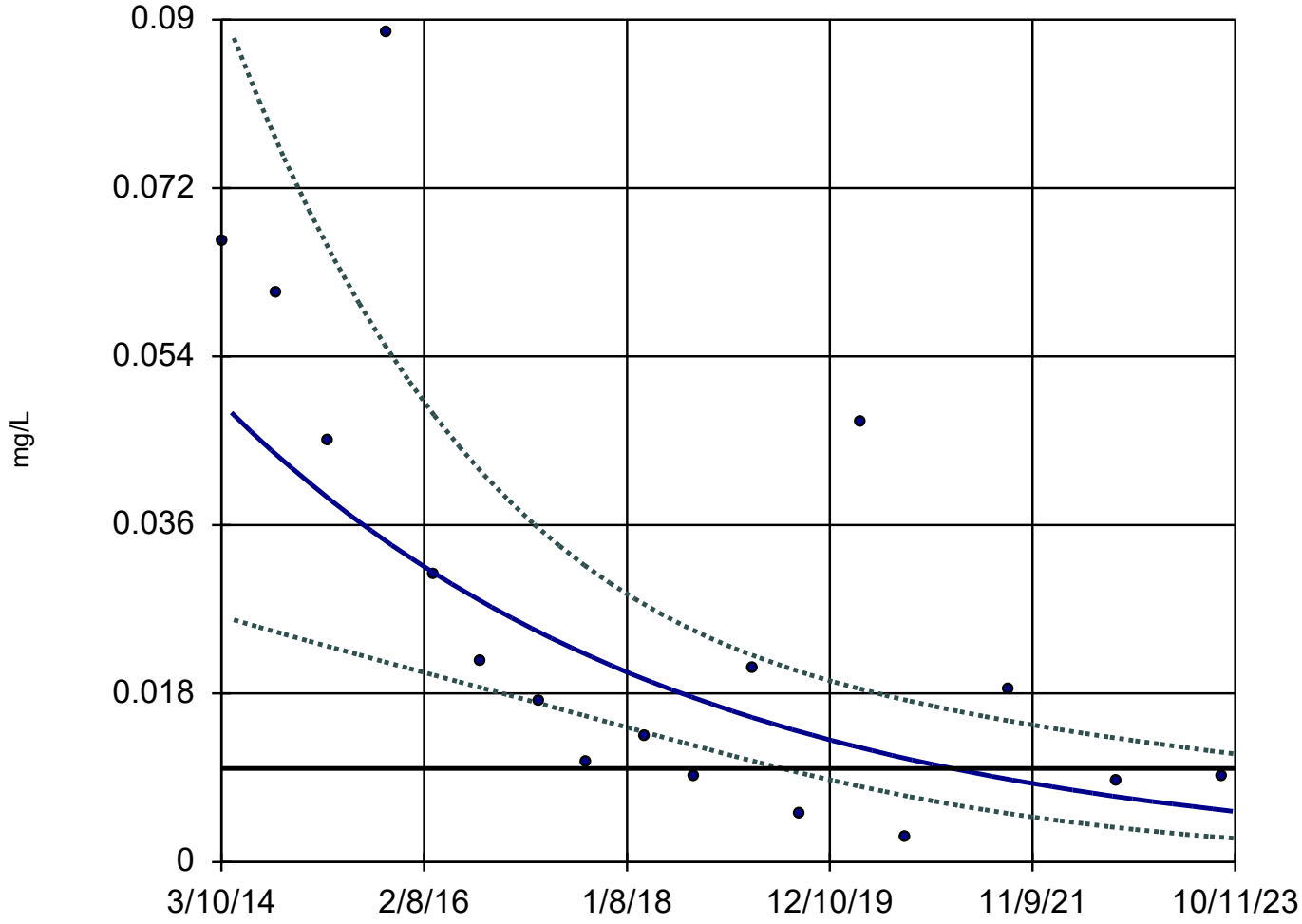
Linear Regression and 90% Confidence Band

MW-30



n = 17

Slope = -0.2301
natural log units/year.

alpha = 0.02
t = -3.472
critical = -2.249

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9894 after natural
log transformation,
critical = 0.851.

GWPS = 0.01 mg/L.

Constituent: Arsenic Analysis Run 11/14/2023 4:32 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-34 Arsenic Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.612644087
R Square	0.375332777
Adjusted R Square	0.345586719
Standard Error	0.014999752
Observations	23

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.002838934	0.0028389	12.6179	0.00188524
Residual	21	0.004724844	0.000225		
Total	22	0.007563777			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.412145355	0.103757757	3.9721884	0.0006943	0.19636929	0.6279214	0.1963693	0.627921424
X Variable 1	-8.63425E-06	2.4307E-06	-3.552168	0.0018852	-1.369E-05	-3.58E-06	-1.369E-05	-3.57934E-06

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
3/4/2011	0.082	0.0615	0.0717	0.0514	0.0893	0.0338
9/8/2011	0.0563	0.0599	0.0694	0.0504	0.0874	0.0324
3/7/2012	0.058	0.0584	0.0672	0.0495	0.0857	0.0311
9/11/2012	0.0585	0.0567	0.0650	0.0485	0.0838	0.0296
3/22/2013	0.0862	0.0551	0.0628	0.0474	0.0820	0.0281
9/3/2013	0.0516	0.0536	0.0609	0.0464	0.0804	0.0268
3/7/2014	0.0619	0.0520	0.0588	0.0453	0.0787	0.0254
9/17/2014	0.0402	0.0504	0.0566	0.0441	0.0769	0.0238
3/12/2015	0.0483	0.0489	0.0548	0.0429	0.0753	0.0224
10/6/2015	0.0492	0.0471	0.0527	0.0414	0.0735	0.0206
3/14/2016	0.0194	0.0457	0.0511	0.0402	0.0721	0.0193
8/12/2016	0.0205	0.0444	0.0498	0.0390	0.0707	0.0180
3/13/2017	0.0305	0.0425	0.0480	0.0371	0.0689	0.0162
8/28/2017	0.0329	0.0411	0.0466	0.0356	0.0675	0.0147
3/9/2018	0.0496	0.0394	0.0452	0.0336	0.0659	0.0130
8/30/2018	0.0371	0.0379	0.0440	0.0318	0.0644	0.0114
3/22/2019	0.0226	0.0362	0.0427	0.0296	0.0628	0.0095
8/27/2019	0.0237	0.0348	0.0417	0.0279	0.0615	0.0081
4/1/2020	0.0217	0.0329	0.0404	0.0254	0.0598	0.0060
8/20/2020	0.0245	0.0317	0.0396	0.0238	0.0587	0.0047
8/25/2021	0.0498	0.0285	0.0376	0.0194	0.0559	0.0011
8/30/2022	0.0399	0.0253	0.0357	0.0149	0.0531	-0.0025
8/24/2023	0.0418	0.0222	0.0339	0.0105	0.0506	-0.0062

GWPS = 0.01 mg/L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

4/7/2037 -4.605 0.01

Projected Year to Completion

4/6/2040

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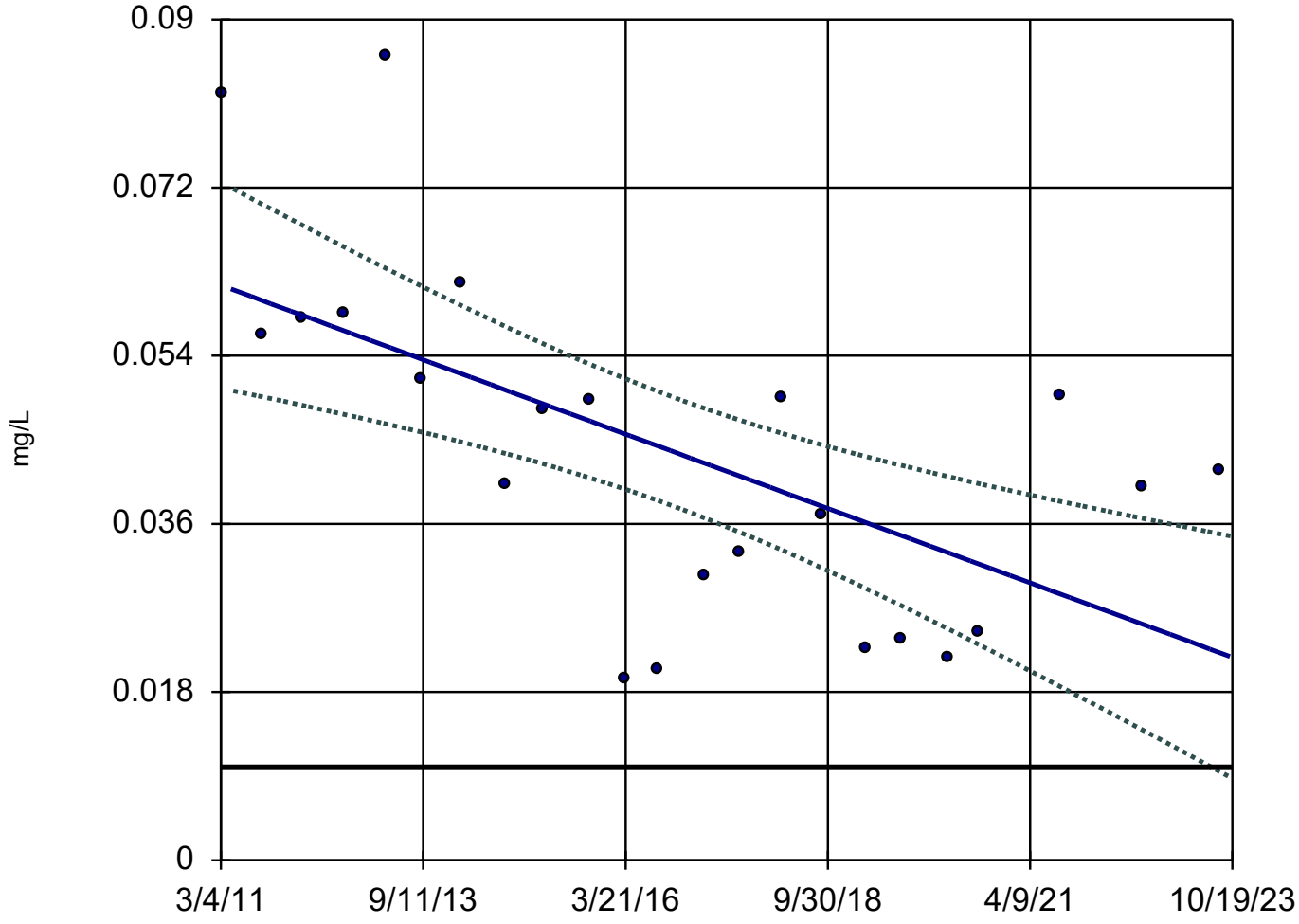
Linear Regression and 90% Confidence Band

MW-34



n = 23

Slope = -0.003153 units/year.

alpha = 0.02
t = -3.55
critical = -2.189

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9678, critical
= 0.881.

GWPS = 0.01 mg/L.

Constituent: Arsenic Analysis Run 11/14/2023 7:00 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-35 Cobalt Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.731606643
R Square	0.53524828
Adjusted R Square	0.507909943
Standard Error	0.281469957
Observations	19

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.551126753	1.551127	19.57867	0.00037094
Residual	17	1.34683072	0.079225		
Total	18	2.897957473			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	6.463931225	2.51322696	2.571965	0.019794	1.16148583	11.76638	1.16148583	11.76637662
X Variable 1	-0.000258343	5.83855E-05	-4.424779	0.000371	-0.0003815	-0.000135	-0.0003815	-0.00013516

X	Y	ln(Y)	Predicted-Log Scale	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
9/5/2012	0.0185	-3.98998	-4.16884	0.01547	0.01930	0.01240	0.02647	0.00904
9/4/2013	0.0162	-4.12274	-4.26284	0.01408	0.01703	0.01164	0.02381	0.00833
3/10/2014	0.0176	-4.03986	-4.31114	0.01342	0.01599	0.01126	0.02257	0.00798
9/17/2014	0.00887	-4.72508	-4.36056	0.01277	0.01500	0.01088	0.02138	0.00763
3/12/2015	0.0066	-5.02069	-4.40599	0.01220	0.01416	0.01052	0.02036	0.00732
9/24/2015	0.00896	-4.71499	-4.45662	0.01160	0.01330	0.01012	0.01929	0.00698
3/11/2016	0.0128	-4.35831	-4.50015	0.01111	0.01262	0.00978	0.01842	0.00670
8/18/2016	0.0128	-4.35831	-4.54148	0.01066	0.01202	0.00945	0.01765	0.00644
3/6/2017	0.0136	-4.29769	-4.59315	0.01012	0.01135	0.00902	0.01674	0.00612
8/28/2017	0.00823	-4.79997	-4.63836	0.00967	0.01083	0.00864	0.01599	0.00585
3/13/2018	0.00771	-4.86524	-4.68926	0.00919	0.01030	0.00821	0.01520	0.00556
8/29/2018	0.00919	-4.68964	-4.73292	0.00880	0.00989	0.00783	0.01456	0.00532
3/20/2019	0.00952	-4.65436	-4.78536	0.00835	0.00945	0.00738	0.01384	0.00504
8/23/2019	0.0083	-4.79150	-4.82566	0.00802	0.00915	0.00703	0.01332	0.00483
3/31/2020	0.0136	-4.29769	-4.88276	0.00758	0.00875	0.00656	0.01262	0.00455
8/27/2020	0.0064	-5.05146	-4.92125	0.00729	0.00850	0.00625	0.01218	0.00436
8/19/2021	0.00654	-5.02982	-5.01348	0.00665	0.00797	0.00555	0.01120	0.00394
8/29/2022	0.00467	-5.36660	-5.11036	0.00603	0.00746	0.00488	0.01029	0.00354
8/28/2023	0.00535	-5.23066	-5.20439	0.00549	0.00701	0.00430	0.00949	0.00318

GWPS (Background) [(1)] = 0.008 mg//L

[(1)] Using the *one-sample* testing method, the fixed GWPS was calculated as the background upper tolerance limit with 95% confidence and 95% coverage. Note that a nonparametric tolerance limit was utilized in the cobalt background calculation. The nonparametric limit achieves 85% coverage.

First Achieved Compliance with the GWPS

Fall 2022

Projected Year to Completion

Fall 2025

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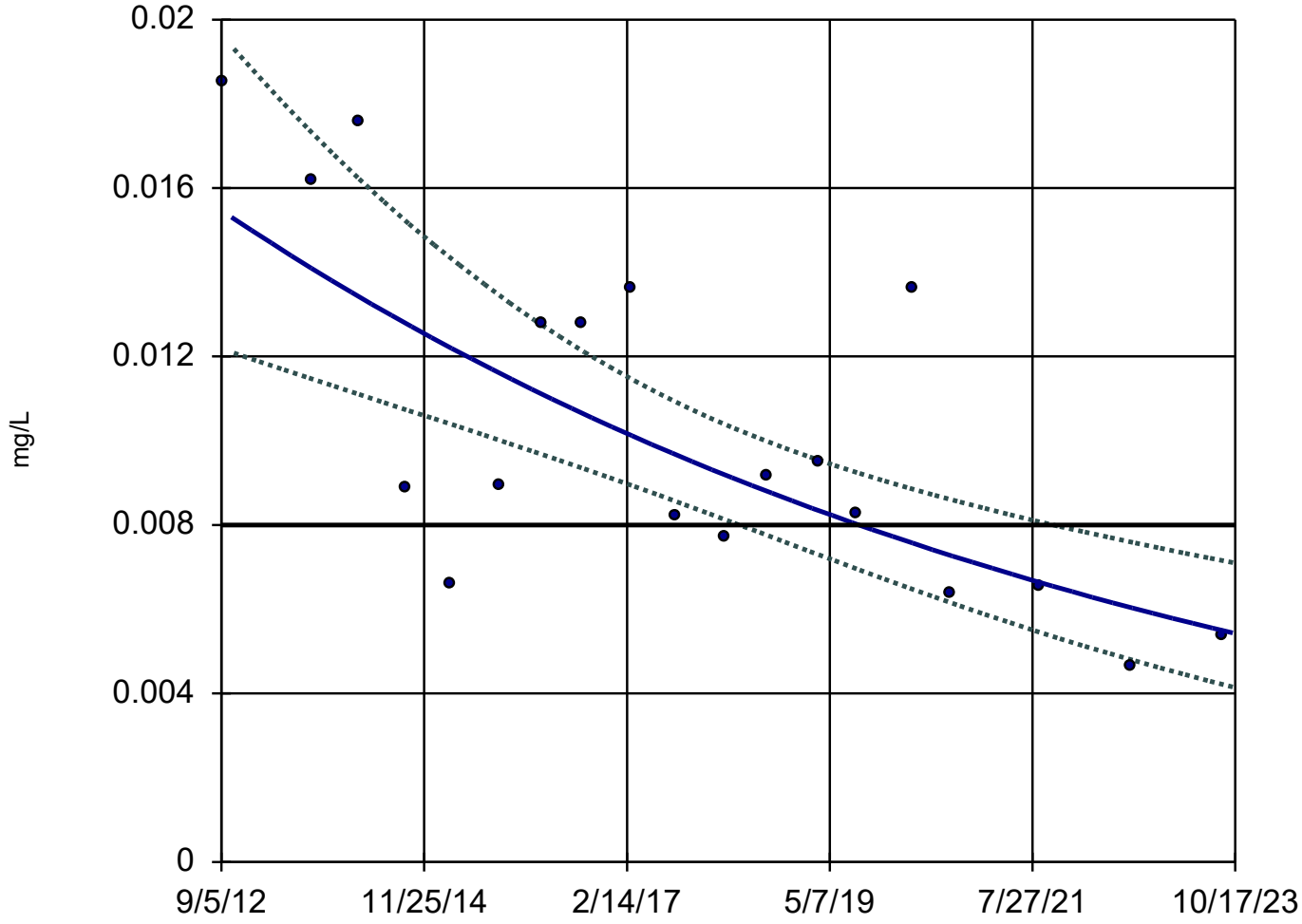
Linear Regression and 90% Confidence Band

MW-35



n = 19

Slope = -0.09433
natural log units/year.

alpha = 0.02
t = -4.424
critical = -2.224

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9814 after natural
log transformation,
critical = 0.863.

GWPS = 0.008 mg/L.

Constituent: Cobalt Analysis Run 11/14/2023 1:37 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

AW-2 Thallium Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.588281405
R Square	0.346075012
Adjusted R Square	0.307608836
Standard Error	0.001037231
Observations	19

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	9.67926E-06	9.679E-06	8.9968655	0.00806367
Residual	17	1.82894E-05	1.076E-06		
Total	18	2.79687E-05			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.032468184	0.009415445	3.4483962	0.0030687	0.01260333	0.052333	0.0126033	0.052333036
X Variable 1	-6.55992E-07	2.18702E-07	-2.999478	0.0080637	-1.117E-06	-1.946E-07	-1.117E-06	-1.94571E-07

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
3/27/2013	0.00684	0.00534	0.00610	0.00458	0.00729	0.00338
9/5/2013	0.00438	0.00523	0.00594	0.00452	0.00717	0.00329
3/11/2014	0.00233	0.00511	0.00576	0.00445	0.00703	0.00319
9/11/2014	0.00489	0.00499	0.00559	0.00439	0.00689	0.00308
3/9/2015	0.00647	0.00487	0.00542	0.00432	0.00676	0.00298
9/16/2015	0.00555	0.00474	0.00525	0.00424	0.00662	0.00287
3/4/2016	0.00434	0.00463	0.00511	0.00416	0.00650	0.00277
8/9/2016	0.00412	0.00453	0.00498	0.00408	0.00639	0.00267
3/7/2017	0.00444	0.00439	0.00481	0.00397	0.00624	0.00254
8/23/2017	0.00406	0.00428	0.00469	0.00387	0.00613	0.00243
3/7/2018	0.00578	0.00415	0.00457	0.00373	0.00600	0.00230
8/23/2018	0.00364	0.00404	0.00447	0.00361	0.00590	0.00219
3/18/2019	0.00404	0.00390	0.00436	0.00345	0.00577	0.00204
8/21/2019	0.00429	0.00380	0.00429	0.00332	0.00567	0.00193
3/24/2020	0.00321	0.00366	0.00419	0.00313	0.00554	0.00178
8/18/2020	0.00279	0.00356	0.00413	0.00300	0.00546	0.00167
8/24/2021	0.00369	0.00332	0.00399	0.00265	0.00525	0.00140
8/22/2022	0.00285	0.00308	0.00387	0.00230	0.00505	0.00111
8/22/2023	0.00277	0.00284	0.00375	0.00194	0.00486	0.00082

GWPS = 0.002 mg//L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

12/6/2030 -6.215 0.002

Projected Year to Completion

12/5/2033

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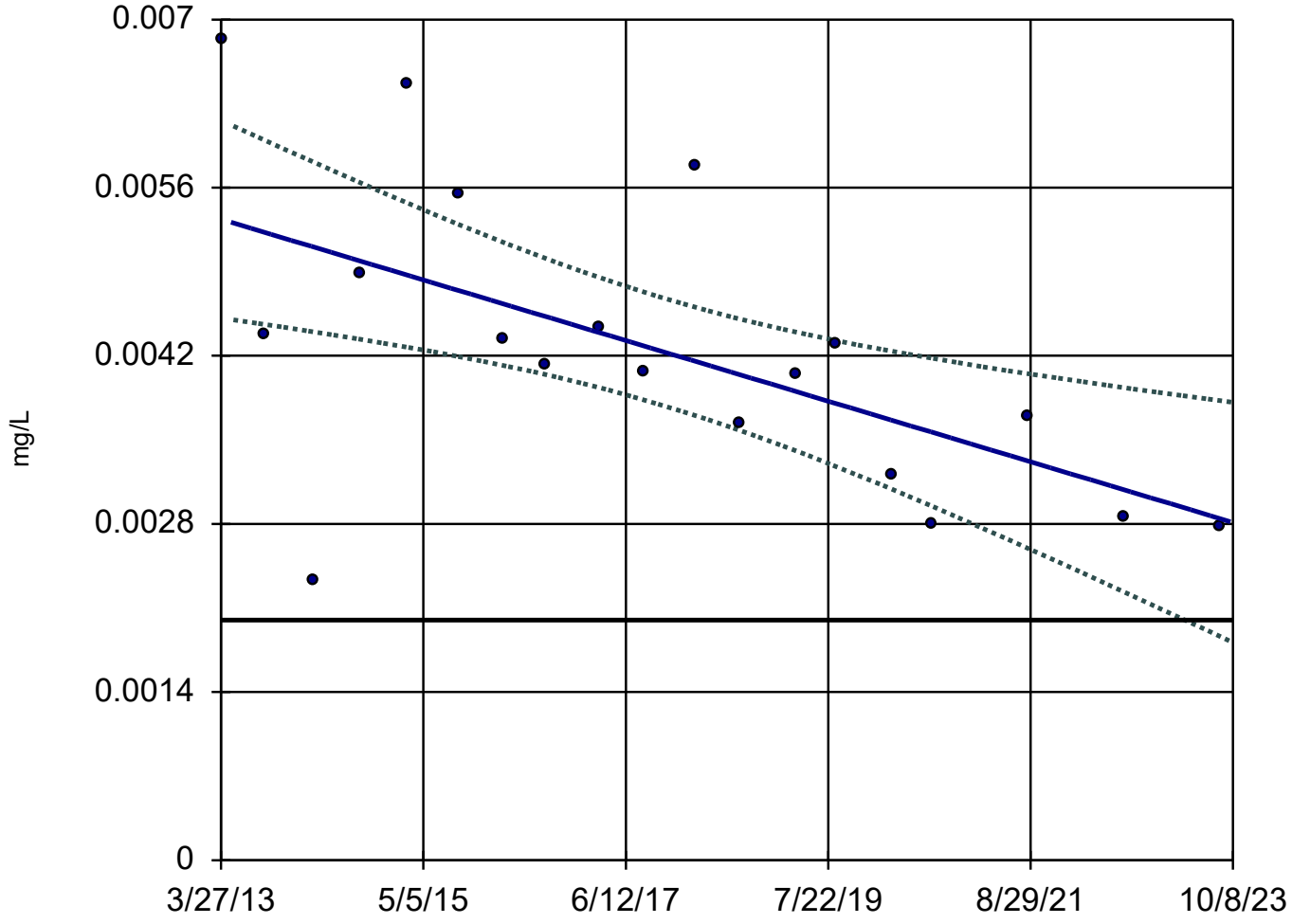
Linear Regression and 90% Confidence Band

AW-2



n = 19

Slope = -0.0002396 units/year.

alpha = 0.02
t = -2.998
critical = -2.224

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha = 0.01, calculated = 0.9008, critical = 0.863.

GWPS = 0.002 mg/L.

Constituent: Thallium Analysis Run 11/14/2023 1:51 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-20 Thallium Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.581858702
R Square	0.338559549
Adjusted R Square	0.301812857
Standard Error	0.001348457
Observations	20

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.67529E-05	1.675E-05	9.2133341	0.00711619
Residual	18	3.27301E-05	1.818E-06		
Total	19	4.9483E-05			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.037270105	0.0113794	3.2752258	0.004205	0.01336287	0.0611773	0.0133629	0.061177338
X Variable 1	-8.03943E-07	2.6486E-07	-3.035347	0.0071162	-1.36E-06	-2.475E-07	-1.36E-06	-2.47492E-07

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
9/9/2012	0.00661	0.00418	0.00515	0.00321	0.00671	0.00165
3/29/2013	0.00405	0.00402	0.00491	0.00312	0.00652	0.00151
9/5/2013	0.00491	0.00389	0.00473	0.00305	0.00637	0.00140
3/7/2014	0.00132	0.00374	0.00452	0.00297	0.00620	0.00128
9/11/2014	0.00501	0.00359	0.00430	0.00288	0.00604	0.00115
3/16/2015	0.00337	0.00344	0.00410	0.00278	0.00587	0.00101
9/18/2015	0.00348	0.00329	0.00390	0.00268	0.00571	0.00087
3/16/2016	0.00114	0.00315	0.00372	0.00257	0.00555	0.00074
8/24/2016	0.00223	0.00302	0.00356	0.00247	0.00542	0.00062
3/6/2017	0.00185	0.00286	0.00339	0.00233	0.00526	0.00046
8/28/2017	0.00347	0.00272	0.00324	0.00220	0.00512	0.00032
3/14/2018	0.00366	0.00256	0.00309	0.00203	0.00496	0.00016
9/4/2018	0.00168	0.00242	0.00298	0.00187	0.00482	0.00002
3/20/2019	0.0005	0.00226	0.00285	0.00167	0.00467	-0.00015
8/28/2019	0.00182	0.00213	0.00276	0.00151	0.00455	-0.00029
3/31/2020	0.000456	0.00196	0.00265	0.00127	0.00440	-0.00048
8/27/2020	0.00269	0.00184	0.00257	0.00111	0.00429	-0.00061
8/25/2021	0.00331	0.00155	0.00241	0.00069	0.00404	-0.00094
8/29/2022	0.00175	0.00125	0.00225	0.00025	0.00379	-0.00129
8/28/2023	0.00153	0.00096	0.00210	-0.00019	0.00356	-0.00164

GWPS = 0.002 mg//L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)*

8/24/2018 -6.215 0.002

Projected Year to Completion*

2027

*During the Spring 2020 statistical evaluation, the confidence band placed around the linear trend line indicated compliance with the GWPS; however, the higher concentrations in Aug. 2020 and Aug. 2021 prevented compliance with the GWPS from being maintained. The Aug. 2022 and Aug. 2023 results returned to concentrations below the GWPS. While the first order attenuation rate projected that compliance with the GWPS has already been achieved, the confidence band placed around the linear trend line (above), has not yet indicated a return to compliance with the GWPS (although it is noted that upper 95% confidence limit is close to statistically achieving compliance with the GWPS and the Aug. 2022 and Aug. 2023 individual results were below the GWPS). For thallium in MW-20, it is assumed that compliance with the GWPS will be attained in 2024.

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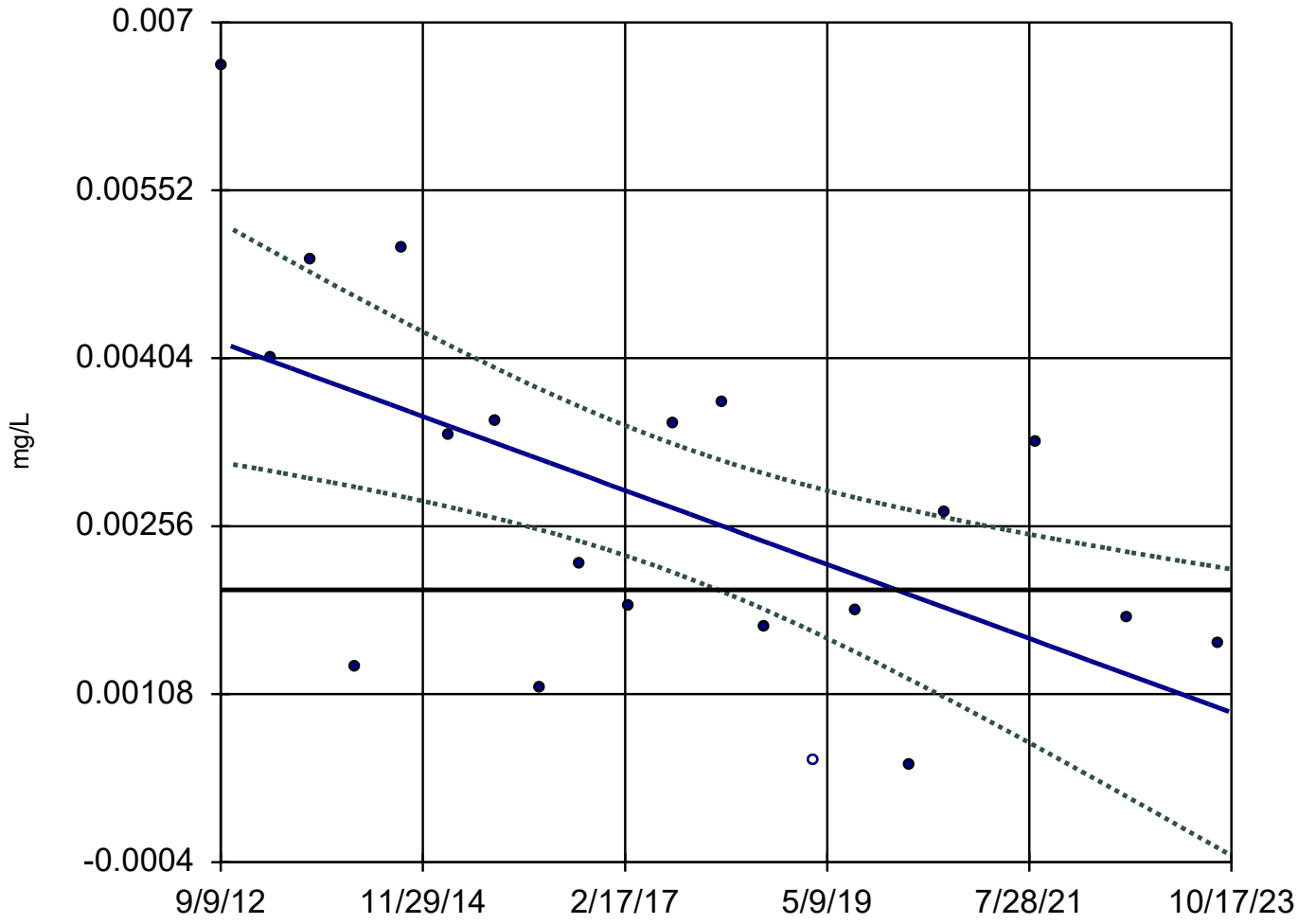
Hollow symbols indicate censored values.

