



## 2024 NOS Landfill Annual Groundwater Report

North Omaha Station NOS  
Ash Landfill

Omaha, Nebraska  
January 31, 2025

This page intentionally left blank.

## Professional Engineer Certification

I hereby certify that to the best of my knowledge that this groundwater monitoring annual report is designed to meet the performance standard in 40 CFR Part 257 of the Federal Coal Combustion Residuals (CCR) Rule.

I am a duly licensed Professional Engineer under the laws of the State of Nebraska.

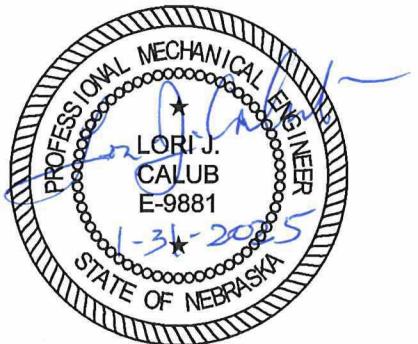
Print Name: Lori Calub

Signature: 

Date: 1-31-2025

License #: E-9881

My license renewal date is December 31, 2025.



# Table of Contents

Executive Summary .....	i
1 Introduction .....	1
1.1 Purpose.....	1
1.2 Facility Information .....	1
2 Monitoring Program Summary.....	2
2.1 Transition of Monitoring Programs .....	2
2.2 Groundwater Monitoring Network Condition Assessment .....	3
3 Data Evaluation and Summary.....	3
3.1 Summary of Sampling Activities .....	3
3.2 Groundwater Elevations & Flow Direction.....	3
3.3 Assessment Monitoring Groundwater Sampling .....	4
3.4 Statistical Analysis Results .....	4
3.5 Other Information Required under 40 CFR §257.90-98 .....	5
4 Key Activities for Upcoming Year .....	5
5 References.....	6

## List of Figures

- Figure 1 – Site Location Map
- Figure 2 – Monitoring Well Location Map
- Figure 3 – Groundwater Contour Map – April 2024
- Figure 4 – Groundwater Contour Map – October 2024

## List of Tables

- Table 1 – Groundwater Monitoring System
- Table 2 – Groundwater Sampling Event Summary
- Table 3 – Groundwater Elevations
- Table 4 – Appendix III Constituents in Groundwater
- Table 5 – Appendix IV Constituents in Groundwater
- Table 6 – Background Threshold Values for Assessment Monitoring
- Table 7 – Established Groundwater Protection Standards

## Appendices

- Appendix A – Field Sampling Forms
- Appendix B – Laboratory Analytical Reports
- Appendix C – Semi-Annual Statistical Analysis Memos

# Executive Summary

Omaha Public Power District (OPPD) owns and operates a five-unit generating plant at the North Omaha Station (NOS) in Omaha, Nebraska. Units 1, 2, and 3 were converted to natural gas, while Units 4 and 5 operate as coal-burning units. NOS is located east of Pershing Drive and Craig Street, approximately 3.5 miles northwest of Eppley Airfield, along the west bank of the Missouri River at river mile 625.2. On April 17, 2015, the United States Environmental Protection Agency published the final rule for the regulation and management of coal combustion residuals (CCR) under Subtitle D of the Resource Conservation and Recovery Act. The rule is formally promulgated in the U.S. Code of Federal Regulations (CFR), Title 40, Part 257. The purpose of this report is to provide a summary of CCR groundwater monitoring system activities for calendar year 2024 for the assessment monitoring program under 40 CFR §257.95.

The NOS Ash Landfill transitioned from detection monitoring to assessment monitoring following the November 2017 sampling event due to statistically significant increases (SSIs) above the background threshold values in downgradient monitoring wells. OPPD evaluated an alternate source demonstration (ASD) for the SSIs, but the ASD was unsuccessful and OPPD initiated assessment monitoring in June 2018 and a subsequent event in October 2018. Results indicated multiple Appendix IV constituents at statistically significant levels (SSLs) above the groundwater protection standards (GWPS). OPPD published a notification of the exceedances on February 14, 2019, and a notification of initiation of assessment of corrective measures (ACM) on May 30, 2019 (HDR, 2019a). An initial ACM Report was completed on July 5, 2019.