Linear Regression and 90% Confidence Band

MW-20



n = 20
5% NDs

Slope = -0.0002936 units/year.

alpha = 0.02
t = -3.034
critical = -2.214

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9814, critical
= 0.868.

GWPS = 0.002 mg/L.

Constituent: Thallium Analysis Run 11/14/2023 1:56 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

MW-34 Vinyl Chloride Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.756314417
R Square	0.572011497
Adjusted R Square	0.556160071
Standard Error	4.206430669
Observations	29

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	638.504394	638.50439	36.085807	2.0762E-06
Residual	27	477.7395922	17.694059		
Total	28	1116.243986			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	136.7060048	21.05032849	6.4942457	5.816E-07	93.5142985	179.89771	93.514298	179.8977112
X Variable 1	-0.002999682	0.000499352	-6.007146	2.076E-06	-0.0040243	-0.001975	-0.0040243	-0.001975096

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
8/6/2008	9.81	17.72	20.20	15.24	25.30	10.14
3/6/2009	23.2	17.08	19.41	14.75	24.62	9.55
7/17/2009	19.8	16.68	18.92	14.45	24.19	9.18
9/17/2009	14.1	16.50	18.69	14.30	23.99	9.01
3/19/2010	15.7	15.95	18.02	13.88	23.41	8.49
9/9/2010	18.3	15.43	17.39	13.47	22.86	8.00
3/4/2011	16.9	14.90	16.75	13.04	22.30	7.50
9/8/2011	21.8	14.34	16.08	12.59	21.71	6.96
3/7/2012	20.5	13.79	15.44	12.14	21.14	6.44
9/11/2012	12.2	13.23	14.79	11.67	20.56	5.90
3/22/2013	12.5	12.65	14.14	11.17	19.97	5.34
9/3/2013	7.82	12.16	13.58	10.73	19.46	4.85
3/7/2014	8.2	11.60	12.98	10.23	18.90	4.31
9/17/2014	3.99	11.02	12.36	9.68	18.31	3.73
3/12/2015	12.8	10.49	11.82	9.16	17.78	3.20
10/6/2015	11.5	9.87	11.21	8.53	17.16	2.58
3/14/2016	5.78	9.39	10.75	8.03	16.68	2.10
8/12/2016	7.38	8.94	10.32	7.55	16.23	1.64
3/13/2017	5.16	8.30	9.75	6.85	15.61	0.99
8/28/2017	7.49	7.79	9.31	6.28	15.12	0.47
3/9/2018	7.27	7.22	8.81	5.62	14.56	-0.13
8/30/2018	9.4	6.69	8.38	5.01	14.05	-0.67
3/22/2019	0.5	6.08	7.88	4.29	13.47	-1.30
8/27/2019	0.5	5.61	7.50	3.72	13.02	-1.80
4/1/2020	1.63	4.95	6.98	2.93	12.40	-2.49
8/20/2020	5.79	4.53	6.65	2.41	12.00	-2.94
8/25/2021	8.14	3.42	5.79	1.05	10.97	-4.13
8/30/2022	5.37	2.31	4.95	-0.33	9.95	-5.32
8/24/2023	6.35	1.23	4.14	-1.67	8.97	-6.50

GWPS = 2 ug/L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

3/9/2025 0.69 2.00

Projected Year to Completion

3/8/2028

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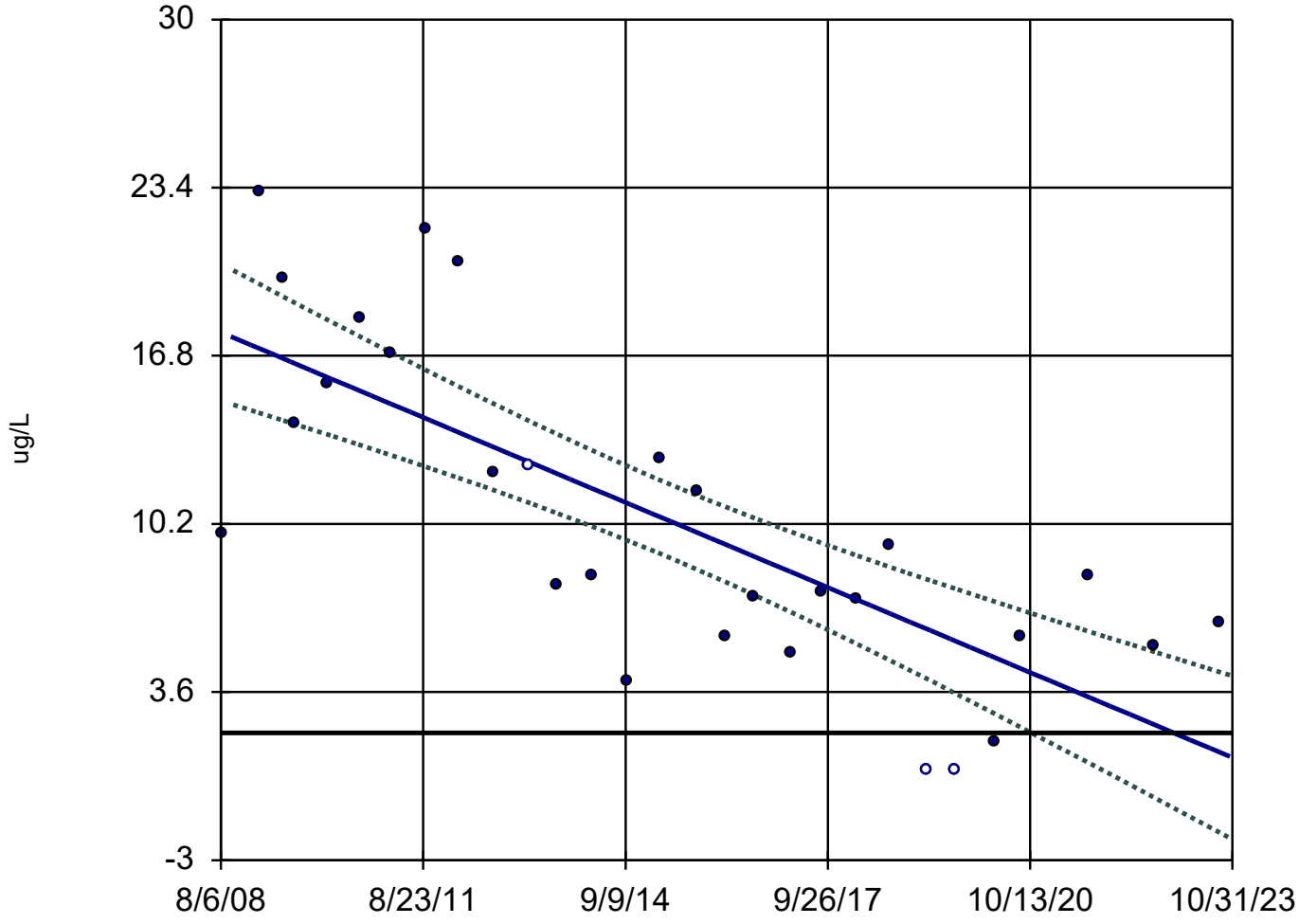
Hollow symbols indicate censored values.

Linear Regression and 90% Confidence Band

MW-34



n = 29
10.34% NDs

Slope = -1.095
units/year.

alpha = 0.02
t = -6.005
critical = -2.158

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9764, critical
= 0.898.

GWPS = 2 ug/L.

Constituent: Vinyl Chloride Analysis Run 11/14/2023 2:05 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Upper Bedrock Cobalt

GWPS as Background - *Two-Sample* Prediction Limit Testing Method

Prediction Limits in Corrective Action Mode [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations													
Cobalt (mg/L)	MW-105A	0.008	8/23/2023	0.00445	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-106A	0.008	8/22/2023	0.00913	Yes	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2
Corrective Action Monitoring Locations													
Cobalt (mg/L)	MW-35	0.008	8/28/2023	0.00535	No	36	n/a	n/a	33	n/a	n/a	0.001267	NP Inter (normality) 1 of 2

[1] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-37 and MW-101A data set. Note that background data set adjustments were incorporated in accordance with Section 3.1 of the Fall 2023 Statistical Evaluation memo.

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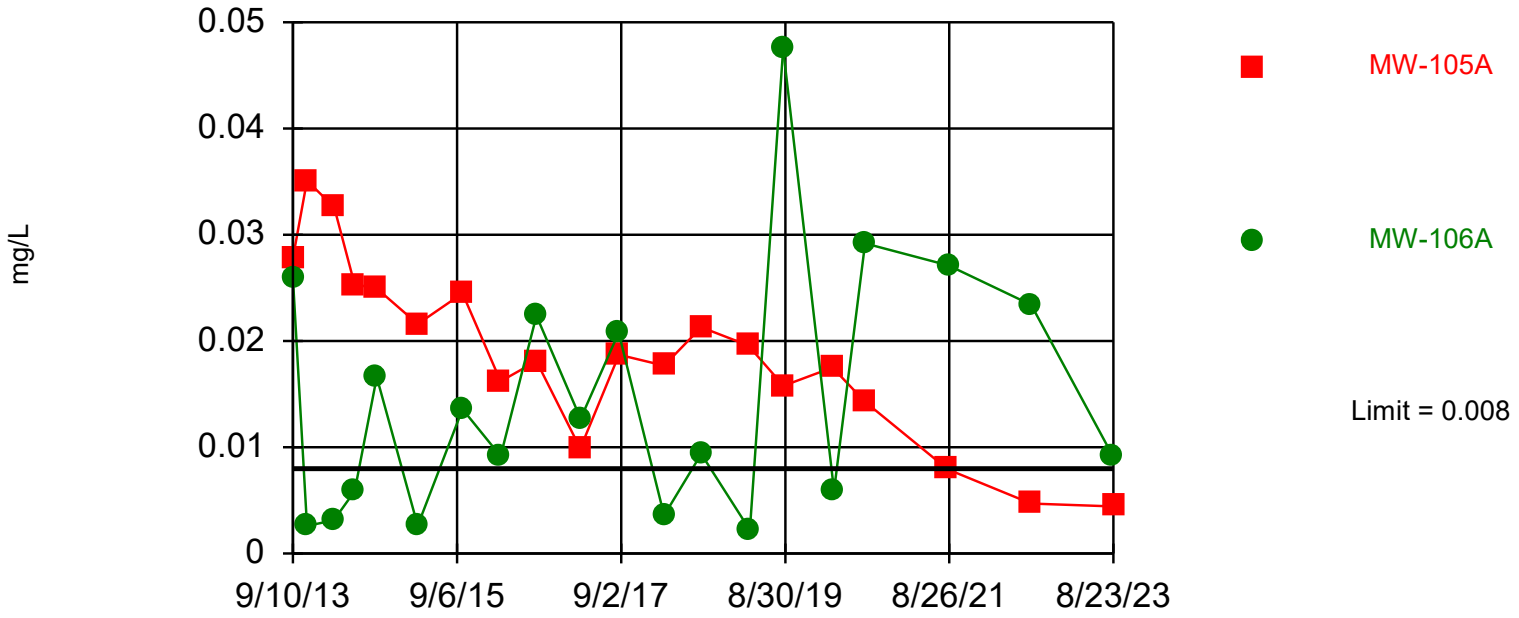
Exceeds Limit: MW-106A

Prediction Limit - Delineation Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/15/2023 2:21 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

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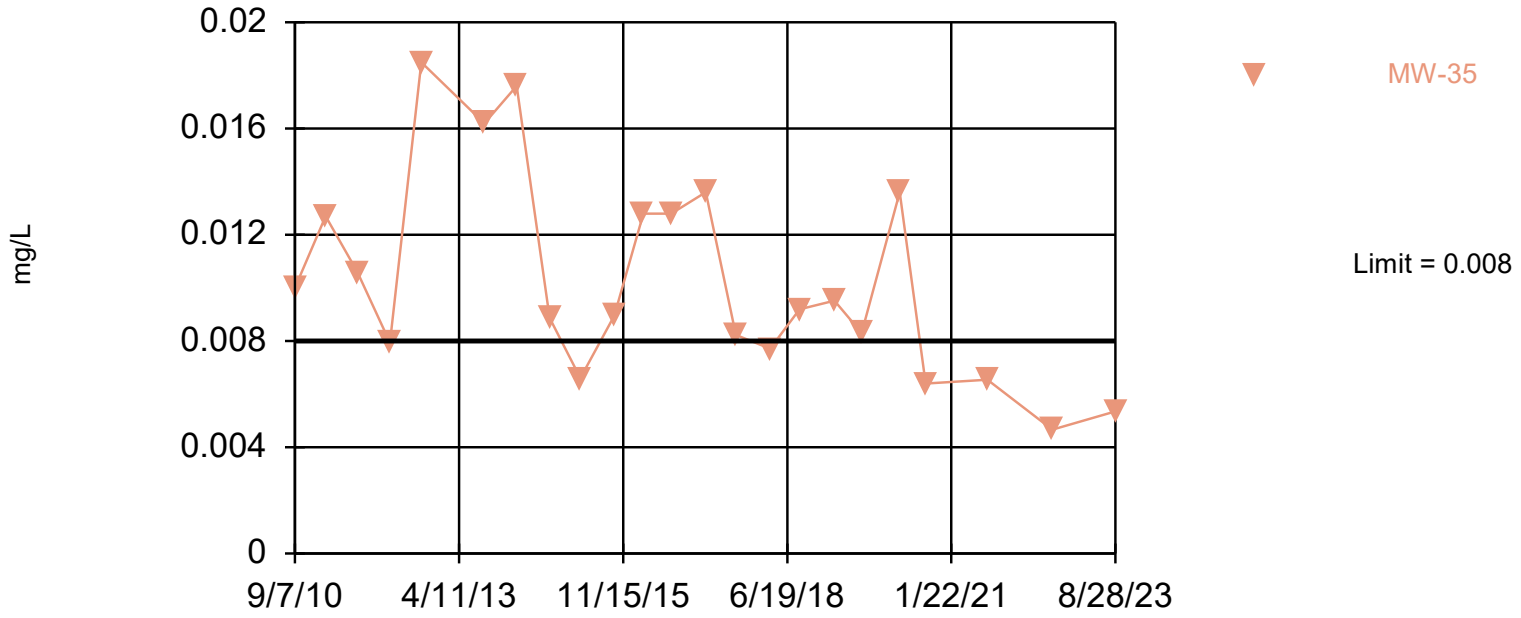
Within Limit

Prediction Limit - Corrective Action Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 36 background values. 33.33% NDs. Annual per-constituent alpha = 0.05664. Individual comparison alpha = 0.001267 (1 of 2).

Constituent: Cobalt Analysis Run 11/15/2023 2:24 PM

Linn County SWAL Data: Site 1 Upper Bedrock - Fall 2023 Evaluation

Deeper Bedrock

Confidence Interval - Corrective Action Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceeds	N	Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Delineation Monitoring Locations													
Arsenic (mg/L)	MW-109B	0.0211	0.0179	0.01	Yes	15	0.0195	0.0046	0	None	No	0.1	Param.
Cobalt (mg/L)	MW-105B	0.00333	0.00249	0.0021	Yes	16	0.0032	0.0013	0	None	No	0.1	NP (normality)
Cobalt (mg/L)	MW-109B	Evaluated with Linear Regression Confidence Band Testing Method. Significant Decreasing Trend in Data.											
Thallium (mg/L)	MW-109B	0.00506	0.00468	0.002	Yes	15	0.00487	0.00055	0	None	No	0.1	Param.
Corrective Action Monitoring Locations													
Arsenic (mg/L)	CRL-9	0.0397	0.0367	0.01	Yes	29	0.038	0.009	0	None	No	0.1	NP (normality)
Arsenic (mg/L)	MW-14	0.0273	0.0199	0.01	Yes	32	0.030	0.028	0	None	No	0.1	NP (normality)
Arsenic (mg/L)	MW-22	0.0501	0.0415	0.01	Yes	29	0.048	0.021	0	None	No	0.1	NP (normality)
Arsenic (mg/L)	MW-33	0.0380	0.0339	0.01	Yes	32	0.036	0.009	0	None	No	0.1	Param.
Arsenic (mg/L)	MW-36	0.0694	0.0586	0.01	Yes	29	0.063	0.018	0	None	No	0.1	NP (normality)
Cobalt (mg/L)	AW-6	0.00913	0.00848	0.0021	Yes	24	0.009	0.001	0	None	No	0.1	Param.
Cobalt (mg/L)	CRL-9	0.00503	0.00408	0.0021	Yes	16	0.005	0.001	0	None	No	0.1	Param.
Cobalt (mg/L)	MW-22	0.00318	0.00290	0.0021	Yes	16	0.003	0.000	0	None	No	0.1	Param.

[1] Under corrective action mode, an SSL is rejected when the upper confidence limit lies below the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

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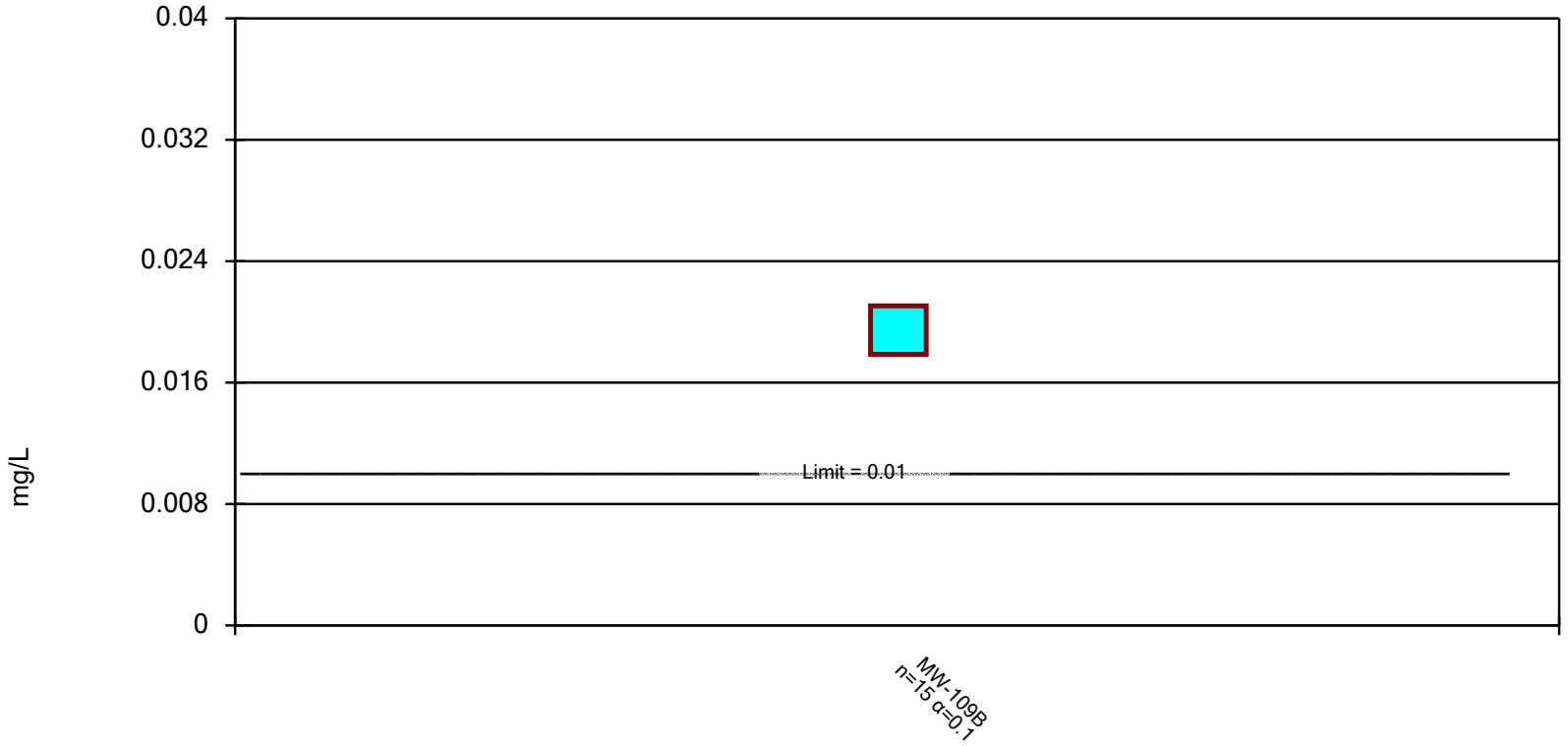
Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/13/2023 8:48 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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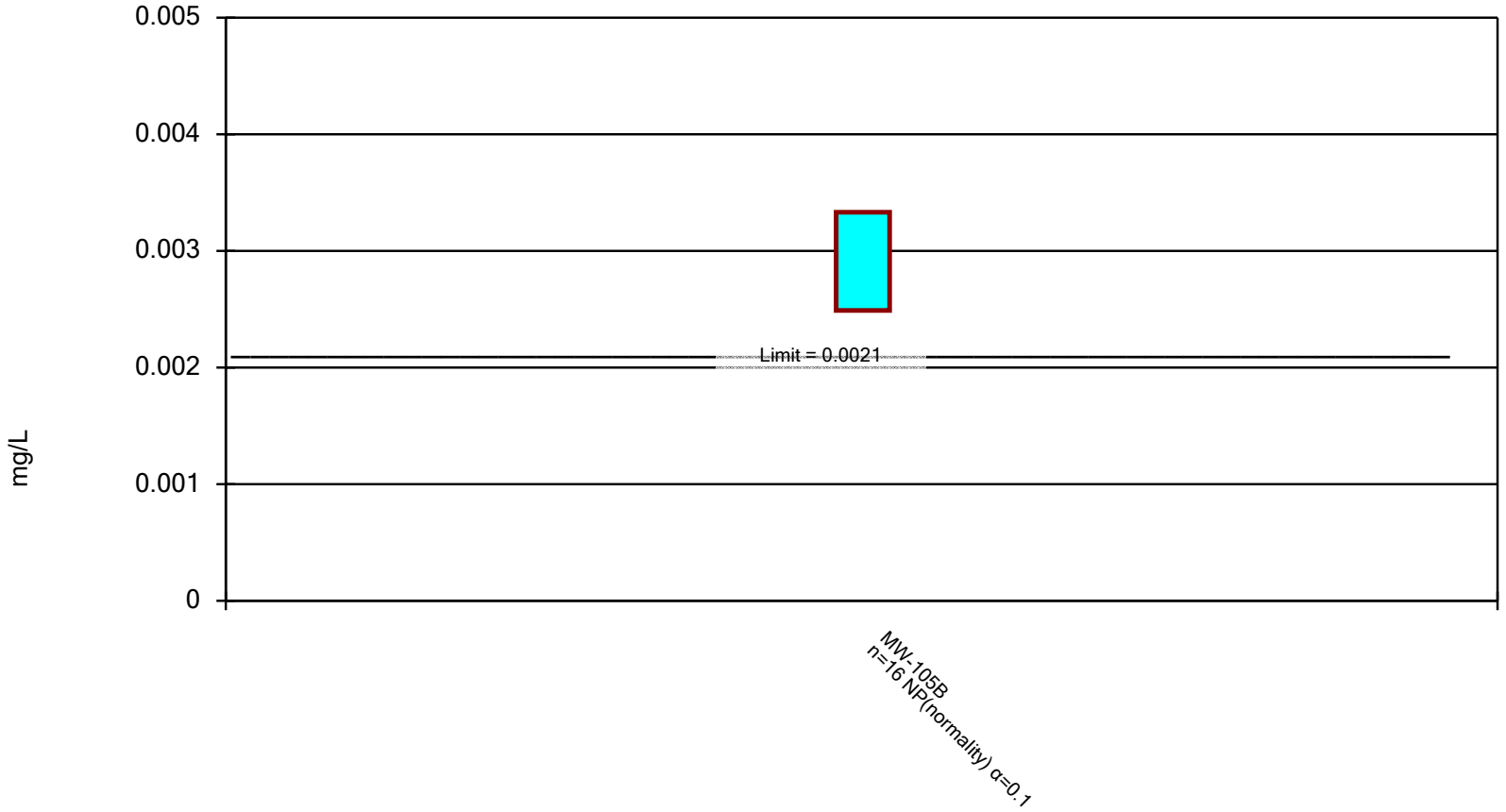
Non-Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.



Constituent: Cobalt Analysis Run 11/13/2023 8:48 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

MW-109B Cobalt Regression Analysis

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.626150476
R Square	0.392064419
Adjusted R Square	0.345300144
Standard Error	0.002334597
Observations	15

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	4.56948E-05	4.569E-05	8.3838446	0.01251587
Residual	13	7.08545E-05	5.45E-06		
Total	14	0.000116549			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.13290622	0.039318522	3.3802446	0.0049258	0.04796372	0.2178487	0.0479637	0.217848722
X Variable 1	-2.58762E-06	8.93675E-07	-2.895487	0.0125159	-4.518E-06	-6.57E-07	-4.518E-06	-6.56957E-07

X	Y	Predicted	Upper 95% CL	Lower 95% CL	Upper 95% PL	Lower 95% PL
11/27/2017	0.0269	0.02147	0.02328	0.01966	0.02598	0.01695
3/8/2018	0.0191	0.02121	0.02289	0.01952	0.02567	0.01674
6/15/2018	0.0232	0.02095	0.02252	0.01938	0.02537	0.01653
9/4/2018	0.0214	0.02074	0.02222	0.01926	0.02513	0.01635
11/27/2018	0.0192	0.02052	0.02191	0.01914	0.02488	0.01616
4/19/2019	0.016	0.02015	0.02141	0.01890	0.02447	0.01583
8/27/2019	0.0181	0.01982	0.02098	0.01866	0.02411	0.01552
3/31/2020	0.0184	0.01926	0.02033	0.01818	0.02353	0.01498
8/20/2020	0.0194	0.01889	0.01996	0.01781	0.02316	0.01462
3/25/2021	0.018	0.01833	0.01949	0.01717	0.02262	0.01403
8/23/2021	0.0168	0.01794	0.01921	0.01666	0.02226	0.01361
3/31/2022	0.0163	0.01737	0.01886	0.01587	0.02176	0.01297
8/25/2022	0.0191	0.01699	0.01865	0.01532	0.02144	0.01253
3/23/2023	0.0173	0.01644	0.01837	0.01451	0.02101	0.01188
8/24/2023	0.0169	0.01604	0.01818	0.01391	0.02070	0.01139

GWPS = 0.0021 mg//L

Projected Year to Attain Compliance with the GWPS (Assuming Future First Order Attenuation Instead of Linear Decay)

12/31/2067 -6.166 0.0021

Projected Year to Completion

12/30/2070

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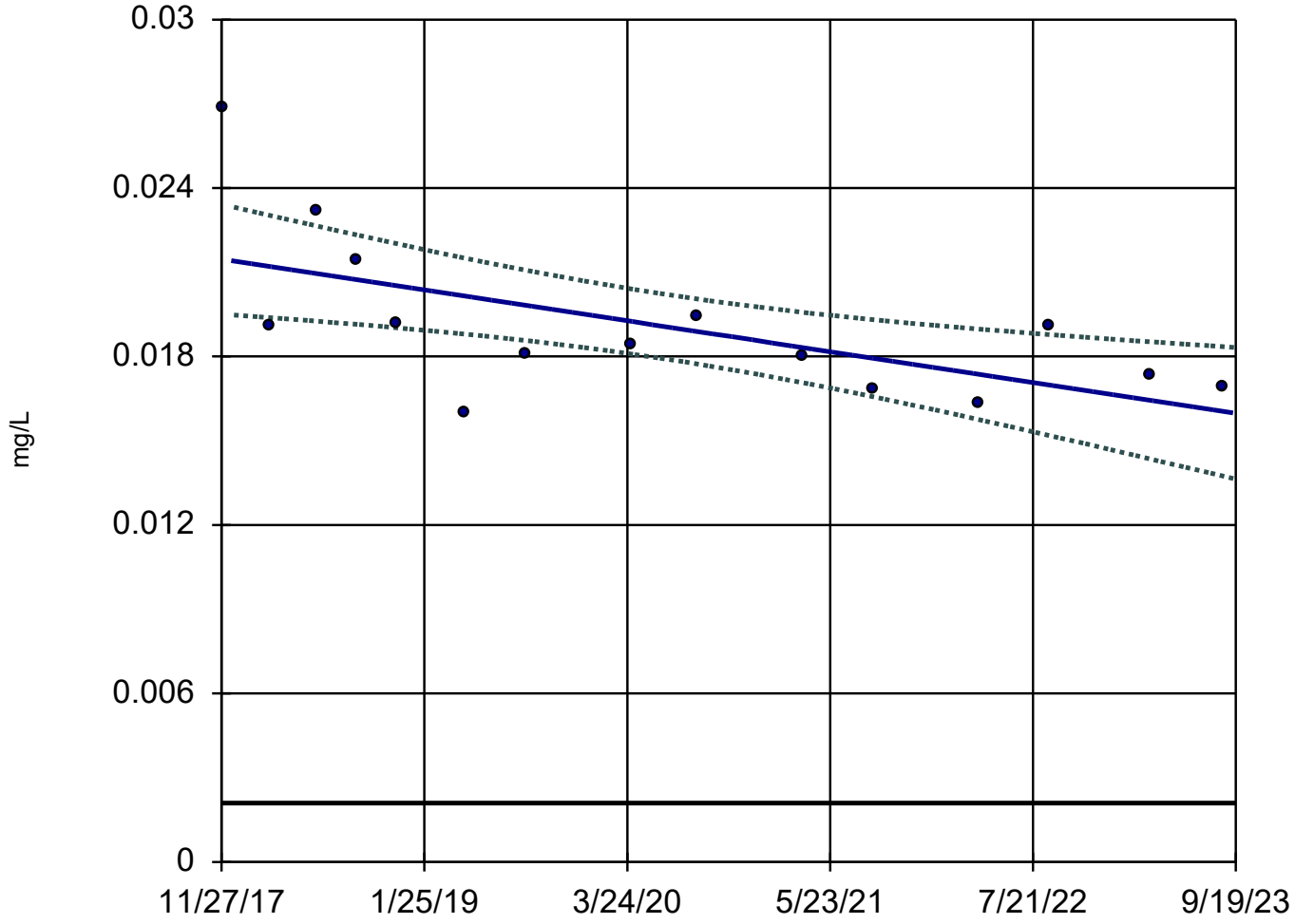
Linear Regression and 90% Confidence Band

MW-109B



n = 15

Slope = -0.0009451 units/year.

alpha = 0.02
t = -2.894
critical = -2.282

Significant decreasing trend.

Normality test on residuals:
Shapiro Wilk @alpha = 0.01, calculated = 0.9542, critical = 0.835.

GWPS = 0.0021.

Constituent: Cobalt Analysis Run 11/13/2023 9:05 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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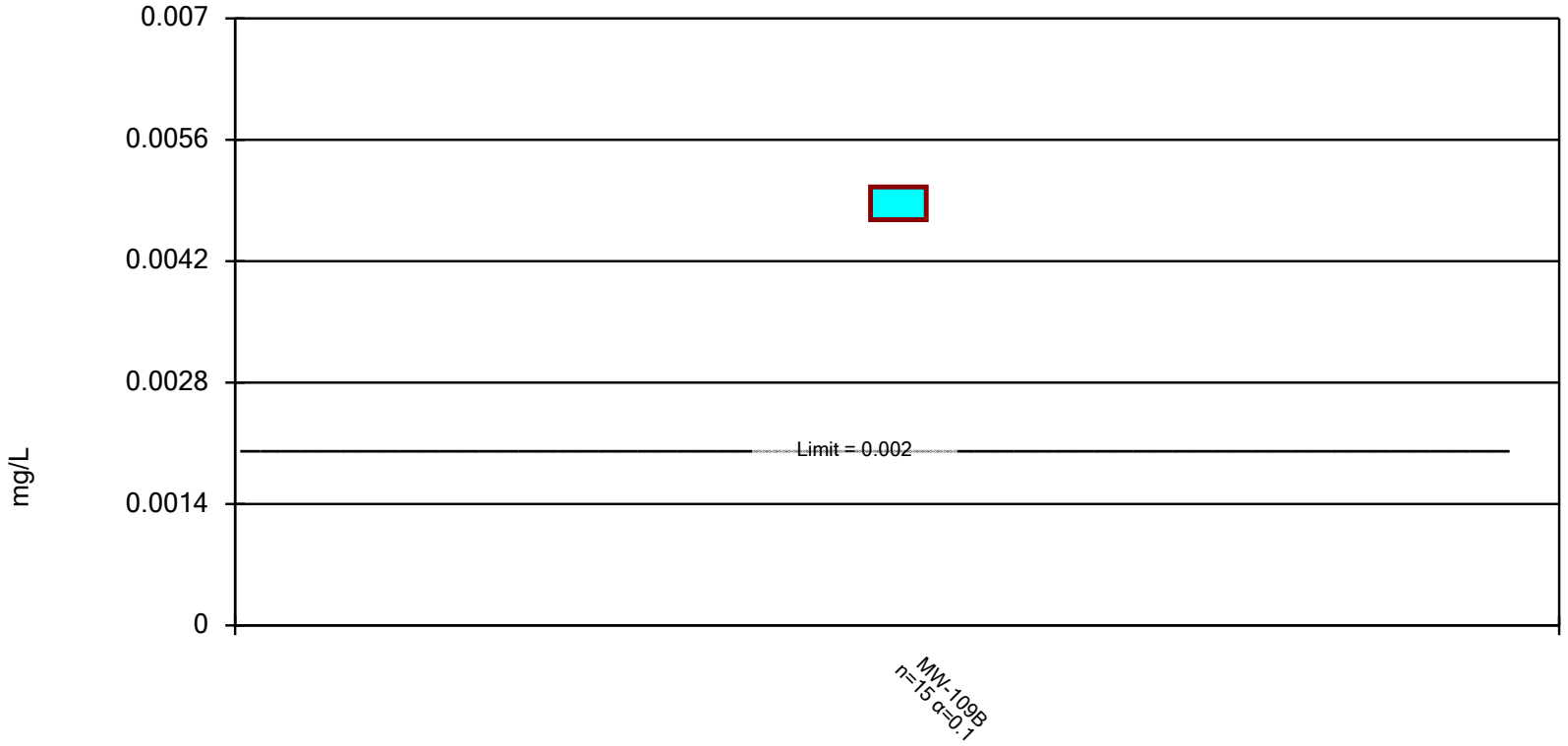
Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded. Normality Test: Shapiro Wilk, alpha based on n.



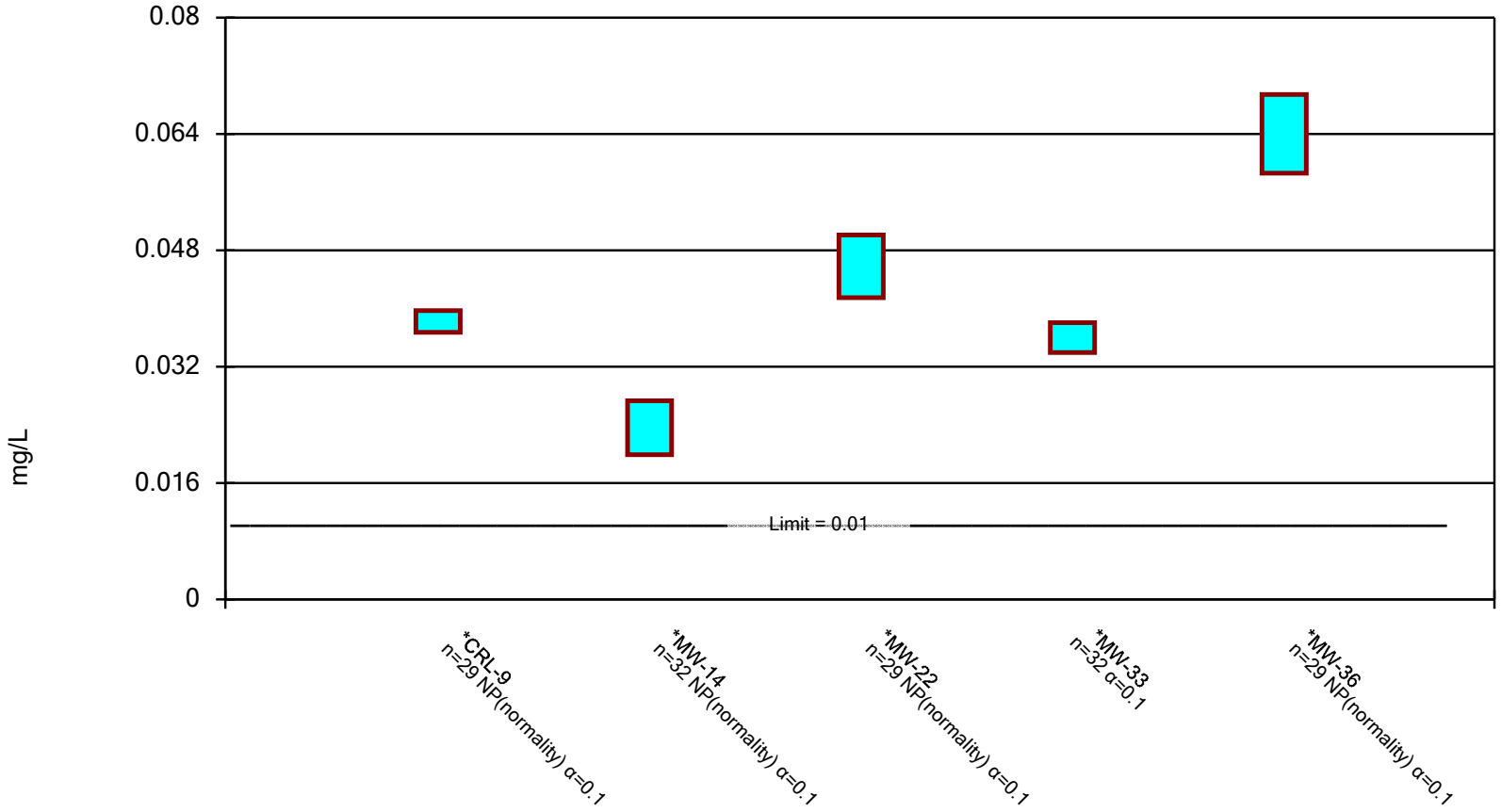
Constituent: Thallium Analysis Run 11/13/2023 8:48 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sanitas™ v.10.0.13 Software licensed to Foth Infrastructure & Environment, LLC. UG

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/13/2023 8:52 PM

Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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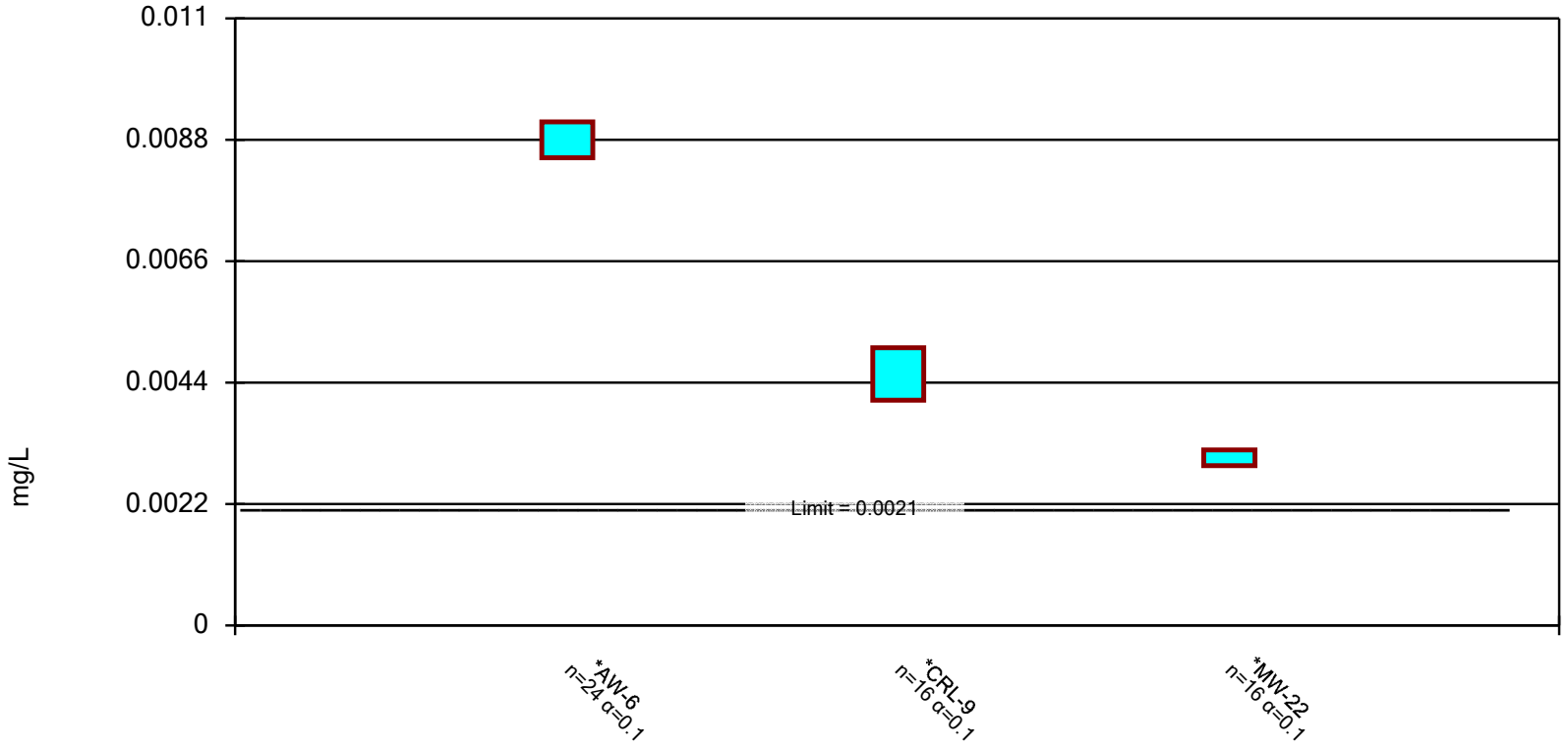
Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.



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Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Sample Values and Corresponding 1st-Order Regression Calculations for Date to Completion

	Upper Bedrock Corrective Action and Delineation Monitoring							
Date	AW-2 Arsenic mg/L	MW-13 Arsenic mg/L	MW-13 Arsenic mg/L	MW-16 Arsenic mg/L	MW-16 Arsenic mg/L	MW-32 Arsenic mg/L	MW-32 Arsenic mg/L	MW-106A Cobalt mg/L
			Start 3/2013		Start 3/2013		Start 3/2013	
2008/08	0.0435	0.0223		0.0368		0.051		
2009/03	0.0219	0.016		0.0739		0.0676		
2009/07	0.202	0.0355		0.0722		0.027		
2009/09	0.0159	0.0231		0.041		0.0456		
2010/03	0.0184	0.0139		0.114		0.0231		
2010/09	0.0167	0.0355		0.0869		0.0236		
2011/03	0.0165	0.0421		0.104		0.0971		
2011/09	0.0138	0.0341		0.0704		0.035		
2012/03	0.017	0.0262		0.122		0.0614		
2012/09	0.0216	0.0719		0.0673		0.065		
2013/03	0.0343	0.0455		0.194		0.127		
2013/05								
2013/09	0.0176	0.0475		0.137		0.146		0.0259
2013/11								0.00259
2014/03	0.022	0.0919		0.0966		0.085		0.00314
2014/06								0.00589
2014/09	0.0175	0.055		0.131		0.118		0.0166
2015/03	0.0533	0.0587		0.0839		0.11		0.00263
2015/09	0.0163			0.125		0.0506		
2015/10		0.0438						0.0136
2016/03	0.0148	0.0436		0.261		0.0373		0.00917
2016/08	0.0133	0.0412		0.239		0.0361		0.0224
2017/03	0.0148	0.0561		0.147		0.0328		0.0127
2017/08	0.0131	0.0429		0.157		0.0384		0.0208
2017/11								
2018/03	0.0161	0.0608		0.217		0.189		0.00358
2018/06								
2018/08	0.0141	0.0548		0.142		0.0639		0.00937
2018/09								
2018/11								
2019/03	0.014	0.0917		0.00836		0.0743		0.00222
2019/04								
2019/08	0.0143	0.072		0.0654		0.0253		0.0475
2020/03	0.0171	0.0553		0.0558		0.0702		
2020/04								0.0059
2020/08	0.0149	0.0663		0.187		0.0465		0.0292
2021/03		0.049		0.102		0.0889		
2021/08	0.0172	0.0717		0.0902		0.0272		0.0271
2022/03		0.0973		0.146		0.172		
2022/08	0.0157	0.0398		0.193		0.345		0.0234
2023/03		0.0534		0.0481		0.135		
2023/08	0.0173	0.0549		0.0775		0.207		0.00913
Aug. 2023 Sample	0.0173	0.0549	0.0549	0.0775	0.0775	0.207	0.207	0.00913
GWPS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.008
Regression Sample Size	29	32	22	32	22	32	22	20
Regression Slope	-0.0001477	0.000182342	4.26499E-05	4.45358E-05	-0.00016854	0.000167418	0.000103582	0.000269661
Regression y-Intercept	2.290723252	-10.8024224	-4.71290372	-4.21606332	5.083224322	-9.8083218	-7.02046518	-16.1766571
Regression *p*-level	0.024	0.000	0.393	0.544	0.227	0.024	0.455	0.173
Estimated Date to Attain GWPS	10/27/2027	No Attenuation	No Attenuation	No Attenuation	5/18/2057	No Attenuation	No Attenuation	No Attenuation
Projected Year to Completion	Oct-2030	No Attenuation	No Attenuation	No Attenuation	May-2060	No Attenuation	No Attenuation	No Attenuation

Sample Values and Corresponding 1st-Order Regression Calculations for Date to Completion

	Deeper Bedrock Corrective Action								
Date	AW-6 Cobalt mg/L	AW-6 Cobalt mg/L	CRL-9 Arsenic mg/L	CRL-9 Arsenic mg/L	CRL-9 Cobalt mg/L	CRL-9 Cobalt mg/L	MW-14 Arsenic mg/L	MW-22 Arsenic mg/L	MW-22 Arsenic mg/L
		Start 3/2012		Start 9/2010		Start 3/2015			Start 3/2015
2008/08			0.0369				0.0308	0.0282	
2009/03			0.0239				0.0224	0.0258	
2009/07			0.029				0.019	0.029	
2009/09			0.0392				0.019	0.0334	
2010/03			0.019				0.0155	0.025	
2010/09	0.00636		0.0428				0.0216	0.0442	
2011/03	0.00834		0.0466				0.0237	0.0433	
2011/09	0.00615		0.0382				0.0296	0.0316	
2012/03	0.00948		0.0372				0.0327	0.0415	
2012/09	0.00999		0.0326				0.0201	0.0339	
2013/03	0.00882		0.0712				0.139	0.141	
2013/05									
2013/09	0.0074		0.034				0.0199	0.0395	
2013/11									
2014/03	0.00827		0.0415				0.0153	0.0421	
2014/06									
2014/09	0.0079		0.0329		0.00163		0.0234	0.0401	
2015/03	0.00881		0.0394		0.0058		0.0164	0.0558	
2015/09	0.00912		0.0417		0.00411			0.0473	
2015/10							0.0286		
2016/03	0.00985		0.039		0.00574		0.0248	0.0574	
2016/08	0.00924		0.04		0.00422		0.0346	0.0471	
2017/03	0.00942		0.0307		0.00373		0.0244	0.0501	
2017/08	0.00788		0.0319		0.00397		0.0264	0.0414	
2017/11									
2018/03	0.00981		0.0412		0.00602		0.0291	0.0669	
2018/06									
2018/08	0.00918		0.0397		0.00493		0.0105		
2018/09								0.0464	
2018/11									
2019/03	0.0118		0.0543		0.00234		0.115	0.0655	
2019/04									
2019/08	0.00792		0.0413		0.00431		0.0633	0.0436	
2020/03			0.0367		0.00572		0.0317	0.0585	
2020/04	0.00876								
2020/08	0.009		0.0332		0.00411		0.0197	0.0525	
2021/03							0.0281		
2021/08	0.00852		0.0413		0.00741		0.0273	0.0517	
2022/03							0.0129		
2022/08	0.00919		0.037		0.00401		0.0108	0.0523	
2023/03									
2023/08	0.01		0.0335		0.00489			0.0566	
Aug. 2023 Sample	0.01	0.01	0.0335	0.0335	0.00489	0.00489	0.0142	0.0566	0.0566
GWPS	0.0021	0.0021	0.01	0.01	0.0021	0.0021	0.01	0.01	0.01
Regression Sample Size	24	21	29	24	16	15	32	29	15
Regression Slope	4.8153E-05	1.6013E-05	2.9597E-05	-2.751E-05	0.00011308	1.0737E-05	-4.892E-05	0.00011924	2.1986E-05
Regression y-Intercept	-6.7916048	-5.3945675	-4.5395116	-2.0676942	-10.343315	-5.8476283	-1.6526509	-8.1227671	-3.9030534
Regression *p* -level	0.024	0.421	0.299	0.337	0.263	0.897	0.448	0.002	0.600
Estimated Date to Attain GWPS	No Attenuation	No Attenuation	No Attenuation	7/2/2152	No Attenuation	No Attenuation	4/1/2065	No Attenuation	No Attenuation
Projected Year to Completion	No Attenuation	No Attenuation	No Attenuation	Jul-2155	No Attenuation	No Attenuation	Mar-2068	No Attenuation	No Attenuation

Sample Values and Corresponding 1st-Order Regression Calculations for Date to Completion

	Deeper Bedrock Corrective Action and Delineation Monitoring								
Date	MW-22 Cobalt mg/L	MW-33 Arsenic mg/L	MW-33 Arsenic mg/L	MW-36 Arsenic mg/L	MW-36 Arsenic mg/L	MW-105B Cobalt mg/L	MW-109B Arsenic mg/L	MW-109B Arsenic mg/L	MW-109B Thallium mg/L
			Start 3/2015		Start 3/2011			Start 11/2018	
2008/08		0.0249		0.0372					
2009/03		0.0233		0.0441					
2009/07		0.0248		0.0413					
2009/09		0.023		0.0358					
2010/03		0.0262		0.0443					
2010/09		0.0272		0.0382					
2011/03		0.0341		0.0696					
2011/09		0.0283		0.0592					
2012/03		0.0292		0.0633					
2012/09		0.0261		0.071					
2013/03		0.027		0.134					
2013/05									
2013/09		0.0324		0.0701					
2013/11									
2014/03		0.0297		0.075					
2014/06									
2014/09	0.00338	0.0271		0.0585		0.00224			
2015/03	0.00272	0.0442		0.0683		0.00233			
2015/09	0.00246	0.0422		0.0659					
2015/10						0.00249			
2016/03	0.00345	0.0425		0.0586		0.00227			
2016/08	0.00246	0.0379		0.0531		0.00224			
2017/03	0.00327	0.038		0.0519		0.00276			
2017/08	0.0028	0.0428		0.0656		0.00264			
2017/11							0.00987		0.00463
2018/03	0.00271	0.0469		0.0694		0.00294	0.0138		0.0052
2018/06							0.0152		0.00513
2018/08		0.0413		0.0703		0.00297			
2018/09	0.00246						0.0166		0.00531
2018/11							0.0201	0.00453	0.00453
2019/03	0.0034	0.0461		0.0534		0.00333			
2019/04							0.0253	0.00464	0.00464
2019/08	0.00306	0.0454		0.0619		0.00499	0.0197	0.00482	0.00482
2020/03	0.00322	0.0474		0.0714		0.00372	0.0276	0.00557	0.00557
2020/04									
2020/08	0.00383	0.0477		0.0719		0.00732	0.0243	0.00446	0.00446
2021/03		0.0514					0.0224	0.00525	0.00525
2021/08	0.00328	0.0351		0.0633		0.00383	0.0189	0.00475	0.00475
2022/03		0.0326					0.0168	0.00456	0.00456
2022/08	0.00272	0.037		0.0745		0.00277	0.0219	0.00557	0.00557
2023/03		0.0399					0.0202	0.00515	0.00515
2023/08	0.00338	0.0496		0.072		0.00315	0.0192	0.00342	0.00342
Aug. 2023 Sample	0.00338	0.0496	0.0496	0.072	0.072	0.00315	0.0192	0.0192	0.00342
GWPS	0.0021	0.01	0.01	0.01	0.01	0.0021	0.01	0.01	0.002
Regression Sample Size	16	32	18	29	23	16	15	11	15
Regression Slope	4.231E-05	0.0001197	-7.16E-06	8.326E-05	-1.475E-05	0.00019147	0.00016185	-0.00010666	-4.9033E-05
Regression y-Intercept	-7.6382022	-8.4253866	-2.8493436	-6.3149977	-2.0728277	-14.0769316	-11.0853435	0.86979654	-3.17599542
Regression *p* -level	0.271	0.000	0.826	0.008	0.638	0.019	0.108	0.184	0.311
Estimated Date to Attain GWPS	No Attenuation	No Attenuation	6/3/2571	No Attenuation	12/13/2369	No Attenuation	No Attenuation	7/15/2040	8/30/2069
Projected Year to Completion	No Attenuation	No Attenuation	Jun-2574	No Attenuation	Dec-2372	No Attenuation	No Attenuation	Jul-2043	Aug-2072

Attachment 6

Effective Power and Site-Wide False Positive Rate Discussion

Effective Power and Site-Wide False Positive Rate

Statistical power refers to the ability of a test to identify real increases in concentration levels given they exist. The Unified Guidance defines the effective power as the "probability of detecting contamination in the monitoring network when one and only one well-constituent pair is contaminated." It further states that any statistical test procedure with effective power at least as high as the appropriate USEPA Reference Power Curve (ERPC) should be considered to have reasonable power.

The Unified Guidance gives the following criteria for comparing the effective power to the ERPC:

If the effective power first exceeds the ERPC at a mean concentration increase no greater than 3 background standard deviations, the power is labeled 'good;' if the effective power first exceeds the ERPC at a mean increase between 3 and 4 standard deviations, the power is considered 'acceptable;' and if the first exceedance of the ERPC does not occur until an increase greater than 4 standard deviations, the power is considered 'low.'

Effective power curves were developed with Sanitas for the 1-of-2 prediction limit plan, with power curves illustrated below. Based on the power curves, the parametric and non-parametric prediction limits have good power.

The Unified Guidance "strongly encourages use of a comprehensive design strategy to account for both the cumulative SWFPR and effective power to identify real exceedances." The Unified Guidance recommends and uses an annual SWFPR target of 10%. The current annual SWFPR based on the 1-of-2 prediction limit plan may be calculated using the basic subdivision principle discussed in Unified Guidance Sections 6.2.2, 19.2.1 and 19.4.

Currently, comparisons were made at 9 wells semiannually and 43 wells annually. Based on the Sanitas prediction limit output summarized in Attachment 2 of the Spring and Fall 2023 statistical evaluations, a total of 252 well/constituent pairs resulted for the upper bedrock, and 164 well/constituent pairs for the deeper bedrock, totaling 416 well/ constituent pairs annually for the site.

The cumulative annual SWFPR can be approximated directly from the α-levels reported in the Sanitas output as SWFPR $= 1 - \prod_{i=1}^{416}(1 - \alpha_i) = 0.279 \approx 28\%$. The current annual SWFPR is higher than the Unified Guidance target 10% false positive rate due to moving from a 1-of-3 to the 1-of-2 prediction plan starting with the Spring 2021 statistical evaluation and the relatively large number of downgradient comparisons with nonparametric prediction limits. Given the number of non-parametric prediction limit evaluations, a background sample size of approximately 80-90 is needed to reduce the SWFPR once again to the 10% target level.

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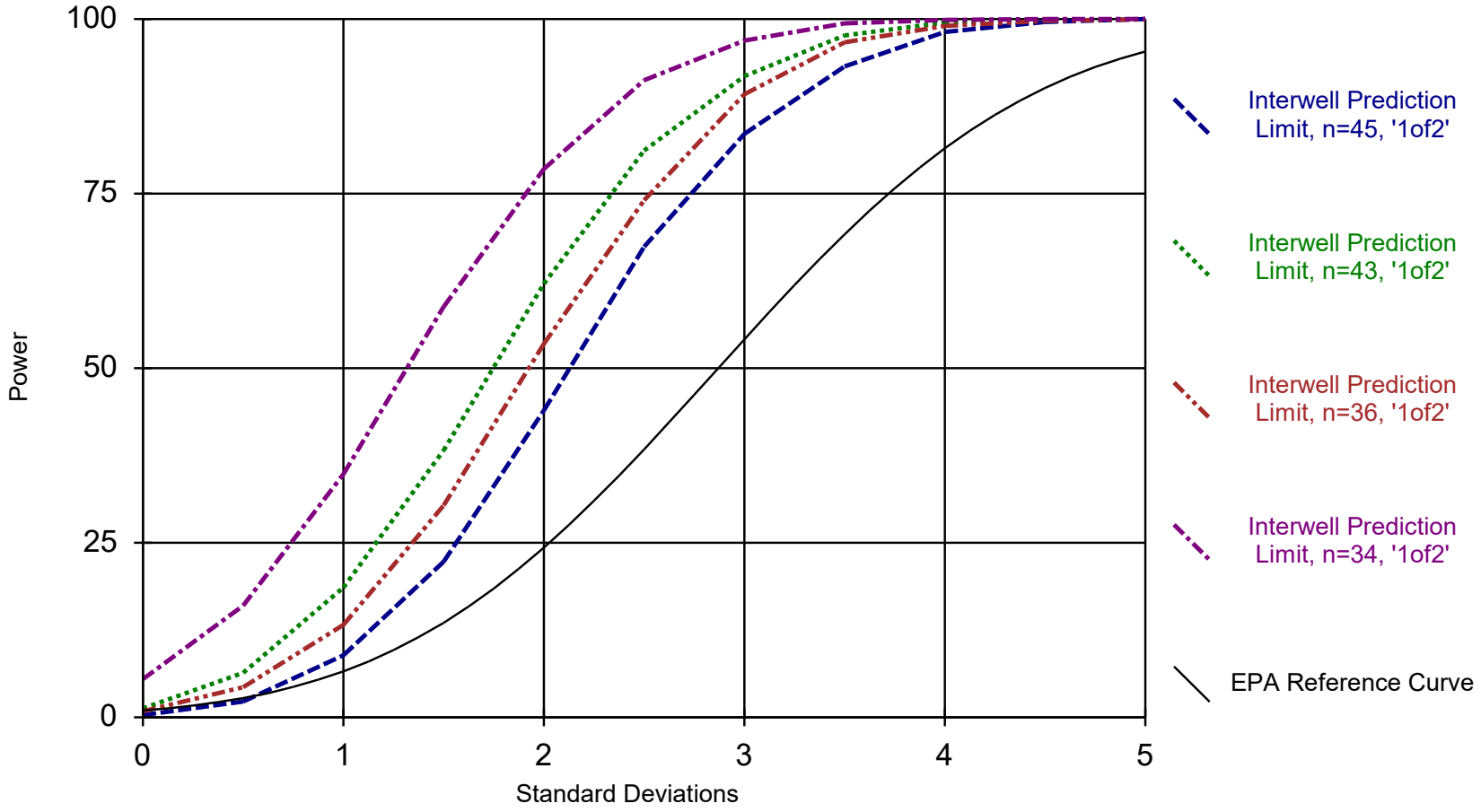
Parametric Power Curves