Additional site information to better understand the hydrogeologic system near the NOS Ash Landfill was obtained through the following studies and reports:

- Nebraska Department of Environment and Energy (NDEE) Title 132: Nature and Extent Investigation Report (HDR, 2019b)
- Hydrogeologic and Geochemical Conceptual Site Model (HDR, 2020b)
- Groundwater Flow Model and Corrective Measures Evaluation Report (HDR, 2020c)
- Evaluation of Potential Groundwater Impacts to Missouri River (HDR, 2021a)
- Groundwater Fate & Transport Model and Corrective Measures Evaluation Report (HDR, 2021b)

Results of the investigations and modeling were presented at a public meeting with interested and affected parties on September 22, 2021. NDEE provided final approval for long-term groundwater monitoring and post-closure landfill capping for the final remedy on October 19, 2021. The Remedy Selection Report [RSR] (HDR, 2021d) dated December 13, 2021, was provided to NDEE. In an e-mail dated March 21, 2022, the NDEE provided comments on the RSR. NDEE comments indicated unusable coal could not be disposed of in the landfill unit. In response to NDEE's March 21, 2022, comments and due to changes in the remedy, the RSR was revised into a Remedial Action Plan / Remedy Selection Report [RAP/RSR] (dated November 17, 2022) and submitted to NDEE. In an e-mail dated November 30, 2022, the NDEE provided comments on the RAP/RSR. OPPD worked with NDEE's permitting section on submitting a major modification for closure of the landfill. The NDEE approved the major

modification on December 13, 2023. Following the approval of the major modification, the RAP/RSR was revised again and submitted to NDEE on February 14, 2024. The NOS Ash Landfill was certified closed in September 2024.

Two semi-annual sampling events were conducted in 2024: one sampling event in April 2024 and one sampling event in October 2024. Results of the April 2024 analysis indicated 40 SSIs for Appendix III and Appendix IV constituents and 8 SSLs for Appendix IV constituents. No new SSLs were identified during the April 2024 sampling event. Results of the October 2024 analysis indicated 44 SSIs for Appendix III and Appendix IV constituents and 9 SSLs for Appendix IV constituents. No new SSLs were identified during the October 2024 sampling event. Results of the 2024 SSIs and SSLs are summarized in the table below.

The Site will continue to be monitored in accordance with the assessment monitoring program as specified in 40 CFR §257.96(b), and the next semi-annual sampling event is anticipated to occur in April 2025. As specified in 40 CFR §257.90(e)(6), a section must be included at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. The following table summarizes the requested information under 40 CFR §257.90(e)(6).

Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site-Specific Compliance			
<b>§257.90(e)(6) A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:</b>		<b>NOS Ash Disposal Area</b>	
<b>§257.90(e)(6)(i)</b>		Assessment Monitoring Program	
<b>§257.90(e)(6)(ii)</b>		Assessment Monitoring Program	
		<b>Compliance Monitoring Event</b>	
		April 2024	October 2024
<b>§257.90(e)(6)(iii)</b>		Yes	Yes
<b>§257.90(e)(6)(iii)(A)</b>		<ul style="list-style-type: none"> <li>• MW-2 – boron, calcium, sulfate</li> <li>• MW-5 – boron, calcium, sulfate, TDS</li> <li>• MW-6 – boron, calcium, chloride, sulfate, TDS</li> <li>• MW-8 – boron, sulfate</li> <li>• MW-13 – boron, calcium, sulfate, TDS</li> </ul>	

Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site-Specific Compliance			
§257.90(e)(6) A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:	NOS Ash Disposal Area		
		• MW-15 – boron, sulfate • MW-17 – boron, calcium, sulfate, TDS	• MW-15 – boron, calcium, pH, sulfate • MW-17 – boron, calcium, sulfate, TDS
§257.90(e)(6)(iii)(B)	Provide the date when the assessment monitoring program was initiated for the CCR unit.		June 5, 2018
§257.90(e)(6)(iv)	If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in appendix IV to this part pursuant to §257.95(g) include all of the following:	Yes	Yes
§257.90(e)(6)(iv)(A)	Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase.	• MW-2 – arsenic • MW-5 – arsenic, lithium • MW-13 – molybdenum • MW-15 – molybdenum, selenium • MW-17 – cobalt, lithium	• MW-2 – arsenic • MW-5 – arsenic, lithium • MW-13 – arsenic, molybdenum • MW-15 – molybdenum, selenium • MW-17 – cobalt, lithium,
§257.90(e)(6)(iv)(B)	Provide the date when the assessment of corrective measures was initiated for the CCR unit.	May 1, 2019: Initiation of assessment of corrective measures  May 30, 2019 – Assessment of Corrective Measures	
§257.90(e)(6)(iv)(C)	Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.	September 22, 2021	
§257.90(e)(6)(iv)(D)	Provide the date when the assessment of corrective measures was completed for the CCR unit.	December 13, 2021 – Remedy Selection Report	
§257.90(e)(6)(v)	Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of remedy selection.	NDEE Title 132 Remedial Action Plan: The NDEE approved a major permit modification on December 13, 2023. A revised RAP/RSR was submitted to NDEE on February 14, 2024. The landfill was certified closed in September 2024.	
§257.90(e)(6)(vi)	(vi) Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period.	Remedial activities were initiated. The landfill was certified closed in September 2024.	

# 1 Introduction

On April 17, 2015, the United States Environmental Protection Agency (EPA) published the final rule for the regulation and management of coal combustion residuals (CCR) under Subtitle D of the Resource Conservation and Recovery Act. Disposal of CCR from Electric Utilities final rule is formally promulgated in the U.S. Code of Federal Regulations (CFR), Title 40, Part 257 (EPA, 2015). The rule – effective on October 19, 2015 – applies to electric utilities and independent power producers that fall within North American Industry Classification System code 221112, and facilities that produce or store CCR materials in surface impoundments or landfills. The CCR rule defines a set of requirements for the disposal and handling of CCR within units (defined as either landfills or surface impoundments). This regulation applies to the Omaha Public Power District (OPPD) North Omaha Station (NOS).

## 1.1 Purpose

Specified in 40 CFR §257.90(e), an owner or operator of an existing CCR landfill must prepare an annual groundwater monitoring and corrective action report to summarize any key actions completed, problems encountered, and upcoming activities related to the groundwater monitoring system. The information included in this report complies with the requirements established in 40 CFR §257.90(e) and provides a summary of CCR groundwater monitoring system activities for calendar year 2024.

## 1.2 Facility Information

OPPD owns and operates a five-unit generating plant at NOS, herein referenced as “Station” or “Site”, in Omaha, Nebraska. Units 1, 2, and 3 were converted to natural gas, while units 4 and 5 were retrofitted with air pollution control equipment and are operating as coal-burning units. The Station is located east of Pershing Drive and Craig Street, approximately 3.5 miles northwest of Eppley Airfield, along the west bank of the Missouri River at river mile 625.2 (**Figure 1**). The first generating unit was placed in service in July 1954, and the fifth unit was placed in operation in 1968. Beneficial use and disposal of the fossil fuel combustion ash has occurred since the 1950s.

This Station has a CCR landfill that was closed in 2024. The NOS Ash Landfill is permitted under the current Nebraska Department of Environment and Energy (NDEE) Title 132 regulations for fossil fuel combustion ash disposal areas (NDEE Permit No. NE0054739, Facility ID 59763). Prior to the NDEE approved major modification to the permit, the regulated NOS Ash Landfill consisted of an unlined active CCR landfill of approximately 18 acres and a 1.4-acre undeveloped portion permitted for ash disposal. A major permit modification was approved by NDEE for early closure of the NOS Ash Landfill. The permit modification revised the total area of the ash disposal area to 18.503 acres. The closure project included removal of the soil from a previously closed landfill adjacent to the NOS Ash Landfill (also referred to as the legacy landfill) and installation of a new landfill cap on both the NOS Ash Landfill and the legacy landfill. During 2023, closure activities were initiated at the NOS Ash Landfill. The landfill was certified closed in September 2024. **Figure 2** identifies the NOS Ash Landfill for this report and the supporting monitoring well network.