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Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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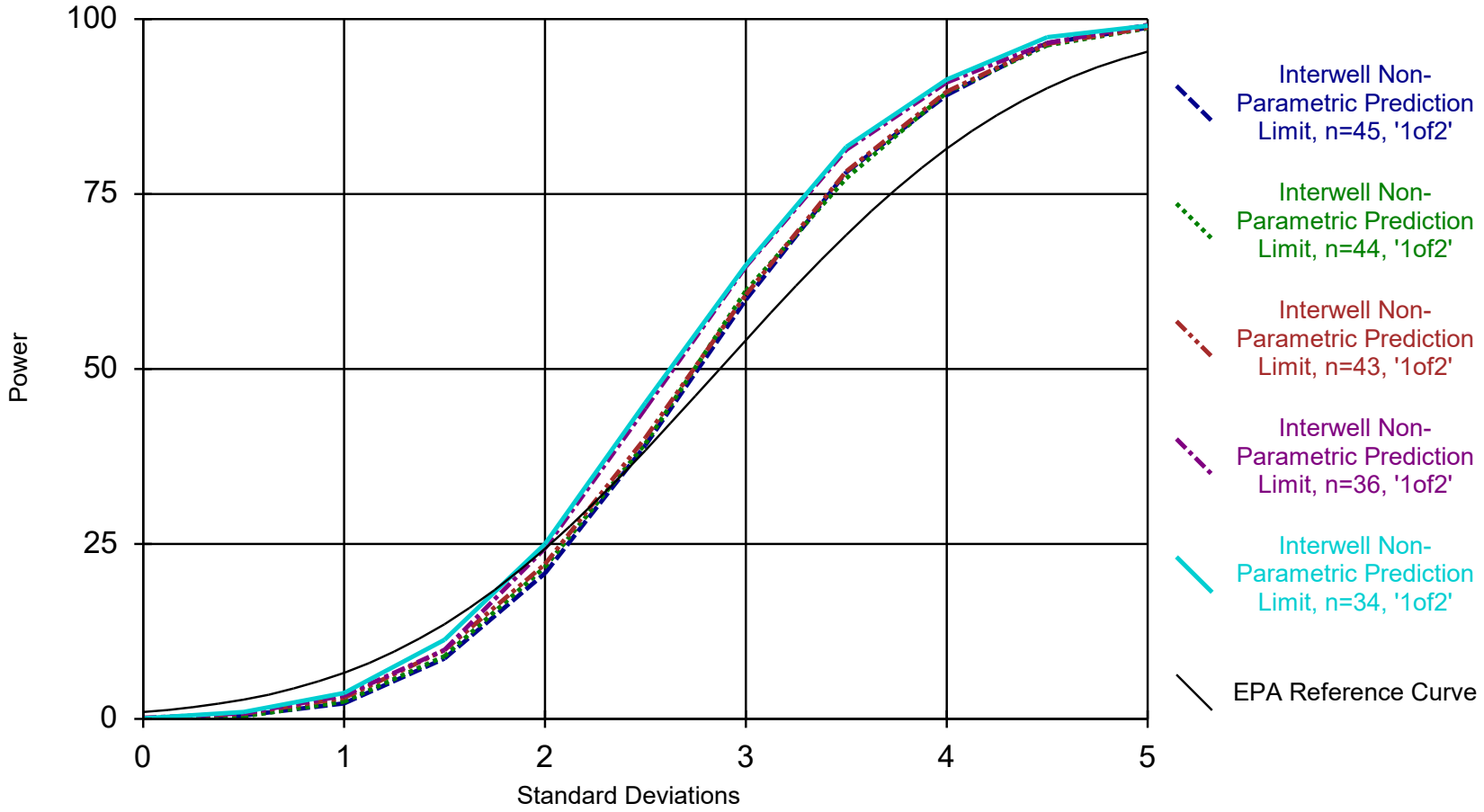
Non-Parametric Power Curves



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Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

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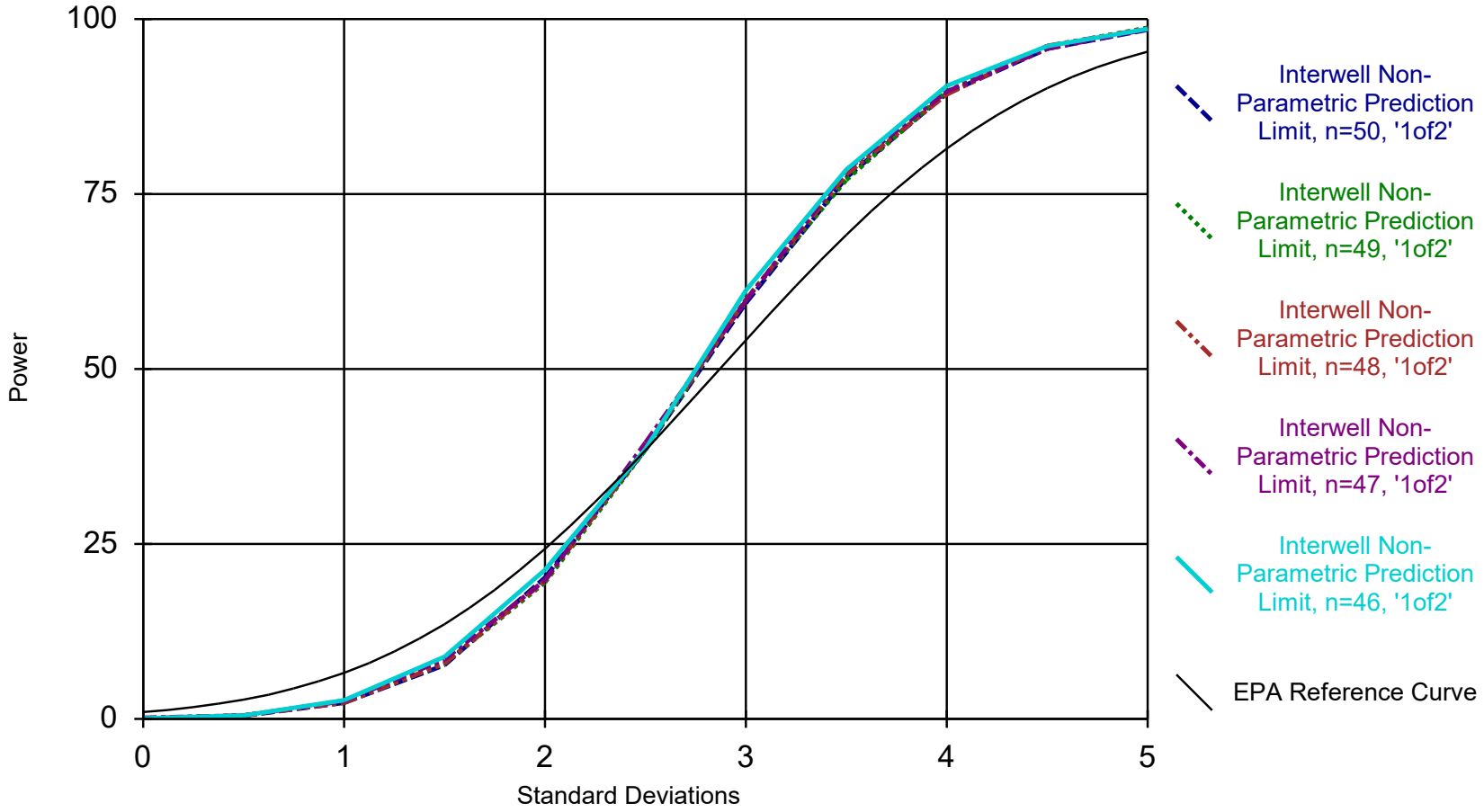
Non-Parametric Power Curves



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Linn County SWAL Data: Site 1 Deeper Bedrock - Fall 2023 Evaluation

Attachment 7

References

References

Foth Infrastructure and Environment (Foth), 2012. *2011 Annual Water Quality Report, Cedar Rapids/Linn County Solid Waste Agency Site No.1, IDNR Permit No. 57-SDP-03-75C, Project ID: 11C050.00*. December 29. [Doc. #68145].

Iowa Department of Natural Resources (Matthew R. Phoenix, P.E.), Letter to Karmin McShane, 12 May 2016. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill (Site #1 – Cedar Rapids), 2015 Annual Water Quality Report and 2015 Statistical Notifications, Permit No. 57-SDP-03-75C." [Doc. #86317].

Iowa Department of Natural Resources (Matthew Graesch), Letter to Karmin McShane, 20 Nov 2017. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, Response to Fall 2017 Statistical Notifications (doc #90813)." [Doc. #90850].

Iowa Department of Natural Resources (Matthew Graesch), Letter to Karmin McShane, 16 April 2019. "Cedar Rapids/Linn County Solid Waste Agency Sanitary Landfill #1, Permit No. 57-SDP-03-75C, 2019 Annual Water Quality Report (Doc. No. 94330)." [Doc. #94910].

United States Environmental Protection Agency (USEPA), 1997. *The Lognormal Distribution in Environmental Applications*. EPA/600/R97/006. Office of Solid Waste and Emergency Response, Washington, D.C.

USEPA, 2006. *On the Computation of a 95% Upper Confidence Limit of the Unknown Population Mean Based Upon Data Sets with Below Detection Limit Observations*. EPA/600/R-06/022. Office of Research and Development, Washington, D.C.

USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. EPA 530-R-09-007. Office of Resource Conservation and Recovery, Program Implementation and Information Division, Washington, D.C.

Appendix C
Leachate Sample Analytical Results

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Avenue SE
Suite 400
Cedar Rapids, Iowa 52401

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JOB DESCRIPTION

Site 1 Leachate

JOB NUMBER

310-269165-1

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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Authorized for release by
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Job ID: 310-269165-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-269165-1

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 sample was received on 11/8/2023 3:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-405662 recovered above the upper control limit for Trichloroethene (21.0 %D). The laboratory control sample (LCS) associated with this CCV were within CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-405662/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-405662 recovered above the upper control limit for Trichlorofluoromethane (29.3 %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 310-405662/3).

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 continuing calibration verification (CCV) associated with batch 310-405957 recovered above the upper control limit for Hexachlorocyclopentadiene (40.9%D) and 2-Nitrophenol (24.0%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 310-405356 and analytical batch 310-405957 recovered outside control limits for the following analytes: Pyridine.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-405356 and analytical batch 310-405957 recovered outside control limits for the following analytes: 2-Chloroaniline and Pyridine.

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-405954 recovered above the upper control limit for Methyl parathion (26.3%D), Ethyl Parathion (21.4%D), o,o',o''-Triethylphosphorothioate (22.3%D), 1,3,5-Trinitrobenzene (61.6%D), Kepone (95.5%D), Hexachloropropene (43.8%D), Chlorobenzilate (41.2%D) and Dinoseb (122%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) for preparation batch 310-405356 and analytical batch 310-405954 recovered outside control limits for the following analytes: Famphur, Kepone, 1,3,5-Trinitrobenzene, Dinoseb and 2-Nitrophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-405356 and analytical batch 310-405954 recovered outside control limits for the following analyte(s): 3,3'-Dimethylbenzidine, p-Phenylene diamine and Methapyrilene. 3,3'-Dimethylbenzidine, p-Phenylene diamine and Methapyrilene have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed

Job ID: 310-269165-1 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 310-405356 and analytical batch 310-405954 recovered outside control limits for the following analytes: Famphur, Kepone, 4-Aminobiphenyl, 1,3,5-Trinitrobenzene and Dinoseb. These analytes were biased high in the LCSD and were not detected in the associated samples; 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 310-405356 and analytical batch 310-405954 recovered outside control limits for the following analytes: 2-Naphthylamine and Hexachloropropene.

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

Herbicides

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

PCBs

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

Pesticides

Method 8081B: The continuing calibration verification (CCV) associated with batch 310-405682 recovered above the upper control limit for Methoxychlor. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

HPLC/IC

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

Metals

Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: Site 1_Leachate_23_11 (310-269165-1). The sample(s) was preserved to the appropriate pH in the laboratory.

Method 7470A: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: Site 1_Leachate_23_11 (310-269165-1). The sample(s) was preserved to the appropriate pH in the laboratory.

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

General Chemistry

Method SM5210B_Calc: All the dilutions failed to deplete the method-required 2 mgO2/L for the following samples: Site 1_Leachate_23_11 (310-269165-1). Only a "less than" result could be calculated from the least dilute preparation.

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

Sample Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-269165-1	Site 1_Leachate_23_11	Water	11/08/23 10:00	11/08/23 15:40

Detection Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.487	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	1.60		1.00	0.420	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	0.941	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	5.35		1.00	0.230	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	16.2		10.0	2.10	ug/L	1		8260D	Total/NA
Acetone	4.80	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	3.86		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	3.16		1.00	0.400	ug/L	1		8260D	Total/NA
Ethylbenzene	2.08		1.00	0.310	ug/L	1		8260D	Total/NA
Isopropylbenzene	1.36		1.00	0.350	ug/L	1		8260D	Total/NA
Naphthalene	4.33	J	5.00	3.00	ug/L	1		8260D	Total/NA
Toluene	0.954	J	1.00	0.430	ug/L	1		8260D	Total/NA
Xylenes, Total	11.0		3.00	0.400	ug/L	1		8260D	Total/NA
Acenaphthene	1.23	J	10.6	0.681	ug/L	1		8270E	Total/NA
Acetophenone	1.01	J	10.6	0.734	ug/L	1		8270E	Total/NA
Bis(2-ethylhexyl) phthalate	8.59	J	10.6	5.85	ug/L	1		8270E	Total/NA
Butyl benzyl phthalate	6.97	J	10.6	5.74	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	1.76	J	10.6	0.628	ug/L	1		8270E	Total/NA
3-Nitroaniline	6.44	J	10.6	2.87	ug/L	1		8270E	Total/NA
Chloride	1340		20.0	9.00	mg/L	20		9056A	Total/NA
Nitrate as N	1.48		0.200	0.0780	mg/L	1		9056A	Total/NA
Arsenic	0.00506		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	1.28		0.00200	0.000640	mg/L	1		6020B	Total/NA
Chromium	0.0121		0.00500	0.00110	mg/L	1		6020B	Total/NA
Iron	1.74		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	211		2.00	0.600	mg/L	4		6020B	Total/NA
Nickel	0.0422		0.00500	0.00190	mg/L	1		6020B	Total/NA
Potassium	318		2.00	0.600	mg/L	4		6020B	Total/NA
Total Volatile Solids	890		250	250	mg/L	1		2540E	Total/NA
Fixed Solids	3780		250	250	mg/L	1		2540E	Total/NA
Ammonia	299		46.9	20.6	mg/L	9.38		350.1	Total/NA
Total Kjeldahl Nitrogen	344		50.0	27.5	mg/L	10		351.2	Total/NA
Total Phosphorus as P	1.90		0.500	0.310	mg/L	1		365.1	Total/NA
Phosphorus as PO4	5.83		1.55	0.950	mg/L	1		365.1	Total/NA
pH	7.07	HF	1.00	1.00	SU	1		9040C	Total/NA
Total Suspended Solids	5.00		5.00	1.70	mg/L	1		I-3765-85	Total/NA
Total Solids	4670		250	210	mg/L	1		SM 2540B	Total/NA
Total Dissolved Solids	4610		250	170	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	505		25.0	24.0	mg/L	5		SM 5220D	Total/NA
Orthophosphate as P	1.35	F1	1.00	0.320	mg/L	10		365.1	Dissolved

This Detection Summary does not include radiochemical test results.

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1
Date Collected: 11/08/23 10:00
Matrix: Water
Date Received: 11/08/23 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			11/11/23 09:53	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			11/11/23 09:53	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			11/11/23 09:53	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			11/11/23 09:53	1
1,1-Dichloroethane	**0.487**	**J**	1.00	0.220	ug/L			11/15/23 13:43	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			11/11/23 09:53	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			11/11/23 09:53	1
1,2,3-Trichlorobenzene	<0.900		5.00	0.900	ug/L			11/11/23 09:53	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			11/11/23 09:53	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			11/11/23 09:53	1
1,2,4-Trimethylbenzene	**1.60**		1.00	0.420	ug/L			11/15/23 13:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			11/11/23 09:53	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			11/11/23 09:53	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			11/11/23 09:53	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			11/11/23 09:53	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			11/11/23 09:53	1
1,3,5-Trimethylbenzene	**0.941**	**J**	1.00	0.370	ug/L			11/15/23 13:43	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			11/11/23 09:53	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			11/11/23 09:53	1
1,4-Dichlorobenzene	**5.35**		1.00	0.230	ug/L			11/15/23 13:43	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			11/11/23 09:53	1
2-Butanone (MEK)	**16.2**		10.0	2.10	ug/L			11/15/23 13:43	1
2-Chloroethyl vinyl ether	<1.70		2.00	1.70	ug/L			11/11/23 09:53	1
2-Chlorotoluene	<0.280		1.00	0.280	ug/L			11/11/23 09:53	1
4-Chlorotoluene	<0.290		1.00	0.290	ug/L			11/15/23 13:43	1
Acetone	**4.80**	**J**	10.0	3.10	ug/L			11/15/23 13:43	1
Benzene	**3.86**		0.500	0.220	ug/L			11/15/23 13:43	1
Bromobenzene	<0.340		1.00	0.340	ug/L			11/11/23 09:53	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			11/11/23 09:53	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			11/11/23 09:53	1
Bromoform	<0.780		5.00	0.780	ug/L			11/11/23 09:53	1
Bromomethane	<1.10		4.00	1.10	ug/L			11/11/23 09:53	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			11/11/23 09:53	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			11/11/23 09:53	1
Chlorobenzene	**3.16**		1.00	0.400	ug/L			11/15/23 13:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			11/11/23 09:53	1
Chloroethane	<0.790		4.00	0.790	ug/L			11/11/23 09:53	1
Chloroform	<1.30		3.00	1.30	ug/L			11/11/23 09:53	1
Chloromethane	<0.610		3.00	0.610	ug/L			11/11/23 09:53	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			11/11/23 09:53	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			11/11/23 09:53	1
Dibromomethane	<0.330		1.00	0.330	ug/L			11/11/23 09:53	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			11/11/23 09:53	1
Ethylbenzene	**2.08**		1.00	0.310	ug/L			11/15/23 13:43	1
Hexachlorobutadiene	<1.40		5.00	1.40	ug/L			11/11/23 09:53	1
Hexane	<0.780		1.00	0.780	ug/L			11/11/23 09:53	1
Isopropylbenzene	**1.36**		1.00	0.350	ug/L			11/15/23 13:43	1
Methyl tert-butyl ether	<0.490		1.00	0.490	ug/L			11/11/23 09:53	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			11/11/23 09:53	1

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1
Date Collected: 11/08/23 10:00
Matrix: Water
Date Received: 11/08/23 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**4.33**	**J**	5.00	3.00	ug/L			11/15/23 13:43	1
n-Butylbenzene	<0.440		1.00	0.440	ug/L			11/11/23 09:53	1
N-Propylbenzene	<0.390		1.00	0.390	ug/L			11/11/23 09:53	1
p-Isopropyltoluene	<0.330		1.00	0.330	ug/L			11/11/23 09:53	1
sec-Butylbenzene	<0.440		1.00	0.440	ug/L			11/11/23 09:53	1
Styrene	<0.370		1.00	0.370	ug/L			11/11/23 09:53	1
tert-Butylbenzene	<0.390		1.00	0.390	ug/L			11/11/23 09:53	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			11/11/23 09:53	1
Toluene	**0.954**	**J**	1.00	0.430	ug/L			11/15/23 13:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			11/11/23 09:53	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			11/11/23 09:53	1
Trichloroethene	<0.430		1.00	0.430	ug/L			11/11/23 09:53	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			11/11/23 09:53	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			11/11/23 09:53	1
Xylenes, Total	**11.0**		3.00	0.400	ug/L			11/15/23 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*80 - 128*		*11/11/23 09:53*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 128*		*11/15/23 13:43*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*11/11/23 09:53*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/15/23 13:43*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/11/23 09:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/15/23 13:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.23**	**J**	10.6	0.681	ug/L		11/09/23 05:40	11/14/23 17:41	1
Acenaphthylene	<0.766		10.6	0.766	ug/L		11/09/23 05:40	11/14/23 17:41	1
Acetophenone	**1.01**	**J**	10.6	0.734	ug/L		11/09/23 05:40	11/14/23 17:41	1
2-Acetylaminofluorene	<2.87		10.6	2.87	ug/L		11/09/23 05:40	11/14/23 14:43	1
4-Aminobiphenyl	<2.34	*1	10.6	2.34	ug/L		11/09/23 05:40	11/14/23 14:43	1
Anthracene	<0.926		10.6	0.926	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzo[a]anthracene	<0.904		10.6	0.904	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzo[a]pyrene	<8.62		10.6	8.62	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzo[b]fluoranthene	<5.21		10.6	5.21	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzo[g,h,i]perylene	<6.70		10.6	6.70	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzoic acid	<18.1		106	18.1	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzo[k]fluoranthene	<2.34		10.6	2.34	ug/L		11/09/23 05:40	11/14/23 17:41	1
Benzyl alcohol	<1.38		10.6	1.38	ug/L		11/09/23 05:40	11/14/23 17:41	1
Bis(2-chloroethoxy)methane	<0.809		10.6	0.809	ug/L		11/09/23 05:40	11/14/23 17:41	1
Bis(2-chloroethyl)ether	<0.872		10.6	0.872	ug/L		11/09/23 05:40	11/14/23 17:41	1
bis (2-chloroisopropyl) ether	<0.574		10.6	0.574	ug/L		11/09/23 05:40	11/14/23 17:41	1
Bis(2-ethylhexyl) phthalate	**8.59**	**J**	10.6	5.85	ug/L		11/09/23 05:40	11/14/23 17:41	1
4-Bromophenyl phenyl ether	<0.745		10.6	0.745	ug/L		11/09/23 05:40	11/14/23 17:41	1
Butyl benzyl phthalate	**6.97**	**J**	10.6	5.74	ug/L		11/09/23 05:40	11/14/23 17:41	1
4-Chloroaniline	<0.660	*1	10.6	0.660	ug/L		11/09/23 05:40	11/14/23 17:41	1
Chlorobenzilate	<3.83	*+	10.6	3.83	ug/L		11/09/23 05:40	11/14/23 14:43	1
4-Chloro-3-methylphenol	<0.894		10.6	0.894	ug/L		11/09/23 05:40	11/14/23 17:41	1
2-Chloronaphthalene	<0.681		10.6	0.681	ug/L		11/09/23 05:40	11/14/23 17:41	1
2-Chlorophenol	<0.574		10.6	0.574	ug/L		11/09/23 05:40	11/14/23 17:41	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1
Date Collected: 11/08/23 10:00
Matrix: Water
Date Received: 11/08/23 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	<0.734		10.6	0.734	ug/L		11/09/23 05:40	11/14/23 17:41	1
Chrysene	<0.926		10.6	0.926	ug/L		11/09/23 05:40	11/14/23 17:41	1
Diallate	<4.26		10.6	4.26	ug/L		11/09/23 05:40	11/14/23 14:43	1
Dibenzo(a,h)anthracene	<4.15		10.6	4.15	ug/L		11/09/23 05:40	11/14/23 17:41	1
Dibenzofuran	<0.787		10.6	0.787	ug/L		11/09/23 05:40	11/14/23 17:41	1
3,3'-Dichlorobenzidine	<1.49		10.6	1.49	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,4-Dichlorophenol	<0.904		10.6	0.904	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,6-Dichlorophenol	<0.734		10.6	0.734	ug/L		11/09/23 05:40	11/14/23 17:41	1
Diethyl phthalate	<1.81		10.6	1.81	ug/L		11/09/23 05:40	11/14/23 17:41	1
Dimethoate	<3.83		10.6	3.83	ug/L		11/09/23 05:40	11/14/23 14:43	1
7,12-Dimethylbenz(a)anthracene	<2.02		10.6	2.02	ug/L		11/09/23 05:40	11/14/23 14:43	1
3,3'-Dimethylbenzidine	<1.60	*-	10.6	1.60	ug/L		11/09/23 05:40	11/14/23 14:43	1
2,4-Dimethylphenol	<0.617		10.6	0.617	ug/L		11/09/23 05:40	11/14/23 17:41	1
Dimethyl phthalate	<1.06		10.6	1.06	ug/L		11/09/23 05:40	11/14/23 17:41	1
Di-n-butyl phthalate	<5.96		10.6	5.96	ug/L		11/09/23 05:40	11/14/23 17:41	1
1,3-Dinitrobenzene	<3.40		10.6	3.40	ug/L		11/09/23 05:40	11/14/23 17:41	1
4,6-Dinitro-2-methylphenol	<7.34		10.6	7.34	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,4-Dinitrophenol	<13.8		21.3	13.8	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,4-Dinitrotoluene	<6.81		10.6	6.81	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,6-Dinitrotoluene	<0.553		10.6	0.553	ug/L		11/09/23 05:40	11/14/23 17:41	1
Di-n-octyl phthalate	<7.45		21.3	7.45	ug/L		11/09/23 05:40	11/14/23 17:41	1
Dinoseb	<2.55	*+	10.6	2.55	ug/L		11/09/23 05:40	11/14/23 14:43	1
Diphenylamine	<6.38		10.6	6.38	ug/L		11/09/23 05:40	11/14/23 17:41	1
Disulfoton	<2.55		10.6	2.55	ug/L		11/09/23 05:40	11/14/23 14:43	1
Ethyl methanesulfonate	<3.83		10.6	3.83	ug/L		11/09/23 05:40	11/14/23 14:43	1
Ethyl Parathion	<2.34		10.6	2.34	ug/L		11/09/23 05:40	11/14/23 14:43	1
Famphur	<4.04	*+	10.6	4.04	ug/L		11/09/23 05:40	11/14/23 14:43	1
Fluoranthene	<1.81		10.6	1.81	ug/L		11/09/23 05:40	11/14/23 17:41	1
Fluorene	<0.840		10.6	0.840	ug/L		11/09/23 05:40	11/14/23 17:41	1
Hexachlorobenzene	<0.745		10.6	0.745	ug/L		11/09/23 05:40	11/14/23 17:41	1
Hexachlorobutadiene	<0.915		10.6	0.915	ug/L		11/09/23 05:40	11/14/23 17:41	1
Hexachlorocyclopentadiene	<5.43		10.6	5.43	ug/L		11/09/23 05:40	11/14/23 17:41	1
Hexachloroethane	<1.03		10.6	1.03	ug/L		11/09/23 05:40	11/14/23 17:41	1
Hexachloropropene	<2.77	*1	10.6	2.77	ug/L		11/09/23 05:40	11/14/23 14:43	1
Indeno[1,2,3-cd]pyrene	<4.47		10.6	4.47	ug/L		11/09/23 05:40	11/14/23 17:41	1
Isodrin	<5.00		10.6	5.00	ug/L		11/09/23 05:40	11/14/23 14:43	1
Isophorone	<0.989		10.6	0.989	ug/L		11/09/23 05:40	11/14/23 17:41	1
Isosafrole	<2.45		10.6	2.45	ug/L		11/09/23 05:40	11/14/23 14:43	1
Kepone	<1.06	*+	10.6	1.06	ug/L		11/09/23 05:40	11/14/23 14:43	1
Methapyrilene	<0.809	*-	10.6	0.809	ug/L		11/09/23 05:40	11/14/23 14:43	1
3-Methylcholanthrene	<0.340		10.6	0.340	ug/L		11/09/23 05:40	11/14/23 14:43	1
Methyl methanesulfonate	<3.51		10.6	3.51	ug/L		11/09/23 05:40	11/14/23 14:43	1
2-Methylnaphthalene	**1.76**	**J**	10.6	0.628	ug/L		11/09/23 05:40	11/14/23 17:41	1
Methyl parathion	<2.45		10.6	2.45	ug/L		11/09/23 05:40	11/14/23 14:43	1
2-Methylphenol	<0.691		10.6	0.691	ug/L		11/09/23 05:40	11/14/23 17:41	1
Methylphenol, 3 & 4	<0.745		10.6	0.745	ug/L		11/09/23 05:40	11/14/23 17:41	1
1,4-Naphthoquinone	<3.83		10.6	3.83	ug/L		11/09/23 05:40	11/14/23 14:43	1
1-Naphthylamine	<2.66		10.6	2.66	ug/L		11/09/23 05:40	11/14/23 14:43	1
2-Naphthylamine	<2.23	*1	10.6	2.23	ug/L		11/09/23 05:40	11/14/23 14:43	1

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1
Date Collected: 11/08/23 10:00
Matrix: Water
Date Received: 11/08/23 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	<6.28		10.6	6.28	ug/L		11/09/23 05:40	11/14/23 17:41	1
3-Nitroaniline	**6.44**	**J**	10.6	2.87	ug/L		11/09/23 05:40	11/14/23 17:41	1
4-Nitroaniline	<1.38		10.6	1.38	ug/L		11/09/23 05:40	11/14/23 17:41	1
Nitrobenzene	<0.851		10.6	0.851	ug/L		11/09/23 05:40	11/14/23 17:41	1
5-Nitro-o-toluidine	<2.98		10.6	2.98	ug/L		11/09/23 05:40	11/14/23 14:43	1
2-Nitrophenol	<7.23		10.6	7.23	ug/L		11/09/23 05:40	11/14/23 17:41	1
4-Nitrophenol	<8.09		10.6	8.09	ug/L		11/09/23 05:40	11/14/23 17:41	1
N-Nitrosodiethylamine	<3.62		10.6	3.62	ug/L		11/09/23 05:40	11/14/23 14:43	1
N-Nitrosodimethylamine	<0.766		10.6	0.766	ug/L		11/09/23 05:40	11/14/23 17:41	1
N-Nitrosodi-n-butylamine	<4.15		10.6	4.15	ug/L		11/09/23 05:40	11/14/23 14:43	1
N-Nitrosodi-n-propylamine	<0.979		10.6	0.979	ug/L		11/09/23 05:40	11/14/23 17:41	1
N-Nitrosodiphenylamine	<0.798		10.6	0.798	ug/L		11/09/23 05:40	11/14/23 17:41	1
N-Nitrosomethylethylamine	<5.21		10.6	5.21	ug/L		11/09/23 05:40	11/14/23 14:43	1
N-Nitrosopiperidine	<2.87		10.6	2.87	ug/L		11/09/23 05:40	11/14/23 14:43	1
N-Nitrosopyrrolidine	<3.83		10.6	3.83	ug/L		11/09/23 05:40	11/14/23 14:43	1
o,o',o''-Triethylphosphorothioate	<3.40		10.6	3.40	ug/L		11/09/23 05:40	11/14/23 14:43	1
o-Toluidine	<3.09		10.6	3.09	ug/L		11/09/23 05:40	11/14/23 14:43	1
p-Dimethylamino azobenzene	<2.34		10.6	2.34	ug/L		11/09/23 05:40	11/14/23 14:43	1
Pentachlorobenzene	<2.98		10.6	2.98	ug/L		11/09/23 05:40	11/14/23 14:43	1
Pentachloronitrobenzene	<6.17		10.6	6.17	ug/L		11/09/23 05:40	11/14/23 14:43	1
Pentachlorophenol	<10.2		10.6	10.2	ug/L		11/09/23 05:40	11/14/23 17:41	1
Phenacetin	<2.02		10.6	2.02	ug/L		11/09/23 05:40	11/14/23 14:43	1
Phenanthrene	<0.840		10.6	0.840	ug/L		11/09/23 05:40	11/14/23 17:41	1
Phenol	<1.17		10.6	1.17	ug/L		11/09/23 05:40	11/14/23 17:41	1
1,4-phenylenediamine	<2.02	*- *1	10.6	2.02	ug/L		11/09/23 05:40	11/14/23 14:43	1
Phorate	<3.40		10.6	3.40	ug/L		11/09/23 05:40	11/14/23 14:43	1
Pronamide	<2.87		10.6	2.87	ug/L		11/09/23 05:40	11/14/23 14:43	1
Pyrene	<0.840		10.6	0.840	ug/L		11/09/23 05:40	11/14/23 17:41	1
Pyridine	<1.70	*- *1	10.6	1.70	ug/L		11/09/23 05:40	11/14/23 17:41	1
Safrole	<2.98		10.6	2.98	ug/L		11/09/23 05:40	11/14/23 14:43	1
1,2,4,5-Tetrachlorobenzene	<0.574		10.6	0.574	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,3,4,6-Tetrachlorophenol	<5.64		10.6	5.64	ug/L		11/09/23 05:40	11/14/23 17:41	1
Thionazin	<3.72		10.6	3.72	ug/L		11/09/23 05:40	11/14/23 14:43	1
2,4,5-Trichlorophenol	<5.64		10.6	5.64	ug/L		11/09/23 05:40	11/14/23 17:41	1
2,4,6-Trichlorophenol	<5.32		10.6	5.32	ug/L		11/09/23 05:40	11/14/23 17:41	1
1,3,5-Trinitrobenzene	<2.45	*+	10.6	2.45	ug/L		11/09/23 05:40	11/14/23 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*39 - 118*	*11/09/23 05:40*	*11/14/23 17:41*	*1*
2-Fluorophenol (Surr)	*74*		*25 - 110*	*11/09/23 05:40*	*11/14/23 17:41*	*1*
Nitrobenzene-d5 (Surr)	*101*		*45 - 129*	*11/09/23 05:40*	*11/14/23 17:41*	*1*
Phenol-d5 (Surr)	*65*		*21 - 110*	*11/09/23 05:40*	*11/14/23 17:41*	*1*
Terphenyl-d14 (Surr)	*99*		*12 - 144*	*11/09/23 05:40*	*11/14/23 17:41*	*1*
2,4,6-Tribromophenol (Surr)	*108*		*27 - 136*	*11/09/23 05:40*	*11/14/23 17:41*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0281		0.0667	0.0281	ug/L		11/09/23 11:12	11/10/23 19:24	1
4,4'-DDE	<0.0281		0.0667	0.0281	ug/L		11/09/23 11:12	11/10/23 19:24	1
4,4'-DDT	<0.0438		0.0667	0.0438	ug/L		11/09/23 11:12	11/10/23 19:24	1

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1
Date Collected: 11/08/23 10:00
Matrix: Water
Date Received: 11/08/23 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0333		0.0667	0.0333	ug/L		11/09/23 11:12	11/10/23 19:24	1
alpha-BHC	<0.0302		0.0667	0.0302	ug/L		11/09/23 11:12	11/10/23 19:24	1
beta-BHC	<0.0385		0.0667	0.0385	ug/L		11/09/23 11:12	11/10/23 19:24	1
Chlordane (technical)	<0.844		2.08	0.844	ug/L		11/09/23 11:12	11/10/23 19:24	1
delta-BHC	<0.0281		0.0667	0.0281	ug/L		11/09/23 11:12	11/10/23 19:24	1
Dieldrin	<0.0271		0.0667	0.0271	ug/L		11/09/23 11:12	11/10/23 19:24	1
Endosulfan I	<0.0344		0.0667	0.0344	ug/L		11/09/23 11:12	11/10/23 19:24	1
Endosulfan II	<0.0302		0.0667	0.0302	ug/L		11/09/23 11:12	11/10/23 19:24	1
Endosulfan sulfate	<0.0313		0.0667	0.0313	ug/L		11/09/23 11:12	11/10/23 19:24	1
Endrin	<0.0271		0.0667	0.0271	ug/L		11/09/23 11:12	11/10/23 19:24	1
Endrin aldehyde	<0.0302		0.0667	0.0302	ug/L		11/09/23 11:12	11/10/23 19:24	1
gamma-BHC (Lindane)	<0.0375		0.0667	0.0375	ug/L		11/09/23 11:12	11/10/23 19:24	1
Heptachlor	<0.0344		0.0667	0.0344	ug/L		11/09/23 11:12	11/10/23 19:24	1
Heptachlor epoxide	<0.0302		0.0667	0.0302	ug/L		11/09/23 11:12	11/10/23 19:24	1
Methoxychlor	<0.0427		0.0667	0.0427	ug/L		11/09/23 11:12	11/10/23 19:24	1
Toxaphene	<0.719		2.08	0.719	ug/L		11/09/23 11:12	11/10/23 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*39*		*10 - 136*	*11/09/23 11:12*	*11/10/23 19:24*	*1*
Tetrachloro-m-xylene	*53*		*10 - 130*	*11/09/23 11:12*	*11/10/23 19:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.177		0.833	0.177	ug/L		11/09/23 11:12	11/14/23 00:34	1
PCB-1221	<0.177		0.833	0.177	ug/L		11/09/23 11:12	11/14/23 00:34	1
PCB-1232	<0.177		0.833	0.177	ug/L		11/09/23 11:12	11/14/23 00:34	1
PCB-1242	<0.177		0.833	0.177	ug/L		11/09/23 11:12	11/14/23 00:34	1
PCB-1248	<0.115		0.833	0.115	ug/L		11/09/23 11:12	11/14/23 00:34	1
PCB-1254	<0.115		0.833	0.115	ug/L		11/09/23 11:12	11/14/23 00:34	1
PCB-1260	<0.115		0.833	0.115	ug/L		11/09/23 11:12	11/14/23 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*41*		*10 - 136*	*11/09/23 11:12*	*11/14/23 00:34*	*1*
Tetrachloro-m-xylene	*48*		*10 - 130*	*11/09/23 11:12*	*11/14/23 00:34*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.186		1.14	0.186	ug/L		11/15/23 14:57	11/28/23 00:05	1
Silvex (2,4,5-TP)	<0.0993		0.879	0.0993	ug/L		11/15/23 14:57	11/28/23 00:05	1
Pentachlorophenol	<0.0238		0.258	0.0238	ug/L		11/15/23 14:57	11/28/23 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*72*		*26 - 137*	*11/15/23 14:57*	*11/28/23 00:05*	*1*

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1340**		20.0	9.00	mg/L			11/18/23 14:53	20
Nitrate as N	**1.48**		0.200	0.0780	mg/L			11/09/23 00:07	1

Client: Foth Infrastructure & Environment, LLC
Project/Site: Site 1 Leachate

Job ID: 310-269165-1

Client Sample ID: Site 1_Leachate_23_11
Date Collected: 11/08/23 10:00
Date Received: 11/08/23 15:40

Lab Sample ID: 310-269165-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00506		0.00200	0.000530	mg/L		11/10/23 09:15	11/10/23 19:00	1
Barium	1.28		0.00200	0.000640	mg/L		11/10/23 09:15	11/10/23 19:00	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		11/10/23 09:15	11/10/23 19:00	1
Chromium	0.0121		0.00500	0.00110	mg/L		11/10/23 09:15	11/10/23 19:00	1
Copper	<0.00180		0.00500	0.00180	mg/L		11/10/23 09:15	11/10/23 19:00	1
Iron	1.74		0.100	0.0360	mg/L		11/10/23 09:15	11/10/23 19:00	1
Lead	<0.000240		0.000500	0.000240	mg/L		11/10/23 09:15	11/10/23 19:00	1
Magnesium	211		2.00	0.600	mg/L		11/10/23 09:15	11/13/23 13:49	4
Nickel	0.0422		0.00500	0.00190	mg/L		11/10/23 09:15	11/10/23 19:00	1
Potassium	318		2.00	0.600	mg/L		11/10/23 09:15	11/13/23 13:49	4
Selenium	<0.00140		0.00500	0.00140	mg/L		11/10/23 09:15	11/10/23 19:00	1
Silver	<0.000500		0.00100	0.000500	mg/L		11/10/23 09:15	11/10/23 19:00	1
Zinc	<0.00640		0.0200	0.00640	mg/L		11/10/23 09:15	11/10/23 19:00	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		11/20/23 11:09	11/21/23 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	299		46.9	20.6	mg/L		11/14/23 09:30	11/14/23 18:12	9.38
Total Kjeldahl Nitrogen (EPA 351.2)	344		50.0	27.5	mg/L		11/10/23 06:14	11/10/23 15:12	10
Total Phosphorus as P (EPA 365.1)	1.90		0.500	0.310	mg/L		11/10/23 08:21	11/10/23 18:57	1
Phosphorus as PO4 (EPA 365.1)	5.83		1.55	0.950	mg/L		11/10/23 08:21	11/10/23 18:57	1
Cyanide, Total (SW846 9012B)	<0.00430		0.0100	0.00430	mg/L		11/09/23 09:17	11/10/23 17:56	1
Total Suspended Solids (USGS I-3765-85)	5.00		5.00	1.70	mg/L			11/09/23 09:28	1
Total Solids (SM 2540B)	4670		250	210	mg/L			11/10/23 09:34	1
Total Dissolved Solids (SM 2540C)	4610		250	170	mg/L			11/09/23 19:23	1
Carbonaceous Biochemical Oxygen Demand (SM 5210B)	<12.0		12.0	12.0	mg/L			11/09/23 07:06	4
Chemical Oxygen Demand (SM 5220D)	505		25.0	24.0	mg/L			11/09/23 09:51	5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids (SM 2540E)	890		250	250	mg/L			11/10/23 09:34	1
Fixed Solids (SM 2540E)	3780		250	250	mg/L			11/10/23 09:34	1
pH (SW846 9040C)	7.07	HF	1.00	1.00	SU			11/08/23 16:56	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P (EPA 365.1)	1.35	F1	1.00	0.320	mg/L			11/08/23 22:01	10
Chromium (VI) (SM 3500 CR B)	<0.0100		0.0200	0.0100	mg/L			11/08/23 16:43	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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.

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.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-128)	(80-120)	(80-120)
310-269161-A-27 MS	Matrix Spike	103	96	105
310-269161-A-27 MSD	Matrix Spike Duplicate	102	96	104
310-269165-1	Site 1_Leachate_23_11	108	91	100
310-269165-1	Site 1_Leachate_23_11	99	96	99
310-269234-I-3 MS	Matrix Spike	96	98	100
310-269234-I-3 MSD	Matrix Spike Duplicate	96	99	101
LCS 310-405662/6	Lab Control Sample	105	96	106
LCS 310-405662/7	Lab Control Sample	122	90	102
LCS 310-405951/7	Lab Control Sample	96	99	99
LCS 310-405951/8	Lab Control Sample	102	95	103
MB 310-405662/5	Method Blank	119	90	101
MB 310-405951/6	Method Blank	104	94	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(39-118)	(25-110)	(45-129)	(21-110)	(12-144)	(27-136)
310-269165-1	Site 1_Leachate_23_11	90	74	101	65	99	108
LCS 310-405356/2-A	Lab Control Sample	95	77	96	60	116	116
LCSD 310-405356/3-A	Lab Control Sample Dup	91	73	92	57	107	110
MB 310-405356/1-A	Method Blank	70	61	80	50	91	82

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-269165-1	Site 1_Leachate_23_11	39	53
LCS 310-405444/4-A	Lab Control Sample	54	55
LCSD 310-405444/5-A	Lab Control Sample Dup	57	51
MB 310-405444/1-A	Method Blank	61	57

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

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)								
310-269165-1	Site 1_Leachate_23_11	41	48								
LCS 310-405444/2-A	Lab Control Sample	55	56								
LCSD 310-405444/3-A	Lab Control Sample Dup	58	59								
MB 310-405444/1-A	Method Blank	62	58								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1									
Lab Sample ID	Client Sample ID	(26-137)									
310-269165-1	Site 1_Leachate_23_11	72									

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA2									
Lab Sample ID	Client Sample ID	(26-137)									
LCS 680-808435/2-A	Lab Control Sample	74									
LCSD 680-808435/3-A	Lab Control Sample Dup	55									
MB 680-808435/1-A	Method Blank	56									

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA2									
Lab Sample ID	Client Sample ID	(26-137)									
310-268895-D-1-K MS	Matrix Spike	75									
310-268895-D-1-L MSD	Matrix Spike Duplicate	60									

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-405662/5
Matrix: Water
Analysis Batch: 405662

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			11/11/23 02:41	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			11/11/23 02:41	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			11/11/23 02:41	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			11/11/23 02:41	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			11/11/23 02:41	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			11/11/23 02:41	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			11/11/23 02:41	1
1,2,3-Trichlorobenzene	<0.900		5.00	0.900	ug/L			11/11/23 02:41	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			11/11/23 02:41	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			11/11/23 02:41	1
1,2,4-Trimethylbenzene	<0.420		1.00	0.420	ug/L			11/11/23 02:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			11/11/23 02:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			11/11/23 02:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			11/11/23 02:41	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			11/11/23 02:41	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			11/11/23 02:41	1
1,3,5-Trimethylbenzene	<0.370		1.00	0.370	ug/L			11/11/23 02:41	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			11/11/23 02:41	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			11/11/23 02:41	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			11/11/23 02:41	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			11/11/23 02:41	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			11/11/23 02:41	1
2-Chloroethyl vinyl ether	<1.70		2.00	1.70	ug/L			11/11/23 02:41	1
2-Chlorotoluene	<0.280		1.00	0.280	ug/L			11/11/23 02:41	1
4-Chlorotoluene	<0.290		1.00	0.290	ug/L			11/11/23 02:41	1
Acetone	<3.10		10.0	3.10	ug/L			11/11/23 02:41	1
Benzene	<0.220		0.500	0.220	ug/L			11/11/23 02:41	1
Bromobenzene	<0.340		1.00	0.340	ug/L			11/11/23 02:41	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			11/11/23 02:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			11/11/23 02:41	1
Bromoform	<0.780		5.00	0.780	ug/L			11/11/23 02:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			11/11/23 02:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			11/11/23 02:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			11/11/23 02:41	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			11/11/23 02:41	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			11/11/23 02:41	1
Chloroethane	<0.790		4.00	0.790	ug/L			11/11/23 02:41	1
Chloroform	<1.30		3.00	1.30	ug/L			11/11/23 02:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			11/11/23 02:41	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			11/11/23 02:41	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			11/11/23 02:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			11/11/23 02:41	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			11/11/23 02:41	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			11/11/23 02:41	1
Hexachlorobutadiene	<1.40		5.00	1.40	ug/L			11/11/23 02:41	1
Hexane	<0.780		1.00	0.780	ug/L			11/11/23 02:41	1
Isopropylbenzene	<0.350		1.00	0.350	ug/L			11/11/23 02:41	1
Methyl tert-butyl ether	<0.490		1.00	0.490	ug/L			11/11/23 02:41	1

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

Lab Sample ID: MB 310-405662/5
Matrix: Water
Analysis Batch: 405662

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<1.70		5.00	1.70	ug/L			11/11/23 02:41	1
Naphthalene	<3.00		5.00	3.00	ug/L			11/11/23 02:41	1
n-Butylbenzene	<0.440		1.00	0.440	ug/L			11/11/23 02:41	1
N-Propylbenzene	<0.390		1.00	0.390	ug/L			11/11/23 02:41	1
p-Isopropyltoluene	<0.330		1.00	0.330	ug/L			11/11/23 02:41	1
sec-Butylbenzene	<0.440		1.00	0.440	ug/L			11/11/23 02:41	1
Styrene	<0.370		1.00	0.370	ug/L			11/11/23 02:41	1
tert-Butylbenzene	<0.390		1.00	0.390	ug/L			11/11/23 02:41	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			11/11/23 02:41	1
Toluene	<0.430		1.00	0.430	ug/L			11/11/23 02:41	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			11/11/23 02:41	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			11/11/23 02:41	1
Trichloroethene	<0.430		1.00	0.430	ug/L			11/11/23 02:41	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			11/11/23 02:41	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			11/11/23 02:41	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			11/11/23 02:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*119*		*80 - 128*		*11/11/23 02:41*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*11/11/23 02:41*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/11/23 02:41*	*1*

Lab Sample ID: LCS 310-405662/6
Matrix: Water
Analysis Batch: 405662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.42		ug/L		97	68 - 123
1,1,1-Trichloroethane	20.0	22.12		ug/L		111	71 - 128
1,1,2,2-Tetrachloroethane	20.0	17.93		ug/L		90	64 - 124
1,1,2-Trichloroethane	20.0	18.52		ug/L		93	70 - 124
1,1-Dichloroethane	20.0	20.35		ug/L		102	71 - 123
1,1-Dichloroethene	20.0	22.64		ug/L		113	61 - 129
1,1-Dichloropropene	20.0	21.60		ug/L		108	70 - 131
1,2,3-Trichlorobenzene	20.0	18.13		ug/L		91	50 - 150
1,2,3-Trichloropropane	20.0	18.88		ug/L		94	64 - 125
1,2,4-Trichlorobenzene	20.0	18.86		ug/L		94	61 - 124
1,2,4-Trimethylbenzene	20.0	19.25		ug/L		96	65 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.67		ug/L		93	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.20		ug/L		96	73 - 125
1,2-Dichlorobenzene	20.0	19.06		ug/L		95	68 - 120
1,2-Dichloroethane	20.0	20.55		ug/L		103	70 - 124
1,2-Dichloropropane	20.0	20.61		ug/L		103	73 - 121
1,3,5-Trimethylbenzene	20.0	19.42		ug/L		97	65 - 124
1,3-Dichlorobenzene	20.0	18.97		ug/L		95	67 - 123
1,3-Dichloropropane	20.0	20.97		ug/L		105	72 - 124
1,4-Dichlorobenzene	20.0	19.11		ug/L		96	67 - 120
2,2-Dichloropropane	20.0	19.43		ug/L		97	50 - 150

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

Lab Sample ID: LCS 310-405662/6
Matrix: Water
Analysis Batch: 405662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	40.0	35.57		ug/L		89	50 - 150
2-Chloroethyl vinyl ether	20.0	19.32		ug/L		97	50 - 150
2-Chlorotoluene	20.0	17.65		ug/L		88	66 - 122
4-Chlorotoluene	20.0	17.53		ug/L		88	65 - 122
Acetone	40.0	35.58		ug/L		89	50 - 150
Benzene	20.0	21.66		ug/L		108	73 - 122
Bromobenzene	20.0	18.84		ug/L		94	67 - 124
Bromochloromethane	20.0	23.01		ug/L		115	68 - 132
Bromodichloromethane	20.0	20.30		ug/L		101	72 - 121
Bromoform	20.0	19.22		ug/L		96	55 - 129
Carbon disulfide	20.0	20.06		ug/L		100	58 - 131
Carbon tetrachloride	20.0	23.28		ug/L		116	67 - 132
Chlorobenzene	20.0	19.46		ug/L		97	69 - 121
Chlorodibromomethane	20.0	18.61		ug/L		93	69 - 122
Chloroform	20.0	21.74		ug/L		109	72 - 120
cis-1,2-Dichloroethene	20.0	21.90		ug/L		110	74 - 120
cis-1,3-Dichloropropene	20.0	18.20		ug/L		91	71 - 126
Dibromomethane	20.0	21.58		ug/L		108	72 - 123
Ethylbenzene	20.0	18.90		ug/L		94	69 - 122
Hexachlorobutadiene	20.0	17.25		ug/L		86	49 - 150
Hexane	20.0	18.16		ug/L		91	35 - 150
Isopropylbenzene	20.0	18.46		ug/L		92	66 - 126
Methyl tert-butyl ether	20.0	20.19		ug/L		101	68 - 127
Methylene Chloride	20.0	19.72		ug/L		99	50 - 150
Naphthalene	20.0	18.59		ug/L		93	50 - 150
n-Butylbenzene	20.0	18.50		ug/L		92	54 - 138
N-Propylbenzene	20.0	17.81		ug/L		89	65 - 127
p-Isopropyltoluene	20.0	19.24		ug/L		96	61 - 128
sec-Butylbenzene	20.0	18.82		ug/L		94	62 - 132
Styrene	20.0	18.65		ug/L		93	67 - 125
tert-Butylbenzene	20.0	19.19		ug/L		96	64 - 127
Tetrachloroethene	20.0	20.97		ug/L		105	69 - 131
Toluene	20.0	19.51		ug/L		98	72 - 121
trans-1,2-Dichloroethene	20.0	21.97		ug/L		110	68 - 125
trans-1,3-Dichloropropene	20.0	19.51		ug/L		98	68 - 124
Trichloroethene	20.0	22.72		ug/L		114	73 - 126
Xylenes, Total	40.0	36.68		ug/L		92	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*80 - 128*
Toluene-d8 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*

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

Lab Sample ID: LCS 310-405662/7
Matrix: Water
Analysis Batch: 405662

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	19.24		ug/L		96	24 - 150		
Chloroethane			20.0	19.02		ug/L		95	51 - 137		
Chloromethane			20.0	18.50		ug/L		93	37 - 150		
Dichlorodifluoromethane			20.0	22.35		ug/L		112	37 - 150		
Trichlorofluoromethane			20.0	25.44		ug/L		127	56 - 144		
Vinyl chloride			20.0	20.03		ug/L		100	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*122*		*80 - 128*
Toluene-d8 (Surr)	*90*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: 310-269161-A-27 MS
Matrix: Water
Analysis Batch: 405662

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		
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.63		ug/L		88	52 - 130		
1,1,1-Trichloroethane	<0.190		20.0	19.21		ug/L		96	49 - 130		
1,1,2,2-Tetrachloroethane	<0.470		20.0	17.08		ug/L		85	51 - 130		
1,1,2-Trichloroethane	<0.450		20.0	17.62		ug/L		88	56 - 130		
1,1-Dichloroethane	1.58		20.0	18.54		ug/L		85	53 - 130		
1,1-Dichloroethene	0.653	J	20.0	18.75		ug/L		91	39 - 130		
1,1-Dichloropropene	<0.430		20.0	18.10		ug/L		91	50 - 131		
1,2,3-Trichlorobenzene	<0.900		20.0	16.03		ug/L		80	46 - 150		
1,2,3-Trichloropropane	<0.590		20.0	17.78		ug/L		89	50 - 130		
1,2,4-Trichlorobenzene	<0.750		20.0	16.44		ug/L		82	45 - 130		
1,2,4-Trimethylbenzene	<0.420		20.0	19.19		ug/L		96	45 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		20.0	17.93		ug/L		90	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		20.0	18.14		ug/L		91	59 - 130		
1,2-Dichlorobenzene	<0.370		20.0	16.69		ug/L		83	53 - 130		
1,2-Dichloroethane	<0.390		20.0	19.03		ug/L		95	57 - 130		
1,2-Dichloropropane	<0.270		20.0	18.92		ug/L		95	60 - 130		
1,3,5-Trimethylbenzene	<0.370		20.0	16.88		ug/L		84	44 - 130		
1,3-Dichlorobenzene	<0.300		20.0	16.38		ug/L		82	54 - 130		
1,3-Dichloropropane	<0.400		20.0	19.48		ug/L		97	57 - 130		
1,4-Dichlorobenzene	<0.230		20.0	16.50		ug/L		83	53 - 130		
2,2-Dichloropropane	<0.690		20.0	14.98		ug/L		75	28 - 150		
2-Butanone (MEK)	7.22	J	40.0	43.92		ug/L		92	47 - 150		
2-Chloroethyl vinyl ether	<1.70	F1	20.0	<1.70	F1	ug/L		0	48 - 150		
2-Chlorotoluene	<0.280		20.0	15.17		ug/L		76	51 - 130		
4-Chlorotoluene	<0.290		20.0	15.26		ug/L		76	46 - 130		
Acetone	73.5		40.0	104.9		ug/L		79	35 - 150		
Benzene	<0.220		20.0	18.91		ug/L		95	47 - 130		
Bromobenzene	<0.340		20.0	16.54		ug/L		83	52 - 130		
Bromochloromethane	<0.540		20.0	20.65		ug/L		103	54 - 132		
Bromodichloromethane	<0.390		20.0	18.42		ug/L		92	58 - 130		
Bromoform	<0.780		20.0	17.84		ug/L		89	42 - 130		

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

Lab Sample ID: 310-269161-A-27 MS
Matrix: Water
Analysis Batch: 405662

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
Carbon disulfide	<0.450		20.0	17.51		ug/L		88	39 - 131
Carbon tetrachloride	<0.650		20.0	18.52		ug/L		93	45 - 132
Chlorobenzene	<0.400		20.0	17.12		ug/L		86	54 - 130
Chlorodibromomethane	<0.750		20.0	17.21		ug/L		86	53 - 130
Chloroform	<1.30		20.0	18.56		ug/L		93	55 - 130
cis-1,2-Dichloroethene	3.91		20.0	21.60		ug/L		88	52 - 130
cis-1,3-Dichloropropene	<0.250		20.0	16.52		ug/L		83	55 - 130
Dibromomethane	<0.330		20.0	19.67		ug/L		98	61 - 130
Ethylbenzene	<0.310		20.0	16.17		ug/L		81	48 - 130
Hexachlorobutadiene	<1.40		20.0	13.97		ug/L		70	27 - 150
Hexane	<0.780		20.0	14.83		ug/L		74	10 - 150
Isopropylbenzene	<0.350		20.0	15.20		ug/L		76	43 - 130
Methyl tert-butyl ether	<0.490		20.0	19.84		ug/L		99	57 - 130
Methylene Chloride	<1.70		20.0	17.55		ug/L		88	50 - 150
Naphthalene	<3.00		20.0	17.81		ug/L		89	33 - 150
n-Butylbenzene	<0.440		20.0	14.97		ug/L		75	37 - 138
N-Propylbenzene	<0.390		20.0	14.73		ug/L		74	42 - 130
p-Isopropyltoluene	<0.330		20.0	15.47		ug/L		77	43 - 130
sec-Butylbenzene	<0.440		20.0	15.06		ug/L		75	41 - 132
Styrene	<0.370		20.0	16.36		ug/L		82	46 - 130
tert-Butylbenzene	<0.390		20.0	15.42		ug/L		77	45 - 130
Tetrachloroethene	2.05		20.0	18.97		ug/L		85	42 - 131
Toluene	<0.430		20.0	16.81		ug/L		84	48 - 130
trans-1,2-Dichloroethene	<0.270		20.0	18.41		ug/L		92	54 - 130
trans-1,3-Dichloropropene	<0.560		20.0	17.67		ug/L		88	51 - 130
Trichloroethene	<0.430		20.0	19.76		ug/L		99	55 - 130
Xylenes, Total	<0.400		40.0	32.51		ug/L		81	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*103*		*80 - 128*
Toluene-d8 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*

Lab Sample ID: 310-269161-A-27 MSD
Matrix: Water
Analysis Batch: 405662

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
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.70		ug/L		88	52 - 130	0	20
1,1,1-Trichloroethane	<0.190		20.0	19.21		ug/L		96	49 - 130	0	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	17.29		ug/L		86	51 - 130	1	20
1,1,2-Trichloroethane	<0.450		20.0	17.76		ug/L		89	56 - 130	1	20
1,1-Dichloroethane	1.58		20.0	18.60		ug/L		85	53 - 130	0	20
1,1-Dichloroethene	0.653	J	20.0	18.56		ug/L		90	39 - 130	1	28
1,1-Dichloropropene	<0.430		20.0	18.04		ug/L		90	50 - 131	0	20
1,2,3-Trichlorobenzene	<0.900		20.0	17.74		ug/L		89	46 - 150	10	23
1,2,3-Trichloropropane	<0.590		20.0	18.46		ug/L		92	50 - 130	4	20
1,2,4-Trichlorobenzene	<0.750		20.0	17.70		ug/L		89	45 - 130	7	20

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

Lab Sample ID: 310-269161-A-27 MSD
Matrix: Water
Analysis Batch: 405662

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
1,2,4-Trimethylbenzene	<0.420		20.0	19.60		ug/L		98	45 - 130	2	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	18.08		ug/L		90	45 - 150	1	20
1,2-Dibromoethane (EDB)	<0.340		20.0	18.56		ug/L		93	59 - 130	2	20
1,2-Dichlorobenzene	<0.370		20.0	16.86		ug/L		84	53 - 130	1	20
1,2-Dichloroethane	<0.390		20.0	18.72		ug/L		94	57 - 130	2	21
1,2-Dichloropropane	<0.270		20.0	19.01		ug/L		95	60 - 130	0	31
1,3,5-Trimethylbenzene	<0.370		20.0	17.14		ug/L		86	44 - 130	2	20
1,3-Dichlorobenzene	<0.300		20.0	16.82		ug/L		84	54 - 130	3	20
1,3-Dichloropropane	<0.400		20.0	19.66		ug/L		98	57 - 130	1	20
1,4-Dichlorobenzene	<0.230		20.0	16.87		ug/L		84	53 - 130	2	20
2,2-Dichloropropane	<0.690		20.0	14.95		ug/L		75	28 - 150	0	20
2-Butanone (MEK)	7.22	J	40.0	44.60		ug/L		93	47 - 150	2	20
2-Chloroethyl vinyl ether	<1.70	F1	20.0	<1.70	F1	ug/L		0	48 - 150	NC	20
2-Chlorotoluene	<0.280		20.0	15.68		ug/L		78	51 - 130	3	20
4-Chlorotoluene	<0.290		20.0	15.73		ug/L		79	46 - 130	3	20
Acetone	73.5		40.0	107.6		ug/L		85	35 - 150	3	26
Benzene	<0.220		20.0	19.08		ug/L		95	47 - 130	1	20
Bromobenzene	<0.340		20.0	17.00		ug/L		85	52 - 130	3	20
Bromochloromethane	<0.540		20.0	20.72		ug/L		104	54 - 132	0	20
Bromodichloromethane	<0.390		20.0	18.45		ug/L		92	58 - 130	0	20
Bromoform	<0.780		20.0	18.03		ug/L		90	42 - 130	1	20
Carbon disulfide	<0.450		20.0	16.65		ug/L		83	39 - 131	5	32
Carbon tetrachloride	<0.650		20.0	18.70		ug/L		93	45 - 132	1	20
Chlorobenzene	<0.400		20.0	17.31		ug/L		87	54 - 130	1	20
Chlorodibromomethane	<0.750		20.0	17.40		ug/L		87	53 - 130	1	20
Chloroform	<1.30		20.0	18.67		ug/L		93	55 - 130	1	20
cis-1,2-Dichloroethene	3.91		20.0	21.56		ug/L		88	52 - 130	0	20
cis-1,3-Dichloropropene	<0.250		20.0	16.41		ug/L		82	55 - 130	1	20
Dibromomethane	<0.330		20.0	19.80		ug/L		99	61 - 130	1	20
Ethylbenzene	<0.310		20.0	16.56		ug/L		83	48 - 130	2	20
Hexachlorobutadiene	<1.40		20.0	14.60		ug/L		73	27 - 150	4	22
Hexane	<0.780		20.0	15.16		ug/L		76	10 - 150	2	23
Isopropylbenzene	<0.350		20.0	15.72		ug/L		79	43 - 130	3	20
Methyl tert-butyl ether	<0.490		20.0	20.24		ug/L		101	57 - 130	2	20
Methylene Chloride	<1.70		20.0	17.86		ug/L		89	50 - 150	2	24
Naphthalene	<3.00		20.0	19.27		ug/L		96	33 - 150	8	30
n-Butylbenzene	<0.440		20.0	15.80		ug/L		79	37 - 138	5	20
N-Propylbenzene	<0.390		20.0	15.35		ug/L		77	42 - 130	4	20
p-Isopropyltoluene	<0.330		20.0	16.17		ug/L		81	43 - 130	4	20
sec-Butylbenzene	<0.440		20.0	15.96		ug/L		80	41 - 132	6	20
Styrene	<0.370		20.0	16.61		ug/L		83	46 - 130	2	20
tert-Butylbenzene	<0.390		20.0	15.88		ug/L		79	45 - 130	3	20
Tetrachloroethene	2.05		20.0	19.10		ug/L		85	42 - 131	1	20
Toluene	<0.430		20.0	16.94		ug/L		85	48 - 130	1	20
trans-1,2-Dichloroethene	<0.270		20.0	18.47		ug/L		92	54 - 130	0	24
trans-1,3-Dichloropropene	<0.560		20.0	18.03		ug/L		90	51 - 130	2	20
Trichloroethene	<0.430		20.0	19.71		ug/L		99	55 - 130	0	20
Xylenes, Total	<0.400		40.0	33.20		ug/L		83	44 - 130	2	20