## 2 Monitoring Program Summary

The groundwater monitoring system currently includes ten monitoring wells consisting of three upgradient/background monitoring wells (MW-9, MW-18, MW-19) and seven downgradient/compliance monitoring wells (MW-2, MW-5, MW-6, MW-8, MW-13, MW-15, and MW-17) (HDR, 2020a). Monitoring well details for the monitoring network, including the date of installation, is provided in **Table 1**. The location of the monitoring wells in the groundwater monitoring program with respect to the NOS Ash Landfill are shown in **Figure 2**.

### 2.1 Transition of Monitoring Programs

On January 31, 2018, OPPD published statistically significant increases (SSIs) detected in November 2017 in downgradient monitoring wells at the NOS Ash Landfill for 17 monitoring well/constituent pairs. These SSIs were noted in multiple wells and included boron, calcium, chloride, sulfate, and total dissolved solids (TDS) from the Appendix III constituents. OPPD conducted an alternate source demonstration (ASD) for the SSIs to evaluate potential error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The ASD was unsuccessful and OPPD published a notification (dated May 29, 2018) stating the facility had initiated an assessment monitoring program in accordance with 40 CFR §257.95.

Assessment monitoring was initiated in June 2018 and a subsequent event was conducted in October 2018. During each event, background and compliance monitoring wells were sampled, and samples were analyzed for both 40 CFR §257 Appendix III and 40 CFR §257 Appendix IV constituents. Results of the statistical analysis of the data indicated multiple Appendix IV constituents were detected at statistically significant levels (SSLs) above the groundwater protection standards (GWPS). OPPD published a notification of the SSLs on February 14, 2019 (OPPD, 2019), and a notification of initiation of assessment of corrective measures (ACM). An initial ACM report was completed on July 5, 2019 (HDR, 2019a). During the completion of the report, data gaps were identified. Additional site information was obtained and submitted in the NDEE Title 132 Nature & Extent Report (HDR, 2019b).

Following the initial ACM Report, additional information necessary to understand the hydrogeologic system at the NOS Ash Landfill was obtained. A Conceptual Site Model (CSM) was prepared to describe the site-specific geologic and hydrogeologic regimes (HDR, 2020b). Using the CSM, a groundwater flow model was prepared to create a digital representation of the groundwater flow system (HDR, 2020c). The groundwater flow model was used to develop a transient model that simulated the fate and transport of constituents of interest (COIs) at the Site (HDR, 2021b). During the 2021 reporting period, semi-annual updates describing the progress in selecting a corrective action at the NOS Ash Landfill were completed on January 4, 2021, and July 2, 2021. Results of the investigations and modeling were presented at a public meeting with interested and affected parties on September 22, 2021. The Remedy Selection Report [RSR] (HDR, 2021d) was completed on December 13, 2021. In an e-mail dated March 21, 2022, the NDEE provided comments on the RSR. NDEE comments indicated unusable coal could not be disposed of in the onsite CCR landfill unit. In response to NDEE's March 21, 2022, comments, the RSR was revised into a Remedial Action Plan / Remedy Selection Report [RAP/RSR] (dated November 17, 2022) and submitted to NDEE. In an e-mail dated November

30, 2022, the NDEE provided comments on the RAP/RSR. OPPD worked with NDEE's permitting section on submitting a major modification for closure of the landfill. The NDEE approved the major modification on December 13, 2023. Following the approval of the major modification, the RAP/RSR was revised again and submitted to NDEE on February 14, 2024. The landfill was certified closed in September 2024.

## 2.2 Groundwater Monitoring Network Condition Assessment

OPPD personnel evaluated the condition of each monitoring well in the groundwater monitoring network during the semi-annual sampling events in April 2024 and October 2024. All the wells were noted in good working condition, concrete pads were intact, and no damage was observed to the protective well casings during 2024.

No network monitoring wells were installed or decommissioned during the 2024 monitoring period. The certified groundwater monitoring system remained unchanged in 2024.

# 3 Data Evaluation and Summary

## 3.1 Summary of Sampling Activities

Groundwater sampling events were conducted by OPPD personnel in April 2024 and October 2024 as continuation of the assessment monitoring program in accordance with 40 CFR §257.96(b). Samples were collected in compliance with 40 CFR §257.90(c), which requires groundwater monitoring be conducted throughout the active life and post-closure care period of the CCR unit for each current background and downgradient well in the monitoring network. The number of samples collected for each background and downgradient well during each groundwater sampling event, whether the sample was collected during detection or assessment monitoring programs, and the date of each event is summarized in **Table 2**.