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

Lab Sample ID: 310-269161-A-27 MSD
Matrix: Water
Analysis Batch: 405662

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*102*		*80 - 128*
Toluene-d8 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 310-405951/6
Matrix: Water
Analysis Batch: 405951

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			11/15/23 12:37	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			11/15/23 12:37	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			11/15/23 12:37	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			11/15/23 12:37	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			11/15/23 12:37	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			11/15/23 12:37	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			11/15/23 12:37	1
1,2,3-Trichlorobenzene	<0.900		5.00	0.900	ug/L			11/15/23 12:37	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			11/15/23 12:37	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			11/15/23 12:37	1
1,2,4-Trimethylbenzene	<0.420		1.00	0.420	ug/L			11/15/23 12:37	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			11/15/23 12:37	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			11/15/23 12:37	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			11/15/23 12:37	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			11/15/23 12:37	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			11/15/23 12:37	1
1,3,5-Trimethylbenzene	<0.370		1.00	0.370	ug/L			11/15/23 12:37	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			11/15/23 12:37	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			11/15/23 12:37	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			11/15/23 12:37	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			11/15/23 12:37	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			11/15/23 12:37	1
2-Chloroethyl vinyl ether	<1.70		2.00	1.70	ug/L			11/15/23 12:37	1
2-Chlorotoluene	<0.280		1.00	0.280	ug/L			11/15/23 12:37	1
4-Chlorotoluene	<0.290		1.00	0.290	ug/L			11/15/23 12:37	1
Acetone	<3.10		10.0	3.10	ug/L			11/15/23 12:37	1
Benzene	<0.220		0.500	0.220	ug/L			11/15/23 12:37	1
Bromobenzene	<0.340		1.00	0.340	ug/L			11/15/23 12:37	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			11/15/23 12:37	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			11/15/23 12:37	1
Bromoform	<0.780		5.00	0.780	ug/L			11/15/23 12:37	1
Bromomethane	<1.10		4.00	1.10	ug/L			11/15/23 12:37	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			11/15/23 12:37	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			11/15/23 12:37	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			11/15/23 12:37	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			11/15/23 12:37	1
Chloroethane	<0.790		4.00	0.790	ug/L			11/15/23 12:37	1
Chloroform	<1.30		3.00	1.30	ug/L			11/15/23 12:37	1
Chloromethane	<0.610		3.00	0.610	ug/L			11/15/23 12:37	1

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

Lab Sample ID: MB 310-405951/6
Matrix: Water
Analysis Batch: 405951

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			11/15/23 12:37	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			11/15/23 12:37	1
Dibromomethane	<0.330		1.00	0.330	ug/L			11/15/23 12:37	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			11/15/23 12:37	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			11/15/23 12:37	1
Hexachlorobutadiene	<1.40		5.00	1.40	ug/L			11/15/23 12:37	1
Hexane	<0.780		1.00	0.780	ug/L			11/15/23 12:37	1
Isopropylbenzene	<0.350		1.00	0.350	ug/L			11/15/23 12:37	1
Methyl tert-butyl ether	<0.490		1.00	0.490	ug/L			11/15/23 12:37	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			11/15/23 12:37	1
Naphthalene	<3.00		5.00	3.00	ug/L			11/15/23 12:37	1
n-Butylbenzene	<0.440		1.00	0.440	ug/L			11/15/23 12:37	1
N-Propylbenzene	<0.390		1.00	0.390	ug/L			11/15/23 12:37	1
p-Isopropyltoluene	<0.330		1.00	0.330	ug/L			11/15/23 12:37	1
sec-Butylbenzene	<0.440		1.00	0.440	ug/L			11/15/23 12:37	1
Styrene	<0.370		1.00	0.370	ug/L			11/15/23 12:37	1
tert-Butylbenzene	<0.390		1.00	0.390	ug/L			11/15/23 12:37	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			11/15/23 12:37	1
Toluene	<0.430		1.00	0.430	ug/L			11/15/23 12:37	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			11/15/23 12:37	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			11/15/23 12:37	1
Trichloroethene	<0.430		1.00	0.430	ug/L			11/15/23 12:37	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			11/15/23 12:37	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			11/15/23 12:37	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			11/15/23 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*11/15/23 12:37*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/15/23 12:37*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/15/23 12:37*	*1*

Lab Sample ID: LCS 310-405951/7
Matrix: Water
Analysis Batch: 405951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.13		ug/L		91	68 - 123
1,1,1-Trichloroethane	20.0	19.80		ug/L		99	71 - 128
1,1,2,2-Tetrachloroethane	20.0	16.40		ug/L		82	64 - 124
1,1,2-Trichloroethane	20.0	19.45		ug/L		97	70 - 124
1,1-Dichloroethane	20.0	19.46		ug/L		97	71 - 123
1,1-Dichloroethene	20.0	19.68		ug/L		98	61 - 129
1,1-Dichloropropene	20.0	20.45		ug/L		102	70 - 131
1,2,3-Trichlorobenzene	20.0	18.60		ug/L		93	50 - 150
1,2,3-Trichloropropane	20.0	17.64		ug/L		88	64 - 125
1,2,4-Trichlorobenzene	20.0	19.39		ug/L		97	61 - 124
1,2,4-Trimethylbenzene	20.0	17.08		ug/L		85	65 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.91		ug/L		95	50 - 150

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

Lab Sample ID: LCS 310-405951/7
Matrix: Water
Analysis Batch: 405951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	20.0	18.74		ug/L		94	73 - 125
1,2-Dichlorobenzene	20.0	19.07		ug/L		95	68 - 120
1,2-Dichloroethane	20.0	17.69		ug/L		88	70 - 124
1,2-Dichloropropane	20.0	20.83		ug/L		104	73 - 121
1,3,5-Trimethylbenzene	20.0	17.21		ug/L		86	65 - 124
1,3-Dichlorobenzene	20.0	20.05		ug/L		100	67 - 123
1,3-Dichloropropane	20.0	19.31		ug/L		97	72 - 124
1,4-Dichlorobenzene	20.0	18.63		ug/L		93	67 - 120
2,2-Dichloropropane	20.0	22.36		ug/L		112	50 - 150
2-Butanone (MEK)	40.0	34.30		ug/L		86	50 - 150
2-Chloroethyl vinyl ether	20.0	17.78		ug/L		89	50 - 150
2-Chlorotoluene	20.0	19.81		ug/L		99	66 - 122
4-Chlorotoluene	20.0	20.03		ug/L		100	65 - 122
Acetone	40.0	35.52		ug/L		89	50 - 150
Benzene	20.0	19.95		ug/L		100	73 - 122
Bromobenzene	20.0	19.04		ug/L		95	67 - 124
Bromochloromethane	20.0	19.95		ug/L		100	68 - 132
Bromodichloromethane	20.0	18.50		ug/L		93	72 - 121
Bromoform	20.0	17.21		ug/L		86	55 - 129
Carbon disulfide	20.0	19.44		ug/L		97	58 - 131
Carbon tetrachloride	20.0	19.55		ug/L		98	67 - 132
Chlorobenzene	20.0	18.84		ug/L		94	69 - 121
Chlorodibromomethane	20.0	18.88		ug/L		94	69 - 122
Chloroform	20.0	18.79		ug/L		94	72 - 120
cis-1,2-Dichloroethene	20.0	19.94		ug/L		100	74 - 120
cis-1,3-Dichloropropene	20.0	18.41		ug/L		92	71 - 126
Dibromomethane	20.0	19.75		ug/L		99	72 - 123
Ethylbenzene	20.0	19.41		ug/L		97	69 - 122
Hexachlorobutadiene	20.0	20.95		ug/L		105	49 - 150
Hexane	20.0	20.54		ug/L		103	35 - 150
Isopropylbenzene	20.0	18.79		ug/L		94	66 - 126
Methyl tert-butyl ether	20.0	17.71		ug/L		89	68 - 127
Methylene Chloride	20.0	19.56		ug/L		98	50 - 150
Naphthalene	20.0	19.44		ug/L		97	50 - 150
n-Butylbenzene	20.0	18.30		ug/L		92	54 - 138
N-Propylbenzene	20.0	19.01		ug/L		95	65 - 127
p-Isopropyltoluene	20.0	17.82		ug/L		89	61 - 128
sec-Butylbenzene	20.0	19.28		ug/L		96	62 - 132
Styrene	20.0	18.72		ug/L		94	67 - 125
tert-Butylbenzene	20.0	19.12		ug/L		96	64 - 127
Tetrachloroethene	20.0	19.29		ug/L		96	69 - 131
Toluene	20.0	18.56		ug/L		93	72 - 121
trans-1,2-Dichloroethene	20.0	20.00		ug/L		100	68 - 125
trans-1,3-Dichloropropene	20.0	18.54		ug/L		93	68 - 124
Trichloroethene	20.0	19.76		ug/L		99	73 - 126
Xylenes, Total	40.0	39.04		ug/L		98	68 - 124

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

Lab Sample ID: LCS 310-405951/7
Matrix: Water
Analysis Batch: 405951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: LCS 310-405951/8
Matrix: Water
Analysis Batch: 405951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.23		ug/L		81	24 - 150
Chloroethane	20.0	15.52		ug/L		78	51 - 137
Chloromethane	20.0	16.60		ug/L		83	37 - 150
Dichlorodifluoromethane	20.0	19.30		ug/L		96	37 - 150
Trichlorofluoromethane	20.0	17.55		ug/L		88	56 - 144
Vinyl chloride	20.0	16.49		ug/L		82	57 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*102*		*80 - 128*
Toluene-d8 (Surr)	*95*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-269234-I-3 MS
Matrix: Water
Analysis Batch: 405951

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
1,1,1,2-Tetrachloroethane	<0.380		25.0	24.00		ug/L		96	52 - 130
1,1,1-Trichloroethane	<0.190		25.0	23.16		ug/L		93	49 - 130
1,1,2,2-Tetrachloroethane	<0.470		25.0	22.37		ug/L		89	51 - 130
1,1,2-Trichloroethane	<0.450		25.0	26.26		ug/L		105	56 - 130
1,1-Dichloroethane	<0.220		25.0	22.96		ug/L		92	53 - 130
1,1-Dichloroethene	<0.560		25.0	24.07		ug/L		96	39 - 130
1,1-Dichloropropene	<0.430		25.0	24.42		ug/L		98	50 - 131
1,2,3-Trichlorobenzene	<0.900		25.0	23.54		ug/L		94	46 - 150
1,2,3-Trichloropropane	<0.590		25.0	23.75		ug/L		95	50 - 130
1,2,4-Trichlorobenzene	<0.750		25.0	23.72		ug/L		95	45 - 130
1,2,4-Trimethylbenzene	<0.420		25.0	22.06		ug/L		88	45 - 130
1,2-Dibromo-3-Chloropropane	<1.20		25.0	24.57		ug/L		98	45 - 150
1,2-Dibromoethane (EDB)	<0.340		25.0	25.30		ug/L		101	59 - 130
1,2-Dichlorobenzene	<0.370		25.0	24.83		ug/L		99	53 - 130
1,2-Dichloroethane	<0.390		25.0	22.11		ug/L		88	57 - 130
1,2-Dichloropropane	<0.270		25.0	25.13		ug/L		101	60 - 130
1,3,5-Trimethylbenzene	<0.370		25.0	21.85		ug/L		87	44 - 130
1,3-Dichlorobenzene	<0.300		25.0	25.37		ug/L		101	54 - 130
1,3-Dichloropropane	<0.400		25.0	25.42		ug/L		102	57 - 130
1,4-Dichlorobenzene	<0.230		25.0	23.46		ug/L		94	53 - 130
2,2-Dichloropropane	<0.690		25.0	22.43		ug/L		90	28 - 150
2-Butanone (MEK)	<2.10		50.0	45.84		ug/L		92	47 - 150

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

Lab Sample ID: 310-269234-I-3 MS
Matrix: Water
Analysis Batch: 405951

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
2-Chloroethyl vinyl ether	<1.70	F1	25.0	<1.70	F1	ug/L		0	48 - 150
2-Chlorotoluene	<0.280		25.0	24.67		ug/L		99	51 - 130
4-Chlorotoluene	<0.290		25.0	25.15		ug/L		101	46 - 130
Acetone	<3.10		50.0	44.12		ug/L		88	35 - 150
Benzene	<0.220		25.0	23.83		ug/L		95	47 - 130
Bromobenzene	<0.340		25.0	24.93		ug/L		100	52 - 130
Bromochloromethane	<0.540		25.0	24.82		ug/L		99	54 - 132
Bromodichloromethane	<0.390		25.0	23.89		ug/L		96	58 - 130
Bromoform	<0.780		25.0	23.16		ug/L		93	42 - 130
Carbon disulfide	<0.450		25.0	24.39		ug/L		98	39 - 131
Carbon tetrachloride	<0.650		25.0	23.10		ug/L		92	45 - 132
Chlorobenzene	<0.400		25.0	23.55		ug/L		94	54 - 130
Chlorodibromomethane	<0.750		25.0	25.23		ug/L		101	53 - 130
Chloroform	<1.30		25.0	22.70		ug/L		91	55 - 130
cis-1,2-Dichloroethene	<0.210		25.0	23.80		ug/L		95	52 - 130
cis-1,3-Dichloropropene	<0.250		25.0	22.79		ug/L		91	55 - 130
Dibromomethane	<0.330		25.0	24.54		ug/L		98	61 - 130
Ethylbenzene	<0.310		25.0	24.06		ug/L		96	48 - 130
Hexachlorobutadiene	<1.40		25.0	25.81		ug/L		103	27 - 150
Hexane	<0.780		25.0	21.81		ug/L		87	10 - 150
Isopropylbenzene	<0.350		25.0	23.03		ug/L		92	43 - 130
Methyl tert-butyl ether	<0.490		25.0	21.71		ug/L		87	57 - 130
Methylene Chloride	<1.70		25.0	23.41		ug/L		94	50 - 150
Naphthalene	<3.00		25.0	23.61		ug/L		94	33 - 150
n-Butylbenzene	<0.440		25.0	21.80		ug/L		87	37 - 138
N-Propylbenzene	<0.390		25.0	23.08		ug/L		92	42 - 130
p-Isopropyltoluene	<0.330		25.0	21.85		ug/L		87	43 - 130
sec-Butylbenzene	<0.440		25.0	23.02		ug/L		92	41 - 132
Styrene	<0.370		25.0	23.96		ug/L		96	46 - 130
tert-Butylbenzene	<0.390		25.0	23.04		ug/L		92	45 - 130
Tetrachloroethene	<0.480		25.0	23.41		ug/L		94	42 - 131
Toluene	<0.430		25.0	22.74		ug/L		91	48 - 130
trans-1,2-Dichloroethene	<0.270		25.0	23.69		ug/L		95	54 - 130
trans-1,3-Dichloropropene	<0.560		25.0	23.17		ug/L		93	51 - 130
Trichloroethene	<0.430		25.0	23.71		ug/L		95	55 - 130
Xylenes, Total	<0.400		50.0	48.97		ug/L		98	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Lab Sample ID: 310-269234-I-3 MSD
Matrix: Water
Analysis Batch: 405951

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
1,1,1,2-Tetrachloroethane	<0.380		25.0	23.34		ug/L		93	52 - 130	3	20

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

Lab Sample ID: 310-269234-I-3 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	<0.190		25.0	21.56		ug/L		86	49 - 130	7	20
1,1,2,2-Tetrachloroethane	<0.470		25.0	22.48		ug/L		90	51 - 130	0	20
1,1,2-Trichloroethane	<0.450		25.0	25.48		ug/L		102	56 - 130	3	20
1,1-Dichloroethane	<0.220		25.0	21.01		ug/L		84	53 - 130	9	20
1,1-Dichloroethene	<0.560		25.0	22.09		ug/L		88	39 - 130	9	28
1,1-Dichloropropene	<0.430		25.0	23.01		ug/L		92	50 - 131	6	20
1,2,3-Trichlorobenzene	<0.900		25.0	23.60		ug/L		94	46 - 150	0	23
1,2,3-Trichloropropane	<0.590		25.0	24.23		ug/L		97	50 - 130	2	20
1,2,4-Trichlorobenzene	<0.750		25.0	23.75		ug/L		95	45 - 130	0	20
1,2,4-Trimethylbenzene	<0.420		25.0	22.14		ug/L		89	45 - 130	0	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	25.58		ug/L		102	45 - 150	4	20
1,2-Dibromoethane (EDB)	<0.340		25.0	24.34		ug/L		97	59 - 130	4	20
1,2-Dichlorobenzene	<0.370		25.0	24.36		ug/L		97	53 - 130	2	20
1,2-Dichloroethane	<0.390		25.0	20.85		ug/L		83	57 - 130	6	21
1,2-Dichloropropane	<0.270		25.0	24.19		ug/L		97	60 - 130	4	31
1,3,5-Trimethylbenzene	<0.370		25.0	21.83		ug/L		87	44 - 130	0	20
1,3-Dichlorobenzene	<0.300		25.0	24.97		ug/L		100	54 - 130	2	20
1,3-Dichloropropane	<0.400		25.0	24.26		ug/L		97	57 - 130	5	20
1,4-Dichlorobenzene	<0.230		25.0	23.03		ug/L		92	53 - 130	2	20
2,2-Dichloropropane	<0.690		25.0	20.80		ug/L		83	28 - 150	8	20
2-Butanone (MEK)	<2.10		50.0	44.19		ug/L		88	47 - 150	4	20
2-Chloroethyl vinyl ether	<1.70	F1	25.0	<1.70	F1	ug/L		0	48 - 150	NC	20
2-Chlorotoluene	<0.280		25.0	24.17		ug/L		97	51 - 130	2	20
4-Chlorotoluene	<0.290		25.0	24.36		ug/L		97	46 - 130	3	20
Acetone	<3.10		50.0	43.77		ug/L		88	35 - 150	1	26
Benzene	<0.220		25.0	22.17		ug/L		89	47 - 130	7	20
Bromobenzene	<0.340		25.0	23.89		ug/L		96	52 - 130	4	20
Bromochloromethane	<0.540		25.0	23.23		ug/L		93	54 - 132	7	20
Bromodichloromethane	<0.390		25.0	22.81		ug/L		91	58 - 130	5	20
Bromoform	<0.780		25.0	22.89		ug/L		92	42 - 130	1	20
Carbon disulfide	<0.450		25.0	21.92		ug/L		88	39 - 131	11	32
Carbon tetrachloride	<0.650		25.0	21.82		ug/L		87	45 - 132	6	20
Chlorobenzene	<0.400		25.0	22.98		ug/L		92	54 - 130	2	20
Chlorodibromomethane	<0.750		25.0	24.77		ug/L		99	53 - 130	2	20
Chloroform	<1.30		25.0	21.44		ug/L		86	55 - 130	6	20
cis-1,2-Dichloroethene	<0.210		25.0	22.50		ug/L		90	52 - 130	6	20
cis-1,3-Dichloropropene	<0.250		25.0	21.74		ug/L		87	55 - 130	5	20
Dibromomethane	<0.330		25.0	23.74		ug/L		95	61 - 130	3	20
Ethylbenzene	<0.310		25.0	23.21		ug/L		93	48 - 130	4	20
Hexachlorobutadiene	<1.40		25.0	22.94		ug/L		92	27 - 150	12	22
Hexane	<0.780		25.0	21.52		ug/L		86	10 - 150	1	23
Isopropylbenzene	<0.350		25.0	22.75		ug/L		91	43 - 130	1	20
Methyl tert-butyl ether	<0.490		25.0	21.19		ug/L		85	57 - 130	2	20
Methylene Chloride	<1.70		25.0	22.05		ug/L		88	50 - 150	6	24
Naphthalene	<3.00		25.0	23.87		ug/L		95	33 - 150	1	30
n-Butylbenzene	<0.440		25.0	21.55		ug/L		86	37 - 138	1	20
N-Propylbenzene	<0.390		25.0	22.95		ug/L		92	42 - 130	1	20
p-Isopropyltoluene	<0.330		25.0	21.93		ug/L		88	43 - 130	0	20
sec-Butylbenzene	<0.440		25.0	23.16		ug/L		93	41 - 132	1	20

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

Lab Sample ID: 310-269234-I-3 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Styrene	<0.370		25.0	22.81		ug/L		91	46 - 130	5	20
tert-Butylbenzene	<0.390		25.0	23.21		ug/L		93	45 - 130	1	20
Tetrachloroethene	<0.480		25.0	22.15		ug/L		89	42 - 131	5	20
Toluene	<0.430		25.0	21.40		ug/L		86	48 - 130	6	20
trans-1,2-Dichloroethene	<0.270		25.0	21.88		ug/L		88	54 - 130	8	24
trans-1,3-Dichloropropene	<0.560		25.0	22.47		ug/L		90	51 - 130	3	20
Trichloroethene	<0.430		25.0	22.02		ug/L		88	55 - 130	7	20
Xylenes, Total	<0.400		50.0	47.26		ug/L		95	44 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 310-405356/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405954
Prep Batch: 405356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		11/09/23 05:40	11/14/23 13:00	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		11/09/23 05:40	11/14/23 13:00	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		11/09/23 05:40	11/14/23 13:00	1
Diallate	<4.00		10.0	4.00	ug/L		11/09/23 05:40	11/14/23 13:00	1
Dimethoate	<3.60		10.0	3.60	ug/L		11/09/23 05:40	11/14/23 13:00	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		11/09/23 05:40	11/14/23 13:00	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		11/09/23 05:40	11/14/23 13:00	1
Dinoseb	<2.40		10.0	2.40	ug/L		11/09/23 05:40	11/14/23 13:00	1
Disulfoton	<2.40		10.0	2.40	ug/L		11/09/23 05:40	11/14/23 13:00	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		11/09/23 05:40	11/14/23 13:00	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		11/09/23 05:40	11/14/23 13:00	1
Famphur	<3.80		10.0	3.80	ug/L		11/09/23 05:40	11/14/23 13:00	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		11/09/23 05:40	11/14/23 13:00	1
Isodrin	<4.70		10.0	4.70	ug/L		11/09/23 05:40	11/14/23 13:00	1
Isosafrole	<2.30		10.0	2.30	ug/L		11/09/23 05:40	11/14/23 13:00	1
Kepone	<1.00		10.0	1.00	ug/L		11/09/23 05:40	11/14/23 13:00	1
Methapyrilene	<0.760		10.0	0.760	ug/L		11/09/23 05:40	11/14/23 13:00	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		11/09/23 05:40	11/14/23 13:00	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		11/09/23 05:40	11/14/23 13:00	1
Methyl parathion	<2.30		10.0	2.30	ug/L		11/09/23 05:40	11/14/23 13:00	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		11/09/23 05:40	11/14/23 13:00	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		11/09/23 05:40	11/14/23 13:00	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		11/09/23 05:40	11/14/23 13:00	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		11/09/23 05:40	11/14/23 13:00	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		11/09/23 05:40	11/14/23 13:00	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		11/09/23 05:40	11/14/23 13:00	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		11/09/23 05:40	11/14/23 13:00	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		11/09/23 05:40	11/14/23 13:00	1

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

Lab Sample ID: MB 310-405356/1-A
Matrix: Water
Analysis Batch: 405954

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		11/09/23 05:40	11/14/23 13:00	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		11/09/23 05:40	11/14/23 13:00	1
o-Toluidine	<2.90		10.0	2.90	ug/L		11/09/23 05:40	11/14/23 13:00	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		11/09/23 05:40	11/14/23 13:00	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		11/09/23 05:40	11/14/23 13:00	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		11/09/23 05:40	11/14/23 13:00	1
Phenacetin	<1.90		10.0	1.90	ug/L		11/09/23 05:40	11/14/23 13:00	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		11/09/23 05:40	11/14/23 13:00	1
Phorate	<3.20		10.0	3.20	ug/L		11/09/23 05:40	11/14/23 13:00	1
Pronamide	<2.70		10.0	2.70	ug/L		11/09/23 05:40	11/14/23 13:00	1
Safrole	<2.80		10.0	2.80	ug/L		11/09/23 05:40	11/14/23 13:00	1
Thionazin	<3.50		10.0	3.50	ug/L		11/09/23 05:40	11/14/23 13:00	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		11/09/23 05:40	11/14/23 13:00	1

Lab Sample ID: MB 310-405356/1-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.640		10.0	0.640	ug/L		11/09/23 05:40	11/14/23 15:52	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		11/09/23 05:40	11/14/23 15:52	1
Acetophenone	<0.690		10.0	0.690	ug/L		11/09/23 05:40	11/14/23 15:52	1
Anthracene	<0.870		10.0	0.870	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzoic acid	<17.0		100	17.0	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		11/09/23 05:40	11/14/23 15:52	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		11/09/23 05:40	11/14/23 15:52	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		11/09/23 05:40	11/14/23 15:52	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		11/09/23 05:40	11/14/23 15:52	1
bis (2-chloroisopropyl) ether	<0.540		10.0	0.540	ug/L		11/09/23 05:40	11/14/23 15:52	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		11/09/23 05:40	11/14/23 15:52	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		11/09/23 05:40	11/14/23 15:52	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		11/09/23 05:40	11/14/23 15:52	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		11/09/23 05:40	11/14/23 15:52	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		11/09/23 05:40	11/14/23 15:52	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		11/09/23 05:40	11/14/23 15:52	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		11/09/23 05:40	11/14/23 15:52	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		11/09/23 05:40	11/14/23 15:52	1
Chrysene	<0.870		10.0	0.870	ug/L		11/09/23 05:40	11/14/23 15:52	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		11/09/23 05:40	11/14/23 15:52	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		11/09/23 05:40	11/14/23 15:52	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		11/09/23 05:40	11/14/23 15:52	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		11/09/23 05:40	11/14/23 15:52	1

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

Lab Sample ID: MB 310-405356/1-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		11/09/23 05:40	11/14/23 15:52	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		11/09/23 05:40	11/14/23 15:52	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		11/09/23 05:40	11/14/23 15:52	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		11/09/23 05:40	11/14/23 15:52	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		11/09/23 05:40	11/14/23 15:52	1
Diphenylamine	<6.00		10.0	6.00	ug/L		11/09/23 05:40	11/14/23 15:52	1
Fluoranthene	<1.70		10.0	1.70	ug/L		11/09/23 05:40	11/14/23 15:52	1
Fluorene	<0.790		10.0	0.790	ug/L		11/09/23 05:40	11/14/23 15:52	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		11/09/23 05:40	11/14/23 15:52	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		11/09/23 05:40	11/14/23 15:52	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		11/09/23 05:40	11/14/23 15:52	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		11/09/23 05:40	11/14/23 15:52	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		11/09/23 05:40	11/14/23 15:52	1
Isophorone	<0.930		10.0	0.930	ug/L		11/09/23 05:40	11/14/23 15:52	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		11/09/23 05:40	11/14/23 15:52	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		11/09/23 05:40	11/14/23 15:52	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		11/09/23 05:40	11/14/23 15:52	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		11/09/23 05:40	11/14/23 15:52	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		11/09/23 05:40	11/14/23 15:52	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		11/09/23 05:40	11/14/23 15:52	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		11/09/23 05:40	11/14/23 15:52	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		11/09/23 05:40	11/14/23 15:52	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		11/09/23 05:40	11/14/23 15:52	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		11/09/23 05:40	11/14/23 15:52	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		11/09/23 05:40	11/14/23 15:52	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		11/09/23 05:40	11/14/23 15:52	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		11/09/23 05:40	11/14/23 15:52	1
Phenanthrene	<0.790		10.0	0.790	ug/L		11/09/23 05:40	11/14/23 15:52	1
Phenol	<1.10		10.0	1.10	ug/L		11/09/23 05:40	11/14/23 15:52	1
Pyrene	<0.790		10.0	0.790	ug/L		11/09/23 05:40	11/14/23 15:52	1
Pyridine	<1.60		10.0	1.60	ug/L		11/09/23 05:40	11/14/23 15:52	1
1,2,4,5-Tetrachlorobenzene	<0.540		10.0	0.540	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		11/09/23 05:40	11/14/23 15:52	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		11/09/23 05:40	11/14/23 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*39 - 118*	*11/09/23 05:40*	*11/14/23 15:52*	*1*
2-Fluorophenol (Surr)	*61*		*25 - 110*	*11/09/23 05:40*	*11/14/23 15:52*	*1*
Nitrobenzene-d5 (Surr)	*80*		*45 - 129*	*11/09/23 05:40*	*11/14/23 15:52*	*1*
Phenol-d5 (Surr)	*50*		*21 - 110*	*11/09/23 05:40*	*11/14/23 15:52*	*1*
Terphenyl-d14 (Surr)	*91*		*12 - 144*	*11/09/23 05:40*	*11/14/23 15:52*	*1*
2,4,6-Tribromophenol (Surr)	*82*		*27 - 136*	*11/09/23 05:40*	*11/14/23 15:52*	*1*

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

Lab Sample ID: LCS 310-405356/2-A
Matrix: Water
Analysis Batch: 405954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Acetylaminofluorene	64.0	59.69		ug/L		93	35 - 150
4-Aminobiphenyl	64.0	26.48		ug/L		41	24 - 138
Chlorobenzilate	64.0	92.45	*+	ug/L		144	52 - 138
Diallate	64.0	74.94		ug/L		117	42 - 141
Dimethoate	64.0	77.53		ug/L		121	51 - 150
7,12-Dimethylbenz(a)anthracene	64.0	69.78		ug/L		109	51 - 129
3,3'-Dimethylbenzidine	64.0	3.318	J *-	ug/L		5	10 - 150
Dinoseb	64.0	136.4	*+	ug/L		213	25 - 146
Disulfoton	64.0	63.17		ug/L		99	54 - 131
Ethyl methanesulfonate	64.0	58.40		ug/L		91	48 - 120
Ethyl Parathion	64.0	76.78		ug/L		120	52 - 149
Famphur	64.0	130.8	E *+	ug/L		204	44 - 150
Hexachloropropene	64.0	20.53		ug/L		32	10 - 110
Isodrin	64.0	70.23		ug/L		110	52 - 125
Methapyrilene	64.0	<0.760	*-	ug/L		0	10 - 110
3-Methylcholanthrene	64.0	36.57		ug/L		57	43 - 150
Methyl methanesulfonate	64.0	41.92		ug/L		65	36 - 110
Methyl parathion	64.0	87.07		ug/L		136	50 - 150
1,4-Naphthoquinone	64.0	65.41		ug/L		102	37 - 149
1-Naphthylamine	64.0	20.64		ug/L		32	19 - 110
2-Naphthylamine	64.0	20.76		ug/L		32	18 - 127
5-Nitro-o-toluidine	64.0	58.33		ug/L		91	47 - 145
N-Nitrosodiethylamine	64.0	65.15		ug/L		102	47 - 138
N-Nitrosodi-n-butylamine	64.0	75.45		ug/L		118	52 - 142
N-Nitrosomethylethylamine	64.0	62.47		ug/L		98	54 - 123
N-Nitrosopiperidine	64.0	69.11		ug/L		108	60 - 127
N-Nitrosopyrrolidine	64.0	66.99		ug/L		105	56 - 143
o,o',o''-Triethylphosphorothioate	64.0	66.74		ug/L		104	45 - 113
o-Toluidine	64.0	37.66		ug/L		59	24 - 142
p-Dimethylamino azobenzene	64.0	67.76		ug/L		106	42 - 138
Pentachlorobenzene	64.0	62.70		ug/L		98	33 - 110
Pentachloronitrobenzene	64.0	79.49		ug/L		124	65 - 127
Phenacetin	64.0	72.61		ug/L		113	56 - 146
1,4-phenylenediamine	64.0	<1.90	*-	ug/L		0.3	20 - 120
Phorate	64.0	73.00		ug/L		114	57 - 135
Pronamide	64.0	68.61		ug/L		107	61 - 144
Safrole	64.0	57.63		ug/L		90	34 - 110
Thionazin	64.0	70.07		ug/L		109	52 - 147
1,3,5-Trinitrobenzene	64.0	100.2	*+	ug/L		157	39 - 144

Lab Sample ID: LCS 310-405356/2-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	90.92		ug/L		91	43 - 110
Acenaphthylene	100	94.68		ug/L		95	40 - 110
Acetophenone	100	79.63		ug/L		80	48 - 119
Anthracene	100	103.4		ug/L		103	51 - 120

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

Lab Sample ID: LCS 310-405356/2-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]anthracene	100	95.42		ug/L		95	51 - 123
Benzo[a]pyrene	100	87.40		ug/L		87	48 - 125
Benzo[b]fluoranthene	100	97.24		ug/L		97	49 - 129
Benzo[g,h,i]perylene	100	92.54		ug/L		93	43 - 139
Benzo[k]fluoranthene	100	115.7		ug/L		116	47 - 130
Benzyl alcohol	100	85.32		ug/L		85	39 - 128
Bis(2-chloroethoxy)methane	100	83.64		ug/L		84	48 - 121
Bis(2-chloroethyl)ether	100	74.36		ug/L		74	43 - 123
bis (2-chloroisopropyl) ether	100	68.89		ug/L		69	34 - 123
Bis(2-ethylhexyl) phthalate	100	89.67		ug/L		90	43 - 143
4-Bromophenyl phenyl ether	100	111.9		ug/L		112	45 - 119
Butyl benzyl phthalate	100	98.37		ug/L		98	46 - 135
4-Chloroaniline	100	50.88		ug/L		51	21 - 139
4-Chloro-3-methylphenol	100	94.02		ug/L		94	49 - 130
2-Chloronaphthalene	100	96.59		ug/L		97	37 - 110
2-Chlorophenol	100	88.61		ug/L		89	44 - 117
4-Chlorophenyl phenyl ether	100	96.07		ug/L		96	44 - 116
Chrysene	100	97.62		ug/L		98	51 - 125
Dibenzo(a,h)anthracene	100	74.48		ug/L		74	38 - 149
Dibenzofuran	100	91.90		ug/L		92	45 - 112
2,4-Dichlorophenol	100	107.5		ug/L		108	41 - 124
2,6-Dichlorophenol	100	105.3		ug/L		105	30 - 130
Diethyl phthalate	100	93.71		ug/L		94	43 - 135
2,4-Dimethylphenol	100	96.70		ug/L		97	31 - 142
Dimethyl phthalate	100	96.56		ug/L		97	43 - 129
Di-n-butyl phthalate	100	98.00		ug/L		98	50 - 133
1,3-Dinitrobenzene	100	100.5		ug/L		101	45 - 138
4,6-Dinitro-2-methylphenol	200	190.6		ug/L		95	22 - 143
2,4-Dinitrophenol	200	133.6		ug/L		67	10 - 138
2,4-Dinitrotoluene	100	92.57		ug/L		93	47 - 137
2,6-Dinitrotoluene	100	96.38		ug/L		96	51 - 130
Di-n-octyl phthalate	100	80.22		ug/L		80	34 - 150
Fluoranthene	100	97.05		ug/L		97	47 - 128
Fluorene	100	91.06		ug/L		91	45 - 119
Hexachlorobenzene	100	108.3		ug/L		108	48 - 119
Hexachlorobutadiene	100	77.86		ug/L		78	32 - 110
Hexachlorocyclopentadiene	100	90.50		ug/L		90	10 - 110
Hexachloroethane	100	61.14		ug/L		61	31 - 110
Indeno[1,2,3-cd]pyrene	100	78.06		ug/L		78	37 - 150
Isophorone	100	89.28		ug/L		89	50 - 125
2-Methylnaphthalene	100	83.75		ug/L		84	33 - 110
2-Methylphenol	100	83.02		ug/L		83	47 - 118
Methylphenol, 3 & 4	100	79.38		ug/L		79	46 - 117
2-Nitroaniline	100	87.30		ug/L		87	50 - 135
3-Nitroaniline	100	67.98		ug/L		68	42 - 139
4-Nitroaniline	100	73.55		ug/L		74	31 - 145
Nitrobenzene	100	89.40		ug/L		89	47 - 116
2-Nitrophenol	100	118.2		ug/L		118	41 - 129
4-Nitrophenol	200	103.1		ug/L		52	18 - 110

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

Lab Sample ID: LCS 310-405356/2-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405356

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
N-Nitrosodimethylamine			100	67.70		ug/L		68	37 - 110		
N-Nitrosodi-n-propylamine			100	80.71		ug/L		81	45 - 130		
N-Nitrosodiphenylamine			100	100.9		ug/L		101	49 - 121		
Pentachlorophenol			200	184.3		ug/L		92	26 - 133		
Phenanthrene			100	96.63		ug/L		97	51 - 117		
Phenol			100	55.98		ug/L		56	29 - 110		
Pyrene			100	111.0		ug/L		111	48 - 127		
Pyridine			200	13.91	*-	ug/L		7	10 - 110		
1,2,4,5-Tetrachlorobenzene			100	84.94		ug/L		85	36 - 110		
2,3,4,6-Tetrachlorophenol			100	110.8		ug/L		111	33 - 134		
2,4,5-Trichlorophenol			100	108.0		ug/L		108	35 - 133		
2,4,6-Trichlorophenol			100	112.3		ug/L		112	28 - 139		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*95*		*39 - 118*
2-Fluorophenol (Surr)	*77*		*25 - 110*
Nitrobenzene-d5 (Surr)	*96*		*45 - 129*
Phenol-d5 (Surr)	*60*		*21 - 110*
Terphenyl-d14 (Surr)	*116*		*12 - 144*
2,4,6-Tribromophenol (Surr)	*116*		*27 - 136*

Lab Sample ID: LCSD 310-405356/3-A
Matrix: Water
Analysis Batch: 405954

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405356

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Acetylaminofluorene			64.0	54.49		ug/L		85	35 - 150	9	28
4-Aminobiphenyl			64.0	17.11	*1	ug/L		27	24 - 138	43	35
Chlorobenzilate			64.0	87.34		ug/L		136	52 - 138	6	28
Diallate			64.0	70.38		ug/L		110	42 - 141	6	35
Dimethoate			64.0	72.83		ug/L		114	51 - 150	6	26
7,12-Dimethylbenz(a)anthracene			64.0	64.30		ug/L		100	51 - 129	8	28
3,3'-Dimethylbenzidine			64.0	3.843	J *-	ug/L		6	10 - 150	15	35
Dinoseb			64.0	140.3	*+	ug/L		219	25 - 146	3	35
Disulfoton			64.0	57.84		ug/L		90	54 - 131	9	24
Ethyl methanesulfonate			64.0	56.26		ug/L		88	48 - 120	4	27
Ethyl Parathion			64.0	74.38		ug/L		116	52 - 149	3	26
Famphur			64.0	121.0	E *+	ug/L		189	44 - 150	8	35
Hexachloropropene			64.0	31.16	*1	ug/L		49	10 - 110	41	35
Isodrin			64.0	63.27		ug/L		99	52 - 125	10	26
Methapyrilene			64.0	<0.760	*-	ug/L		0	10 - 110	NC	35
3-Methylcholanthrene			64.0	33.13		ug/L		52	43 - 150	10	32
Methyl methanesulfonate			64.0	39.80		ug/L		62	36 - 110	5	26
Methyl parathion			64.0	83.19		ug/L		130	50 - 150	5	25
1,4-Naphthoquinone			64.0	63.57		ug/L		99	37 - 149	3	29
1-Naphthylamine			64.0	15.21		ug/L		24	19 - 110	30	35
2-Naphthylamine			64.0	13.74	*1	ug/L		21	18 - 127	41	35
5-Nitro-o-toluidine			64.0	50.20		ug/L		78	47 - 145	15	31

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

Lab Sample ID: LCSD 310-405356/3-A
Matrix: Water
Analysis Batch: 405954

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405356

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-Nitrosodiethylamine	64.0	60.53		ug/L		95	47 - 138	7	26
N-Nitrosodi-n-butylamine	64.0	71.20		ug/L		111	52 - 142	6	27
N-Nitrosomethylethylamine	64.0	57.53		ug/L		90	54 - 123	8	26
N-Nitrosopiperidine	64.0	64.35		ug/L		101	60 - 127	7	26
N-Nitrosopyrrolidine	64.0	61.02		ug/L		95	56 - 143	9	25
o,o',o''-Triethylphosphorothioate	64.0	64.59		ug/L		101	45 - 113	3	33
o-Toluidine	64.0	26.41		ug/L		41	24 - 142	35	35
p-Dimethylamino azobenzene	64.0	60.35		ug/L		94	42 - 138	12	29
Pentachlorobenzene	64.0	58.57		ug/L		92	33 - 110	7	35
Pentachloronitrobenzene	64.0	72.44		ug/L		113	65 - 127	9	29
Phenacetin	64.0	68.40		ug/L		107	56 - 146	6	25
1,4-phenylenediamine	64.0	<1.90	*- *1	ug/L		0.03	20 - 120	162	35
Phorate	64.0	67.00		ug/L		105	57 - 135	9	26
Pronamide	64.0	64.05		ug/L		100	61 - 144	7	27
Safrole	64.0	57.81		ug/L		90	34 - 110	0	35
Thionazin	64.0	63.97		ug/L		100	52 - 147	9	28
1,3,5-Trinitrobenzene	64.0	97.49	*+	ug/L		152	39 - 144	3	35

Lab Sample ID: LCSD 310-405356/3-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405356

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	100	85.05		ug/L		85	43 - 110	7	35
Acenaphthylene	100	87.26		ug/L		87	40 - 110	8	35
Acetophenone	100	73.96		ug/L		74	48 - 119	7	35
Anthracene	100	95.82		ug/L		96	51 - 120	8	35
Benzo[a]anthracene	100	86.44		ug/L		86	51 - 123	10	35
Benzo[a]pyrene	100	79.36		ug/L		79	48 - 125	10	35
Benzo[b]fluoranthene	100	87.70		ug/L		88	49 - 129	10	35
Benzo[g,h,i]perylene	100	82.59		ug/L		83	43 - 139	11	35
Benzo[k]fluoranthene	100	102.7		ug/L		103	47 - 130	12	35
Benzyl alcohol	100	78.51		ug/L		79	39 - 128	8	35
Bis(2-chloroethoxy)methane	100	78.77		ug/L		79	48 - 121	6	35
Bis(2-chloroethyl)ether	100	68.91		ug/L		69	43 - 123	8	35
bis (2-chloroisopropyl) ether	100	62.98		ug/L		63	34 - 123	9	35
Bis(2-ethylhexyl) phthalate	100	82.83		ug/L		83	43 - 143	8	35
4-Bromophenyl phenyl ether	100	104.7		ug/L		105	45 - 119	7	35
Butyl benzyl phthalate	100	91.65		ug/L		92	46 - 135	7	35
4-Chloroaniline	100	31.39	*1	ug/L		31	21 - 139	47	35
4-Chloro-3-methylphenol	100	89.77		ug/L		90	49 - 130	5	35
2-Chloronaphthalene	100	87.74		ug/L		88	37 - 110	10	35
2-Chlorophenol	100	81.99		ug/L		82	44 - 117	8	35
4-Chlorophenyl phenyl ether	100	88.93		ug/L		89	44 - 116	8	35
Chrysene	100	90.26		ug/L		90	51 - 125	8	35
Dibenzo(a,h)anthracene	100	66.22		ug/L		66	38 - 149	12	35
Dibenzofuran	100	86.00		ug/L		86	45 - 112	7	35
2,4-Dichlorophenol	100	101.3		ug/L		101	41 - 124	6	35
2,6-Dichlorophenol	100	99.28		ug/L		99	30 - 130	6	35

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

Lab Sample ID: LCSD 310-405356/3-A
Matrix: Water
Analysis Batch: 405957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405356

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diethyl phthalate			100	86.38		ug/L		86	43 - 135	8	35
2,4-Dimethylphenol			100	91.38		ug/L		91	31 - 142	6	35
Dimethyl phthalate			100	90.04		ug/L		90	43 - 129	7	35
Di-n-butyl phthalate			100	88.91		ug/L		89	50 - 133	10	35
1,3-Dinitrobenzene			100	93.50		ug/L		93	45 - 138	7	35
4,6-Dinitro-2-methylphenol			200	186.3		ug/L		93	22 - 143	2	35
2,4-Dinitrophenol			200	135.4		ug/L		68	10 - 138	1	35
2,4-Dinitrotoluene			100	84.66		ug/L		85	47 - 137	9	35
2,6-Dinitrotoluene			100	92.02		ug/L		92	51 - 130	5	35
Di-n-octyl phthalate			100	76.55		ug/L		77	34 - 150	5	35
Fluoranthene			100	89.17		ug/L		89	47 - 128	8	35
Fluorene			100	83.77		ug/L		84	45 - 119	8	35
Hexachlorobenzene			100	100.5		ug/L		100	48 - 119	7	35
Hexachlorobutadiene			100	83.39		ug/L		83	32 - 110	7	35
Hexachlorocyclopentadiene			100	94.88		ug/L		95	10 - 110	5	35
Hexachloroethane			100	65.27		ug/L		65	31 - 110	7	35
Indeno[1,2,3-cd]pyrene			100	71.48		ug/L		71	37 - 150	9	35
Isophorone			100	84.53		ug/L		85	50 - 125	5	35
2-Methylnaphthalene			100	80.48		ug/L		80	33 - 110	4	35
2-Methylphenol			100	76.90		ug/L		77	47 - 118	8	35
Methylphenol, 3 & 4			100	72.38		ug/L		72	46 - 117	9	35
2-Nitroaniline			100	77.87		ug/L		78	50 - 135	11	35
3-Nitroaniline			100	54.48		ug/L		54	42 - 139	22	35
4-Nitroaniline			100	60.96		ug/L		61	31 - 145	19	35
Nitrobenzene			100	84.89		ug/L		85	47 - 116	5	35
2-Nitrophenol			100	113.1		ug/L		113	41 - 129	4	35
4-Nitrophenol			200	94.56		ug/L		47	18 - 110	9	35
N-Nitrosodimethylamine			100	61.09		ug/L		61	37 - 110	10	35
N-Nitrosodi-n-propylamine			100	73.31		ug/L		73	45 - 130	10	35
N-Nitrosodiphenylamine			100	92.79		ug/L		93	49 - 121	8	35
Pentachlorophenol			200	173.8		ug/L		87	26 - 133	6	35
Phenanthrene			100	89.42		ug/L		89	51 - 117	8	35
Phenol			100	52.41		ug/L		52	29 - 110	7	35
Pyrene			100	102.2		ug/L		102	48 - 127	8	35
Pyridine			200	7.260	J *- *1	ug/L		4	10 - 110	63	35
1,2,4,5-Tetrachlorobenzene			100	81.76		ug/L		82	36 - 110	4	35
2,3,4,6-Tetrachlorophenol			100	102.2		ug/L		102	33 - 134	8	35
2,4,5-Trichlorophenol			100	100.7		ug/L		101	35 - 133	7	35
2,4,6-Trichlorophenol			100	105.2		ug/L		105	28 - 139	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*91*		*39 - 118*
2-Fluorophenol (Surr)	*73*		*25 - 110*
Nitrobenzene-d5 (Surr)	*92*		*45 - 129*
Phenol-d5 (Surr)	*57*		*21 - 110*
Terphenyl-d14 (Surr)	*107*		*12 - 144*
2,4,6-Tribromophenol (Surr)	*110*		*27 - 136*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-405444/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405682
Prep Batch: 405444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0270		0.0640	0.0270	ug/L		11/09/23 11:12	11/10/23 18:19	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		11/09/23 11:12	11/10/23 18:19	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		11/09/23 11:12	11/10/23 18:19	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		11/09/23 11:12	11/10/23 18:19	1
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		11/09/23 11:12	11/10/23 18:19	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		11/09/23 11:12	11/10/23 18:19	1
Chlordane (technical)	<0.810		2.00	0.810	ug/L		11/09/23 11:12	11/10/23 18:19	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		11/09/23 11:12	11/10/23 18:19	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		11/09/23 11:12	11/10/23 18:19	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		11/09/23 11:12	11/10/23 18:19	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		11/09/23 11:12	11/10/23 18:19	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		11/09/23 11:12	11/10/23 18:19	1
Endrin	<0.0260		0.0640	0.0260	ug/L		11/09/23 11:12	11/10/23 18:19	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		11/09/23 11:12	11/10/23 18:19	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		11/09/23 11:12	11/10/23 18:19	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		11/09/23 11:12	11/10/23 18:19	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		11/09/23 11:12	11/10/23 18:19	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		11/09/23 11:12	11/10/23 18:19	1
Toxaphene	<0.690		2.00	0.690	ug/L		11/09/23 11:12	11/10/23 18:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*61*		*10 - 136*	*11/09/23 11:12*	*11/10/23 18:19*	*1*
Tetrachloro-m-xylene	*57*		*10 - 130*	*11/09/23 11:12*	*11/10/23 18:19*	*1*

Lab Sample ID: LCS 310-405444/4-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405682
Prep Batch: 405444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.00	0.7218		ug/L		72	36 - 149
4,4'-DDE	1.00	0.6754		ug/L		68	34 - 130
4,4'-DDT	1.00	0.7552		ug/L		76	23 - 150
Aldrin	1.00	0.4765		ug/L		48	13 - 120
alpha-BHC	1.00	0.6530		ug/L		65	36 - 127
beta-BHC	1.00	0.7328		ug/L		73	37 - 136
delta-BHC	1.00	0.6540		ug/L		65	33 - 134
Dieldrin	1.00	0.7232		ug/L		72	39 - 130
Endosulfan I	1.00	0.2153		ug/L		22	10 - 120
Endosulfan II	1.00	0.2742		ug/L		27	14 - 120
Endosulfan sulfate	1.00	0.8732		ug/L		87	36 - 147
Endrin	1.00	0.7715		ug/L		77	39 - 140
Endrin aldehyde	1.00	0.7698		ug/L		77	32 - 137
gamma-BHC (Lindane)	1.00	0.7157		ug/L		72	36 - 132
Heptachlor	1.00	0.5853		ug/L		59	27 - 120
Heptachlor epoxide	1.00	0.7004		ug/L		70	38 - 133
Methoxychlor	1.00	0.7869		ug/L		79	10 - 150

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

Lab Sample ID: LCS 310-405444/4-A
Matrix: Water
Analysis Batch: 405682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405444

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	54		10 - 136
Tetrachloro-m-xylene	55		10 - 130

Lab Sample ID: LCSD 310-405444/5-A
Matrix: Water
Analysis Batch: 405682

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405444

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			1.00	0.7076		ug/L		71	36 - 149	2	35
4,4'-DDE			1.00	0.6382		ug/L		64	34 - 130	6	35
4,4'-DDT			1.00	0.7421		ug/L		74	23 - 150	2	35
Aldrin			1.00	0.4153		ug/L		42	13 - 120	14	35
alpha-BHC			1.00	0.6263		ug/L		63	36 - 127	4	35
beta-BHC			1.00	0.7018		ug/L		70	37 - 136	4	35
delta-BHC			1.00	0.6418		ug/L		64	33 - 134	2	35
Dieldrin			1.00	0.7061		ug/L		71	39 - 130	2	35
Endosulfan I			1.00	0.2061		ug/L		21	10 - 120	4	35
Endosulfan II			1.00	0.2671		ug/L		27	14 - 120	3	35
Endosulfan sulfate			1.00	0.8654		ug/L		87	36 - 147	1	35
Endrin			1.00	0.7720		ug/L		77	39 - 140	0	35
Endrin aldehyde			1.00	0.7434		ug/L		74	32 - 137	3	35
gamma-BHC (Lindane)			1.00	0.6654		ug/L		67	36 - 132	7	35
Heptachlor			1.00	0.5207		ug/L		52	27 - 120	12	35
Heptachlor epoxide			1.00	0.6814		ug/L		68	38 - 133	3	35
Methoxychlor			1.00	0.7716		ug/L		77	10 - 150	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	57		10 - 136
Tetrachloro-m-xylene	51		10 - 130

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

Lab Sample ID: MB 310-405444/1-A
Matrix: Water
Analysis Batch: 405775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.170		0.800	0.170	ug/L		11/09/23 11:12	11/13/23 23:45	1
PCB-1221	<0.170		0.800	0.170	ug/L		11/09/23 11:12	11/13/23 23:45	1
PCB-1232	<0.170		0.800	0.170	ug/L		11/09/23 11:12	11/13/23 23:45	1
PCB-1242	<0.170		0.800	0.170	ug/L		11/09/23 11:12	11/13/23 23:45	1
PCB-1248	<0.110		0.800	0.110	ug/L		11/09/23 11:12	11/13/23 23:45	1
PCB-1254	<0.110		0.800	0.110	ug/L		11/09/23 11:12	11/13/23 23:45	1
PCB-1260	<0.110		0.800	0.110	ug/L		11/09/23 11:12	11/13/23 23:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	62		10 - 136	11/09/23 11:12	11/13/23 23:45	1
Tetrachloro-m-xylene	58		10 - 130	11/09/23 11:12	11/13/23 23:45	1

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

Lab Sample ID: LCS 310-405444/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405775
Prep Batch: 405444

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			10.0	8.341		ug/L		83	30 - 133		
PCB-1260			10.0	7.535		ug/L		75	31 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*55*		*10 - 136*
Tetrachloro-m-xylene	*56*		*10 - 130*

Lab Sample ID: LCSD 310-405444/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405775
Prep Batch: 405444

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			10.0	8.089		ug/L		81	30 - 133	3	35
PCB-1260			10.0	7.299		ug/L		73	31 - 133	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*58*		*10 - 136*
Tetrachloro-m-xylene	*59*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 680-808435/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 810108
Prep Batch: 808435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.180		1.10	0.180	ug/L		11/15/23 14:57	11/27/23 18:03	1
Silvex (2,4,5-TP)	<0.0960		0.850	0.0960	ug/L		11/15/23 14:57	11/27/23 18:03	1
Pentachlorophenol	<0.0230		0.250	0.0230	ug/L		11/15/23 14:57	11/27/23 18:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*56*		*26 - 137*	*11/15/23 14:57*	*11/27/23 18:03*	*1*

Lab Sample ID: LCS 680-808435/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 810108
Prep Batch: 808435

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			6.40	5.748		ug/L		90	21 - 147		
Silvex (2,4,5-TP)			1.60	1.464		ug/L		92	31 - 144		
Pentachlorophenol			1.60	1.368		ug/L		85	32 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*74*		*26 - 137*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 680-808435/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 810108
Prep Batch: 808435

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			6.40	3.982		ug/L		62	21 - 147	36	50
Silvex (2,4,5-TP)			1.60	1.007		ug/L		63	31 - 144	37	50
Pentachlorophenol			1.60	0.9641		ug/L		60	32 - 136	35	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*55*		*26 - 137*

Lab Sample ID: 310-268895-D-1-K MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: TCLP
Analysis Batch: 810108
Prep Batch: 808435

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	<2.25		80.0	71.73		ug/L		90	21 - 130
Silvex (2,4,5-TP)	<1.20		20.0	20.99		ug/L		105	31 - 144
Pentachlorophenol	<0.288		20.0	10.82		ug/L		54	32 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCAA	*75*		*26 - 137*

Lab Sample ID: 310-268895-D-1-L MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: TCLP
Analysis Batch: 810108
Prep Batch: 808435

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	<2.25		80.0	54.01		ug/L		68	21 - 130	28	50
Silvex (2,4,5-TP)	<1.20		20.0	16.26		ug/L		81	31 - 144	25	50
Pentachlorophenol	<0.288		20.0	8.508		ug/L		43	32 - 136	24	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCAA	*60*		*26 - 137*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-405796/3
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0780		0.200	0.0780	mg/L			11/08/23 09:28	1

Lab Sample ID: LCS 310-405796/4
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405796

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N			2.00	2.169		mg/L		108	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 310-269080-B-1 MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.45		5.00	7.759		mg/L		106	80 - 120

Lab Sample ID: 310-269080-B-1 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405796

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	2.45		5.00	7.848		mg/L		108	80 - 120	1	15

Lab Sample ID: MB 310-406606/3
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406606

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.450		1.00	0.450	mg/L			11/18/23 09:18	1

Lab Sample ID: LCS 310-406606/4
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406606

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.599		mg/L		96	90 - 110

Lab Sample ID: 310-268973-B-1 MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406606

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	318		100	416.6		mg/L		99	80 - 120

Lab Sample ID: 310-268973-B-1 MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 406606

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	318		100	415.2		mg/L		97	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-405520/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405719
Prep Batch: 405520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000530		0.00200	0.000530	mg/L		11/10/23 09:15	11/10/23 17:44	1
Barium	<0.000640		0.00200	0.000640	mg/L		11/10/23 09:15	11/10/23 17:44	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		11/10/23 09:15	11/10/23 17:44	1
Chromium	<0.00110		0.00500	0.00110	mg/L		11/10/23 09:15	11/10/23 17:44	1
Copper	<0.00180		0.00500	0.00180	mg/L		11/10/23 09:15	11/10/23 17:44	1
Iron	<0.0360		0.100	0.0360	mg/L		11/10/23 09:15	11/10/23 17:44	1

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

Lab Sample ID: MB 310-405520/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405719
Prep Batch: 405520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.000240		0.000500	0.000240	mg/L		11/10/23 09:15	11/10/23 17:44	1
Magnesium	<0.150		0.500	0.150	mg/L		11/10/23 09:15	11/10/23 17:44	1
Nickel	<0.00190		0.00500	0.00190	mg/L		11/10/23 09:15	11/10/23 17:44	1
Potassium	<0.150		0.500	0.150	mg/L		11/10/23 09:15	11/10/23 17:44	1
Selenium	<0.00140		0.00500	0.00140	mg/L		11/10/23 09:15	11/10/23 17:44	1
Silver	<0.000500		0.00100	0.000500	mg/L		11/10/23 09:15	11/10/23 17:44	1
Zinc	<0.00640		0.0200	0.00640	mg/L		11/10/23 09:15	11/10/23 17:44	1

Lab Sample ID: LCS 310-405520/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405719
Prep Batch: 405520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2046		mg/L		102	80 - 120
Barium	0.100	0.09877		mg/L		99	80 - 120
Cadmium	0.100	0.1054		mg/L		105	80 - 120
Chromium	0.100	0.09374		mg/L		94	80 - 120
Copper	0.200	0.2054		mg/L		103	80 - 120
Iron	0.200	0.2081		mg/L		104	80 - 120
Lead	0.200	0.2091		mg/L		105	80 - 120
Magnesium	2.00	1.925		mg/L		96	80 - 120
Nickel	0.200	0.2038		mg/L		102	80 - 120
Potassium	2.00	1.917		mg/L		96	80 - 120
Selenium	0.400	0.3982		mg/L		100	80 - 120
Silver	0.100	0.1141		mg/L		114	80 - 120
Zinc	0.200	0.1958		mg/L		98	80 - 120

Lab Sample ID: 310-269291-A-2-B MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405719
Prep Batch: 405520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.000649	J	0.200	0.2089		mg/L		104	75 - 125
Barium	0.116		0.100	0.2161		mg/L		100	75 - 125
Cadmium	0.000214		0.100	0.1080		mg/L		108	75 - 125
Chromium	<0.00110		0.100	0.09431		mg/L		94	75 - 125
Copper	0.0656		0.200	0.2777		mg/L		106	75 - 125
Iron	0.0870	J	0.200	0.2916		mg/L		102	75 - 125
Lead	0.000581		0.200	0.2121		mg/L		106	75 - 125
Magnesium	3.71		2.00	5.543		mg/L		92	75 - 125
Nickel	<0.00190		0.200	0.2076		mg/L		104	75 - 125
Potassium	0.589		2.00	2.505		mg/L		96	75 - 125
Selenium	0.00161	J	0.400	0.4125		mg/L		103	75 - 125
Silver	<0.000500		0.100	0.1174		mg/L		117	75 - 125
Zinc	0.0232		0.200	0.2217		mg/L		99	75 - 125

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

Lab Sample ID: 310-269291-A-2-C MSD
Matrix: Water
Analysis Batch: 405719

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 405520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.000649	J	0.200	0.2112		mg/L		105	75 - 125	1	20
Barium	0.116		0.100	0.2176		mg/L		102	75 - 125	1	20
Cadmium	0.000214		0.100	0.1081		mg/L		108	75 - 125	0	20
Chromium	<0.00110		0.100	0.09517		mg/L		95	75 - 125	1	20
Copper	0.0656		0.200	0.2803		mg/L		107	75 - 125	1	20
Iron	0.0870	J	0.200	0.2987		mg/L		106	75 - 125	2	20
Lead	0.000581		0.200	0.2107		mg/L		105	75 - 125	1	20
Magnesium	3.71		2.00	5.785		mg/L		104	75 - 125	4	20
Nickel	<0.00190		0.200	0.2078		mg/L		104	75 - 125	0	20
Potassium	0.589		2.00	2.569		mg/L		99	75 - 125	3	20
Selenium	0.00161	J	0.400	0.4152		mg/L		103	75 - 125	1	20
Silver	<0.000500		0.100	0.1182		mg/L		118	75 - 125	1	20
Zinc	0.0232		0.200	0.2249		mg/L		101	75 - 125	1	20

Lab Sample ID: 310-269190-A-10-B DU
Matrix: Water
Analysis Batch: 405719

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 405520

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0422		0.04118		mg/L		2	20
Barium	0.0499		0.04812		mg/L		4	20
Cadmium	<0.000100		<0.000100		mg/L		NC	20
Chromium	<0.00110		<0.00110		mg/L		NC	20
Copper	<0.00180		<0.00180		mg/L		NC	20
Iron	<0.0360		<0.0360		mg/L		NC	20
Lead	<0.000240		<0.000240		mg/L		NC	20
Magnesium	3.53		3.451		mg/L		2	20
Nickel	<0.00190		<0.00190		mg/L		NC	20
Selenium	<0.00140		<0.00140		mg/L		NC	20
Silver	<0.000500		<0.000500		mg/L		NC	20
Zinc	<0.00640		<0.00640		mg/L		NC	20

Lab Sample ID: 310-269190-A-10-B DU ^4
Matrix: Water
Analysis Batch: 405849

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 405520

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	7.90		7.908		mg/L		0.08	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-406598/1-A
Matrix: Water
Analysis Batch: 406827

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 406598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L		11/20/23 11:09	11/21/23 10:43	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 310-406598/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406827 — **Prep Batch: 406598**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.001695		mg/L		102	80 - 120		

Lab Sample ID: 310-268545-A-9-H MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 406827 — **Prep Batch: 406598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000140		0.00167	0.001673		mg/L		100	80 - 120		

Lab Sample ID: 310-268545-A-9-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 406827 — **Prep Batch: 406598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000140		0.00167	0.001716		mg/L		103	80 - 120	3	20

Method: 2540E - Solids, Volatile and Fixed (VS)

Lab Sample ID: MB 310-405749/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 405749

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	<50.0		50.0	50.0	mg/L			11/10/23 09:34	1
Fixed Solids	<50.0		50.0	50.0	mg/L			11/10/23 09:34	1

Lab Sample ID: 310-269165-1 DU — **Client Sample ID: Site 1_Leachate_23_11**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 405749

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Volatile Solids	890			890.0		mg/L				0	35
Fixed Solids	3780			4380		mg/L				15	26

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 310-405920/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406004 — **Prep Batch: 405920**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.220		0.500	0.220	mg/L		11/14/23 09:30	11/14/23 17:29	1

Lab Sample ID: LCS 310-405920/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406004 — **Prep Batch: 405920**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			4.00	3.785		mg/L		95	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 310-269172-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406004 — **Prep Batch: 405920**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	1.33	F1	4.00	4.973		mg/L		91	90 - 110

Lab Sample ID: 310-269172-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406004 — **Prep Batch: 405920**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	1.33	F1	4.00	4.916	F1	mg/L		89	90 - 110	1	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 310-405544/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 405669 — **Prep Batch: 405544**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	<0.550		1.00	0.550	mg/L		11/10/23 06:14	11/10/23 13:12	1

Lab Sample ID: LCS 310-405544/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 405669 — **Prep Batch: 405544**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	4.01	3.888		mg/L		97	90 - 110

Lab Sample ID: 310-269154-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 405669 — **Prep Batch: 405544**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	121	F1	100	221.2		mg/L		100	90 - 110

Lab Sample ID: 310-269154-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 405669 — **Prep Batch: 405544**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	121	F1	100	240.0	F1	mg/L		118	90 - 110	8	16

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 310-405350/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 405349

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P	<0.0320		0.100	0.0320	mg/L			11/08/23 22:01	1

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: LCS 310-405350/1-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 405349

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Orthophosphate as P			1.39	1.456		mg/L		105	90 - 110		

Lab Sample ID: 310-269165-1 MS
Client Sample ID: Site 1_Leachate_23_11
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 405349

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Orthophosphate as P	1.35	F1	5.01	1.923	F1	mg/L		11	90 - 110		

Lab Sample ID: 310-269165-1 MSD
Client Sample ID: Site 1_Leachate_23_11
Matrix: Water
Prep Type: Dissolved
Analysis Batch: 405349

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Orthophosphate as P	1.35	F1	5.01	1.877	F1	mg/L		11	90 - 110	2	10

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 310-405568/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405704
Prep Batch: 405568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	<0.0620		0.100	0.0620	mg/L		11/10/23 08:21	11/10/23 18:50	1
Phosphorus as PO4	<0.190		0.310	0.190	mg/L		11/10/23 08:21	11/10/23 18:50	1

Lab Sample ID: LCS 310-405568/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405704
Prep Batch: 405568

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Phosphorus as P			1.00	0.9054		mg/L		90	90 - 110		

Lab Sample ID: 310-269092-A-1-B MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405704
Prep Batch: 405568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Phosphorus as P	0.900		1.00	1.848		mg/L		95	90 - 110		

Lab Sample ID: 310-269092-A-1-C MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405704
Prep Batch: 405568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Phosphorus as P	0.900		1.00	1.834		mg/L		93	90 - 110	1	13

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-405405/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405703
Prep Batch: 405405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.00430		0.0100	0.00430	mg/L		11/09/23 09:17	11/10/23 17:39	1

Lab Sample ID: LCS 310-405405/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405703
Prep Batch: 405405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.200	0.1884		mg/L		94	90 - 110

Lab Sample ID: 310-269099-B-1-B MS
Client Sample ID: Matrix Spike
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405703
Prep Batch: 405405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	<0.00430		0.200	0.1864		mg/L		93	59 - 126

Lab Sample ID: 310-269099-B-1-C MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405703
Prep Batch: 405405

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.00430		0.200	0.1874		mg/L		94	59 - 126	1	35

Method: 9040C - pH

Lab Sample ID: 310-269165-1 DU
Client Sample ID: Site 1_Leachate_23_11
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405336

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.07	HF	7.050		SU		0.3	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-405413/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405413

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.70		5.00	1.70	mg/L			11/09/23 09:28	1

Lab Sample ID: LCS 310-405413/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 405413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	103.0		mg/L		103	75 - 116

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: 310-269183-A-1 DU
Matrix: Water
Analysis Batch: 405413

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	2020			2016		mg/L				0	35

Method: SM 2540B - Solids, Total

Lab Sample ID: MB 310-405601/1
Matrix: Water
Analysis Batch: 405601

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	<42.0		50.0	42.0	mg/L			11/10/23 09:34	1

Lab Sample ID: LCS 310-405601/2
Matrix: Water
Analysis Batch: 405601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Solids			1000	984.0		mg/L		98	89 - 115		

Lab Sample ID: 310-269165-1 DU
Matrix: Water
Analysis Batch: 405601

Client Sample ID: Site 1_Leachate_23_11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	4670			5270		mg/L				12	35

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-405534/1
Matrix: Water
Analysis Batch: 405534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<34.0		50.0	34.0	mg/L			11/09/23 19:23	1

Lab Sample ID: LCS 310-405534/2
Matrix: Water
Analysis Batch: 405534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	962.0		mg/L		96	90 - 110		

Lab Sample ID: 310-269127-G-2 DU
Matrix: Water
Analysis Batch: 405534

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	504			470.0		mg/L				7	20

Method: SM 3500 CR B - Chromium, Hexavalent

Lab Sample ID: MB 310-405320/1-A
Matrix: Water
Analysis Batch: 405313

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium (VI)	<0.0100		0.0200	0.0100	mg/L			11/08/23 13:53	1

Lab Sample ID: LCS 310-405320/2-A
Matrix: Water
Analysis Batch: 405313

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium (VI)	0.401	0.3892		mg/L		97	90 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 310-405367/1
Matrix: Water
Analysis Batch: 405367

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			11/09/23 06:38	1

Lab Sample ID: LCS 310-405367/2
Matrix: Water
Analysis Batch: 405367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbonaceous Biochemical Oxygen Demand	198	170.5		mg/L		86	76 - 126

Lab Sample ID: 310-269171-B-1 DU
Matrix: Water
Analysis Batch: 405367

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbonaceous Biochemical Oxygen Demand	<3.00		<3.00		mg/L		NC	30

Method: SM 5220D - COD

Lab Sample ID: MB 310-405423/60
Matrix: Water
Analysis Batch: 405423

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<4.80		5.00	4.80	mg/L			11/09/23 09:51	1

Lab Sample ID: LCS 310-405423/63
Matrix: Water
Analysis Batch: 405423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	125	125.3		mg/L		100	85 - 115

Client: Foth Infrastructure & Environment, LLC
Project/Site: Site 1 Leachate

Job ID: 310-269165-1

Method: SM 5220D - COD (Continued)

Lab Sample ID: 310-269165-1 MS
Matrix: Water
Analysis Batch: 405423

Client Sample ID: Site 1_Leachate_23_11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand	505		250	778.1	E	mg/L		109	81 - 144		

Lab Sample ID: 310-269165-1 MSD
Matrix: Water
Analysis Batch: 405423

Client Sample ID: Site 1_Leachate_23_11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	505		250	767.9	E	mg/L		105	81 - 144	1	15

GC/MS VOA

Analysis Batch: 405662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8260D	
MB 310-405662/5	Method Blank	Total/NA	Water	8260D	
LCS 310-405662/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-405662/7	Lab Control Sample	Total/NA	Water	8260D	
310-269161-A-27 MS	Matrix Spike	Total/NA	Water	8260D	
310-269161-A-27 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 405951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8260D	
MB 310-405951/6	Method Blank	Total/NA	Water	8260D	
LCS 310-405951/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-405951/8	Lab Control Sample	Total/NA	Water	8260D	
310-269234-I-3 MS	Matrix Spike	Total/NA	Water	8260D	
310-269234-I-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 405356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	3510C	
MB 310-405356/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-405356/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-405356/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 405954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8270E	405356
MB 310-405356/1-A	Method Blank	Total/NA	Water	8270E	405356
LCS 310-405356/2-A	Lab Control Sample	Total/NA	Water	8270E	405356
LCSD 310-405356/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	405356

Analysis Batch: 405957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8270E	405356
MB 310-405356/1-A	Method Blank	Total/NA	Water	8270E	405356
LCS 310-405356/2-A	Lab Control Sample	Total/NA	Water	8270E	405356
LCSD 310-405356/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	405356

GC Semi VOA

Prep Batch: 405444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	3510C	
MB 310-405444/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-405444/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 310-405444/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-405444/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 310-405444/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

GC Semi VOA

Analysis Batch: 405682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8081B	405444
MB 310-405444/1-A	Method Blank	Total/NA	Water	8081B	405444
LCS 310-405444/4-A	Lab Control Sample	Total/NA	Water	8081B	405444
LCSD 310-405444/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	405444

Analysis Batch: 405775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8082A	405444
MB 310-405444/1-A	Method Blank	Total/NA	Water	8082A	405444
LCS 310-405444/2-A	Lab Control Sample	Total/NA	Water	8082A	405444
LCSD 310-405444/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	405444

Leach Batch: 808285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268895-D-1-K MS	Matrix Spike	TCLP	Water	1311	
310-268895-D-1-L MSD	Matrix Spike Duplicate	TCLP	Water	1311	

Prep Batch: 808435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8151A	
MB 680-808435/1-A	Method Blank	Total/NA	Water	8151A	
LCS 680-808435/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 680-808435/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
310-268895-D-1-K MS	Matrix Spike	TCLP	Water	8151A	808285
310-268895-D-1-L MSD	Matrix Spike Duplicate	TCLP	Water	8151A	808285

Analysis Batch: 810108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	8151A	808435
MB 680-808435/1-A	Method Blank	Total/NA	Water	8151A	808435
LCS 680-808435/2-A	Lab Control Sample	Total/NA	Water	8151A	808435
LCSD 680-808435/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	808435
310-268895-D-1-K MS	Matrix Spike	TCLP	Water	8151A	808435
310-268895-D-1-L MSD	Matrix Spike Duplicate	TCLP	Water	8151A	808435

HPLC/IC

Analysis Batch: 405796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	9056A	
MB 310-405796/3	Method Blank	Total/NA	Water	9056A	
LCS 310-405796/4	Lab Control Sample	Total/NA	Water	9056A	
310-269080-B-1 MS	Matrix Spike	Total/NA	Water	9056A	
310-269080-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Analysis Batch: 406606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	9056A	
MB 310-406606/3	Method Blank	Total/NA	Water	9056A	
LCS 310-406606/4	Lab Control Sample	Total/NA	Water	9056A	
310-268973-B-1 MS	Matrix Spike	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 406606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268973-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Metals

Prep Batch: 405520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	3005A	
MB 310-405520/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-405520/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-269291-A-2-B MS	Matrix Spike	Total/NA	Water	3005A	
310-269291-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-269190-A-10-B DU	Duplicate	Total/NA	Water	3005A	
310-269190-A-10-B DU ^4	Duplicate	Total/NA	Water	3005A	

Analysis Batch: 405719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	6020B	405520
MB 310-405520/1-A	Method Blank	Total/NA	Water	6020B	405520
LCS 310-405520/2-A	Lab Control Sample	Total/NA	Water	6020B	405520
310-269291-A-2-B MS	Matrix Spike	Total/NA	Water	6020B	405520
310-269291-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	405520
310-269190-A-10-B DU	Duplicate	Total/NA	Water	6020B	405520

Analysis Batch: 405833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	6020B	405520

Analysis Batch: 405849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269190-A-10-B DU ^4	Duplicate	Total/NA	Water	6020B	405520

Prep Batch: 406598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	7470A	
MB 310-406598/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-406598/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-268545-A-9-H MS	Matrix Spike	Dissolved	Water	7470A	
310-268545-A-9-I MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 406827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	7470A	406598
MB 310-406598/1-A	Method Blank	Total/NA	Water	7470A	406598
LCS 310-406598/2-A	Lab Control Sample	Total/NA	Water	7470A	406598
310-268545-A-9-H MS	Matrix Spike	Dissolved	Water	7470A	406598
310-268545-A-9-I MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	406598

General Chemistry

Analysis Batch: 405313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-405320/1-A	Method Blank	Dissolved	Water	SM 3500 CR B	405320

General Chemistry (Continued)

Analysis Batch: 405313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-405320/2-A	Lab Control Sample	Dissolved	Water	SM 3500 CR B	405320

Filtration Batch: 405320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Dissolved	Water	Filtration	
MB 310-405320/1-A	Method Blank	Dissolved	Water	Filtration	
LCS 310-405320/2-A	Lab Control Sample	Dissolved	Water	Filtration	

Analysis Batch: 405336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	9040C	
LCS 310-405336/1	Lab Control Sample	Total/NA	Water	9040C	
310-269165-1 DU	Site 1_Leachate_23_11	Total/NA	Water	9040C	

Analysis Batch: 405349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Dissolved	Water	365.1	405350
MB 310-405350/2-A	Method Blank	Dissolved	Water	365.1	405350
LCS 310-405350/1-A	Lab Control Sample	Dissolved	Water	365.1	405350
310-269165-1 MS	Site 1_Leachate_23_11	Dissolved	Water	365.1	405350
310-269165-1 MSD	Site 1_Leachate_23_11	Dissolved	Water	365.1	405350

Filtration Batch: 405350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Dissolved	Water	Filtration	
MB 310-405350/2-A	Method Blank	Dissolved	Water	Filtration	
LCS 310-405350/1-A	Lab Control Sample	Dissolved	Water	Filtration	
310-269165-1 MS	Site 1_Leachate_23_11	Dissolved	Water	Filtration	
310-269165-1 MSD	Site 1_Leachate_23_11	Dissolved	Water	Filtration	

Analysis Batch: 405367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	SM 5210B	
USB 310-405367/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-405367/2	Lab Control Sample	Total/NA	Water	SM 5210B	
310-269171-B-1 DU	Duplicate	Total/NA	Water	SM 5210B	

Prep Batch: 405405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	9012B	
MB 310-405405/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-405405/2-A	Lab Control Sample	Total/NA	Water	9012B	
310-269099-B-1-B MS	Matrix Spike	Total/NA	Water	9012B	
310-269099-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 405413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	I-3765-85	
MB 310-405413/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-405413/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-269183-A-1 DU	Duplicate	Total/NA	Water	I-3765-85	

General Chemistry

Analysis Batch: 405423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	SM 5220D	
MB 310-405423/60	Method Blank	Total/NA	Water	SM 5220D	
LCS 310-405423/63	Lab Control Sample	Total/NA	Water	SM 5220D	
310-269165-1 MS	Site 1_Leachate_23_11	Total/NA	Water	SM 5220D	
310-269165-1 MSD	Site 1_Leachate_23_11	Total/NA	Water	SM 5220D	

Analysis Batch: 405514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Dissolved	Water	SM 3500 CR B	405320

Analysis Batch: 405534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	SM 2540C	
MB 310-405534/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-405534/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-269127-G-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Prep Batch: 405544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	351.2	
MB 310-405544/1-A	Method Blank	Total/NA	Water	351.2	
LCS 310-405544/2-A	Lab Control Sample	Total/NA	Water	351.2	
310-269154-A-1-B MS	Matrix Spike	Total/NA	Water	351.2	
310-269154-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Prep Batch: 405568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	365.2/365.3/365	
MB 310-405568/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 310-405568/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
310-269092-A-1-B MS	Matrix Spike	Total/NA	Water	365.2/365.3/365	
310-269092-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 405601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	SM 2540B	
MB 310-405601/1	Method Blank	Total/NA	Water	SM 2540B	
LCS 310-405601/2	Lab Control Sample	Total/NA	Water	SM 2540B	
310-269165-1 DU	Site 1_Leachate_23_11	Total/NA	Water	SM 2540B	

Analysis Batch: 405669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	351.2	405544
MB 310-405544/1-A	Method Blank	Total/NA	Water	351.2	405544
LCS 310-405544/2-A	Lab Control Sample	Total/NA	Water	351.2	405544
310-269154-A-1-B MS	Matrix Spike	Total/NA	Water	351.2	405544
310-269154-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	405544

Analysis Batch: 405703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	9012B	405405

General Chemistry (Continued)

Analysis Batch: 405703 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-405405/1-A	Method Blank	Total/NA	Water	9012B	405405
LCS 310-405405/2-A	Lab Control Sample	Total/NA	Water	9012B	405405
310-269099-B-1-B MS	Matrix Spike	Total/NA	Water	9012B	405405
310-269099-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	405405

Analysis Batch: 405704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	365.1	405568
MB 310-405568/1-A	Method Blank	Total/NA	Water	365.1	405568
LCS 310-405568/2-A	Lab Control Sample	Total/NA	Water	365.1	405568
310-269092-A-1-B MS	Matrix Spike	Total/NA	Water	365.1	405568
310-269092-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	365.1	405568

Analysis Batch: 405749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	2540E	
MB 310-405749/1	Method Blank	Total/NA	Water	2540E	
310-269165-1 DU	Site 1_Leachate_23_11	Total/NA	Water	2540E	

Prep Batch: 405920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	Distill/Ammonia	
MB 310-405920/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 310-405920/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
310-269172-A-2-B MS	Matrix Spike	Total/NA	Water	Distill/Ammonia	
310-269172-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 406004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-269165-1	Site 1_Leachate_23_11	Total/NA	Water	350.1	405920
MB 310-405920/1-A	Method Blank	Total/NA	Water	350.1	405920
LCS 310-405920/2-A	Lab Control Sample	Total/NA	Water	350.1	405920
310-269172-A-2-B MS	Matrix Spike	Total/NA	Water	350.1	405920
310-269172-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	405920

Lab Chronicle

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Client Sample ID: Site 1_Leachate_23_11
Lab Sample ID: 310-269165-1

Date Collected: 11/08/23 10:00
Matrix: Water
Date Received: 11/08/23 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405951	WSE8	EET CF	11/15/23 13:43
Total/NA	Analysis	8260D		1	405662	D2YP	EET CF	11/11/23 09:53
Total/NA	Prep	3510C			405356	Y6AF	EET CF	11/09/23 05:40
Total/NA	Analysis	8270E		1	405954	L0FS	EET CF	11/14/23 14:43
Total/NA	Prep	3510C			405356	Y6AF	EET CF	11/09/23 05:40
Total/NA	Analysis	8270E		1	405957	L0FS	EET CF	11/14/23 17:41
Total/NA	Prep	3510C			405444	Y6AF	EET CF	11/09/23 11:12
Total/NA	Analysis	8081B		1	405682	BW2O	EET CF	11/10/23 19:24
Total/NA	Prep	3510C			405444	Y6AF	EET CF	11/09/23 11:12
Total/NA	Analysis	8082A		1	405775	BW2O	EET CF	11/14/23 00:34
Total/NA	Prep	8151A			808435	KF	EET SAV	11/15/23 14:57
Total/NA	Analysis	8151A		1	810108	DBM	EET SAV	11/28/23 00:05
Total/NA	Analysis	9056A		20	406606	QTZ5	EET CF	11/18/23 14:53
Total/NA	Analysis	9056A		1	405796	QTZ5	EET CF	11/09/23 00:07
Total/NA	Prep	3005A			405520	KCK5	EET CF	11/10/23 09:15
Total/NA	Analysis	6020B		4	405833	A6US	EET CF	11/13/23 13:49
Total/NA	Prep	3005A			405520	KCK5	EET CF	11/10/23 09:15
Total/NA	Analysis	6020B		1	405719	A6US	EET CF	11/10/23 19:00
Total/NA	Prep	7470A			406598	NFT2	EET CF	11/20/23 11:09
Total/NA	Analysis	7470A		1	406827	NFT2	EET CF	11/21/23 11:37
Total/NA	Analysis	2540E		1	405749	DGU1	EET CF	11/10/23 09:34
Total/NA	Prep	Distill/Ammonia			405920	MQ8M	EET CF	11/14/23 09:30
Total/NA	Analysis	350.1		9.38	406004	ZJX4	EET CF	11/14/23 18:12
Total/NA	Prep	351.2			405544	W9YR	EET CF	11/10/23 06:14
Total/NA	Analysis	351.2		10	405669	WZC8	EET CF	11/10/23 15:12
Dissolved	Filtration	Filtration			405350	ZJX4	EET CF	11/08/23 16:30
Dissolved	Analysis	365.1		10	405349	ZJX4	EET CF	11/08/23 22:01
Total/NA	Prep	365.2/365.3/365			405568	MAQ3	EET CF	11/10/23 08:21
Total/NA	Analysis	365.1		1	405704	ZJX4	EET CF	11/10/23 18:57
Total/NA	Prep	9012B			405405	ENB7	EET CF	11/09/23 09:17
Total/NA	Analysis	9012B		1	405703	ZJX4	EET CF	11/10/23 17:56
Total/NA	Analysis	9040C		1	405336	A3GU	EET CF	11/08/23 16:56
Total/NA	Analysis	I-3765-85		1	405413	DGU1	EET CF	11/09/23 09:28
Total/NA	Analysis	SM 2540B		1	405601	DGU1	EET CF	11/10/23 09:34
Total/NA	Analysis	SM 2540C		1	405534	D7CP	EET CF	11/09/23 19:23
Dissolved	Filtration	Filtration			405320	WZC8	EET CF	11/08/23 16:30
Dissolved	Analysis	SM 3500 CR B		1	405514	WZC8	EET CF	11/08/23 16:43
Total/NA	Analysis	SM 5210B		4	405367	W9YR	EET CF	11/09/23 07:06
Total/NA	Analysis	SM 5220D		5	405423	ENB7	EET CF	11/09/23 09:51

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

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	12-01-23

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
2540E		Water	Fixed Solids
365.1	365.2/365.3/365	Water	Phosphorus as PO4
8260D		Water	1,2,3-Trichlorobenzene
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	2-Chloroethyl vinyl ether
8260D		Water	Bromobenzene
8260D		Water	Hexane
8260D		Water	p-Isopropyltoluene
8260D		Water	sec-Butylbenzene
8260D		Water	tert-Butylbenzene
8270E	3510C	Water	Benzoic acid
8270E	3510C	Water	Pyridine

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24

Accreditation/Certification Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Laboratory: Eurofins Savannah (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
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Foth Infrastructure & Environment, LLC
Job ID: 310-269165-1
Project/Site: Site 1 Leachate

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET SAV
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
2540E	Solids, Volatile and Fixed (VS)	SM	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
365.1	Phosphorus, Ortho	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
9012B	Cyanide, Total andor Amenable	SW846	EET CF
9040C	pH	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 2540B	Solids, Total	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 3500 CR B	Chromium, Hexavalent	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
SM 5220D	COD	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
365.2/365.3/365	Phosphorus, Total	EPA	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	EET SAV
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF
Filtration	Sample Filtration	None	EET CF

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

eurofins | Environment Testing America

310-269165 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11/8/23 | TIME 1540 | Received By: EM

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☒ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present? 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: X | Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 3.4 | Corrected Temp (°C): 3.4

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Chain of Custody Record

652990

eurofins | Environment Testing America

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Gina Wilming	Site Contact: —	Date: 11/8/23	COC No
Company Name: Foth I & E	Tel/Email: gina.wilming@foth.com	Lab Contact: Connor	Carrier:	1 of 1 COCs
Address: 411 6th Ave SE Suite 400	Analysis Turnaround Time			Sampler: Tyler Merritt
City/State/Zip: Cedar Rapids, IA 52401	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (319) 365-9565	TAT if different from Below _____			Walk-in Client:
Fax: (319) 365-9681	☐ 2 weeks			Lab Sampling
Project Name: Site 1 Leachate	☐ 1 week			
Site: CRLCSWA #1	☐ 2 days			Job / SDG No
P O #	☐ 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)														Sample Specific Notes
Site 1_Leachate_23_11	11/8/23	10:00	G	H_2O	20	N	N		See Attached Parameter Sheet												

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
Tyler Merritt	O.A. Tech Svcs	11/8 11:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by: EM	Company:	Date/Time: 11/8/23 1540

11/20/2023

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

EXHIBIT B

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

SANITARY LANDFILL LEACHATE SAMPLING GUIDELINE 10-26-93

Legend: * = TCLP Test Parameter
Parameters per IAC 103.2(4)

1. Conventional Pollutants

Method of Analysis: EPA SW-846

Carbonaceous Biochemical Oxygen Demand
Chemical Oxygen Demand
Ammonia Nitrogen
Nitrate as NO_3^-
Total Kjeldahl Nitrogen
Chloride
pH
Phosphate (Total)
Phosphorus
Total Dissolved Solids
Total Suspended Solids
Total Volatile Solids

2. Total Metals

Method of Analysis: EPA SW-846

*Arsenic
*Barium
*Cadmium
*Chromium
Chromium +6
Copper
Cyanide
Iron
*Lead
Magnesium
*Mercury
Nickel
Potassium
*Selenium
*Silver
Zinc

3. Volatile Compounds

Method of Analysis: EPA Wastewater Method 624 or EPA SW-846

*Benzene
Bromodichloromethane
Bromoform

WALLACE STATE OFFICE BUILDING / DES MOINES, IOWA 50319 / 515-281-5145 / TDD 515-242-5967 / FAX 515-281-8895

Bromomethane (methyl bromide)
*Carbon Tetrachloride
*Chlorobenzene
Chloroethane (ethyl chloride)
2-Chloroethyl Vinyl Ether
*Chloroform
Chloromethane (methyl chloride)
Dibromochloromethane
1,1-Dichloroethane
*1,2-Dichloroethane
*1,1-Dichloroethene (1,1-dichloroethylene)
1,2-Dichloroethene (1,2-dichloroethylene)
1,2-Dichloropropane
1,3-Dichloropropene (1,3-dichloropropylene)
Ethyl Benzene
*Methyl Ethyl Ketone
Methylene Chloride (dichloromethane)
*Pyridine
Toluene
1,1,2,2-Tetrachloroethane
*Tetrachloroethene (tetrachloroethylene)
1,1,1-Trichloroethane (methyl chloroform)
1,1,2-Trichloroethane
*Trichloroethene (trichloroethylene)
*Vinyl Chloride
Xylenes (Total)

4. Chlorinated Hydrocarbon Pesticides

Method of Analysis: EPA Wastewater Method 608 or EPA SW-846

Aldrin
Alpha-BHC
Beta-BHC
Delta-BHC
*Gamma-BHC (Lindane)
*Chlordane
*2,4,-D
4,4'-DDE
4,4'-DDD
4,4'DDT
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan Sulfate
*Endrin
Endrin Aldehyde
*Heptachlor
Heptachlor Epoxide
*Methoxychlor
*Toxaphene
*2,4,5-TP (Silvex)

5. Polychlorinated Biphenyl Mixtures

Method of Analysis: EPA Wastewater Method 608 or EPA SW-846

Arochlor®-1016
Arochlor®-1221
Arochlor®-1232
Arochlor®-1242
Arochlor®-1248
Arochlor®-1254
Arochlor®-1260

Polychlorinated Biphenyls (PCB's) (Total)

6. Acid Fraction

Method of Analysis: EPA Wastewater Method 625 or EPA SW-846

Benzoic Acid
2-Chlorophenol
4-Chloro-3-Methylphenol (p-chloro-m-cresol)
2,4-Dichlorophenol
2,4-Dimethylphenol (xylenol)
2,4-Dinitrophenol
4,6-Dinitrophenol
4,6-Dinitro-2-Methylphenol
*2-Methylphenol (o-cresol)
*3-Methylphenol (m-cresol)
*4-Methylphenol (p-cresol)
*Cresols (Total)
2-Nitrophenol
4-Nitrophenol
*Pentachlorophenol
*2,4,5-Trichlorophenol
*2,4,6-Trichlorophenol

7. Base/Neutral Fraction

Method of Analysis: EPA Wastewater Method 625 or EPA SW-846

Acenaphthalyene
Acenaphthene
Anthracene
Benz (a) Anthracene
Benzo (a) Pyrene
Benzo (b) Fluoranthene
Benzo (k) Fluoranthene

Benzo (g,h,i) Perylene
Benzyl Alcohol
Bis (2-Chloroethoxy) methane
Bis (2-Chloroethyl) ether
Bis (2-Chloroisopropyl) ether
Bis (2-Ethylhexyl) Phthalate
4-Bromophenyl Phenyl Ether
Butyl Benzyl Phthalate
4-Chloroanaline
2-Chloronaphthalene
4-Chlorophenyl Phenyl Ether
Chrysene
Dibenz (ah) Anthracene
Dibenzofuran
Di-n-Butyl-Phthalate
Di-n-Octyl Phthalate
1,2-Dichlorobenzene
1,3-Dichlorobenzene
*1,4-Dichlorobenzene
3,3'-Dichlorobenzidine
Diethyl Phthalate
Dimethyl Phthalate
*2,4-Dinitrotoluene
2,6-Dinitrotoluene
Fluoranthene
Fluorene
*Hexachlorobenzene
*Hexachlorobutadiene (Hexachloro-1,3-butadiene)
*Hexachloroethane
Hexachlorocyclopentadiene
Indeno (1,2,3-cd) Pyrene
Isophorone
2-Methylnaphthalene
Naphthalene
2-Nitroanaline
3-Nitroanaline
4-Nitroanaline
*Nitrobenzene
N-Nitroso-Dipropylamine
N-Nitrosodiphenylamine
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

Polynuclear Aromatic Hydrocarbons (PAH's) (Total)

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Calhoun, Conner M	Carrier Tracking No(s):	COC No: 310-67269.1
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 Southeast,		Accreditations Required (See note): State Program Iowa		Job #: 310-269165-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 11/21/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Site 1 Leachate	Project #: 31009776			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8151A/8151A_AP_LVI TCLP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Site 1_Leachate_23_11 (310-269165-1)	11/8/23	10:00 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	[signature]	11/9/23 1115		TH	11-10-23	
2					1006	
3						

Cooler Temperature(s) °C and Other Remarks: 1.2 - 1.6

Login Sample Receipt Checklist

Client: Foth Infrastructure & Environment, LLC

Job Number: 310-269165-1

Login Number: 269165

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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: Foth Infrastructure & Environment, LLC

Job Number: 310-269165-1

Login Number: 269165
List Number: 2
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 11/10/23 01:06 PM

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.	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	
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.	N/A	
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	