Groundwater sampling was conducted by OPPD personnel in accordance with the facility's NDEE Title 132 Groundwater Sampling and Analysis Plan (HDR, 2019c) and the CCR Groundwater Monitoring System Certification (HDR, 2020a). Samples were analyzed for Appendix III and Appendix IV constituents during both semi-annual sampling events. Field sampling forms from these sampling events are provided in **Appendix A**. The collected groundwater samples were analyzed by Eurofins, and laboratory analytical reports are provided in **Appendix B**.

## 3.2 Groundwater Elevations & Flow Direction

Static groundwater level measurements were recorded at the monitoring wells specified in **Table 1** prior to purging and sampling activities conducted during the groundwater sampling events. Groundwater measurements from both monitoring network wells and water level only wells, as specified in **Table 1**, were used to develop groundwater contours for semi-annual sampling events in 2024. Monitoring well static groundwater elevations are provided in **Table 3**. Groundwater measurements collected during the April 2024 sampling event indicated a flow direction to the east/northeast, with an average flow velocity of 0.00306 feet per day (ft/day) to 0.282 ft/day (**Figure 3**). Groundwater measurements collected during the October 2024 sampling event indicated a flow direction to the east/northeast with an average flow velocity of

0.00419 ft/day to 0.290 ft/day (**Figure 4**). The flow velocities are based on a range of hydraulic conductivity at the Site of 0.0544 ft/day to 3.77 ft/day (HDR, 2020a).

### 3.3 Assessment Monitoring Groundwater Sampling

The NOS Ash Landfill was monitored semi-annually in 2024 as continuation of the assessment monitoring program in accordance with 40 CFR §257.96(b). Appendix III and Appendix IV constituents were analyzed for both the April 2024 and October 2024 sampling events, meeting the requirements of 40 CFR §257.95. The results of the assessment monitoring events are presented in **Table 4** (Appendix III constituents) and **Table 5** (Appendix IV constituents).

### 3.4 Statistical Analysis Results

In the assessment monitoring program, Appendix III and IV constituents are statistically analyzed to evaluate for SSIs above the calculated background threshold values (BTVs), and Appendix IV constituents are statistically analyzed to evaluate for SSLs above the GWPS. Statistical analyses were performed using Sanitas™ statistical analysis software in accordance with the methods described in the Groundwater Monitoring Statistical Methods Certification (HDR, 2021c).

Statistically derived BTVs for Appendix III and IV constituents are provided in **Table 6**. BTVs are updated every two years or during a monitoring program transition, in accordance with Chapter 21 of the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance (EPA, 2009). The BTVs were updated as part of the October 2023 statistical analysis. The established GWPS for each Appendix IV constituent is provided in **Table 7**. Results of the statistical analysis of designated in-network downgradient monitoring wells from the April 2024 and October 2024 sampling events are provided in **Appendix C**.

Semi-annual sampling events were conducted in April 2024 and October 2024. Results of the April 2024 analysis indicated 40 SSIs for Appendix III and Appendix IV constituents, as follows:

- Arsenic in MW-2, MW-5, MW-13, and MW-17
- Boron in MW-2, MW-5, MW-6, MW-8, MW-13, MW-15, and MW-17
- Calcium in MW-2, MW-5, MW-6, MW-13, and MW-17
- Chloride in MW-6
- Chromium in MW-15
- Cobalt in MW-6 and MW-17
- Lithium in MW-5 and MW-17
- Molybdenum in MW-5, MW-6, MW-8, MW-13, MW-15, and MW-17
- Selenium in MW-15
- Sulfate in MW-2, MW-5, MW-6, MW-8, MW-13, MW-15, and MW-17
- TDS in MW-5, MW-6, MW-13, and MW-17

No new SSLs were identified during the April 2024 sampling event. Analysis of the Appendix IV constituents indicated 8 SSLs detected above the GWPS during the April 2024 sampling event:

- Arsenic in MW-2 and MW-5
- Cobalt in MW-17
- Lithium in MW-5 and MW-17

- Molybdenum in MW-13 and MW-15
- Selenium in MW-15

Results of the October 2024 analysis indicated 44 SSIs for Appendix III and Appendix IV constituents, as follows:

- Arsenic in MW-2, MW-5, MW-13, and MW-17
- Boron in MW-2, MW-5, MW-6, MW-8, MW-13, MW-15, and MW-17
- Calcium in MW-2, MW-5, MW-6, MW-15, and MW-17
- Chloride in MW-6
- Cobalt in MW-6 and MW-17
- Lithium in MW-5 and MW-17
- Molybdenum in MW-6, MW-8, MW-13, MW-15, and MW-17
- pH in MW-8 and MW-15
- Selenium in MW-15
- Sulfate in MW-2, MW-5, MW-6, MW-8, MW-13, MW-15, and MW-17
- TDS in MW-2, MW-5, MW-6, MW-13, and MW-17
- Thallium in MW-2, MW-6, and MW-17

No new SSLs were identified during the October 2024 sampling event. Analysis of the Appendix IV constituents indicated 9 SSLs detected above the GWPS during the October 2024 sampling event:

- Arsenic in MW-2, MW-5, and MW-13
- Cobalt in MW-17
- Lithium in MW-5 and MW-17
- Molybdenum in MW-13 and MW-15
- Selenium in MW-15

### **3.5 Other Information Required under 40 CFR §257.90-98**

OPPD has continued to comply with CCR Rule regulations and selected a remedy at the NOS Ash Landfill as noted in the RSR (HDR, 2021d) dated December 13, 2021. During the 2022 reporting period, OPPD received comments from NDEE on the RSR dated March 21, 2022. Following NDEE's feedback, the RSR was revised into the RAP/RSR dated November 17, 2022. In collaboration with NDEE's permitting section, OPPD submitted a major permit modification application on March 29, 2023, for landfill closure. NDEE approved the major modification in a letter dated December 13, 2023. Following the approval of the major modification, the RAP/RSR was revised again and submitted to NDEE on February 14, 2024. The landfill was certified closed in September 2024. No other information is required under 40 CFR §257.90-98 at this time.

## **4 Key Activities for Upcoming Year**

OPPD will continue to implement the selected remedy outlined in the RAP/RSR (HDR, 2024). The Site will continue to be monitored in accordance with the assessment monitoring program as specified in 40 CFR §257.96(b), and the next semi-annual sampling event is anticipated to occur in April 2025.

## 5 References

- EPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities: Unified Guidance*. Environmental Protection Agency Office of Resource Conservation and Recovery. EPA 530/R-09-007. March 2009.
- EPA, 2015. 40 CFR Part 257; *Disposal of Coal Combustion Residuals from Electric Utilities*; Final Rule, Federal Register vol. 80, no. 74. Environmental Protection Agency. April 17, 2015.
- HDR, 2019a. *Assessment of Corrective Measures for Groundwater at Omaha Public Power District (OPPD) North Omaha Station*. Omaha, Nebraska. July 5, 2019.
- HDR, 2019b. *Title 132 Nature & Extent Report*. North Omaha Station Ash Disposal Area. Omaha, Nebraska. December 18, 2019.
- HDR, 2019c. *Groundwater Sampling and Analysis Plan*. North Omaha Station Ash Disposal Area. Omaha, Nebraska. September 2019. Revised December 2019
- HDR, 2020a. *CCR Groundwater Monitoring System Certification (rev. 3)*. North Omaha Station Ash Disposal Area. Omaha, Nebraska. Amended January 24, 2020.
- HDR, 2020b. *Hydrogeologic and Geochemical Conceptual Site Model*. NOS Ash Disposal Area. Omaha, Nebraska. May 5, 2020.
- HDR, 2020c. *Groundwater Flow Model and Corrective Measures Evaluation Report*. NOS Ash Disposal Area. Omaha, Nebraska. June 18, 2020.
- HDR, 2021a. *Evaluation of Potential Groundwater Impacts to Missouri River*. NOS Ash Disposal Area. Omaha, Nebraska. March 9, 2021.
- HDR, 2021b. *Groundwater Fate & Transport Model and Corrective Measures Evaluation Report*. NOS Ash Disposal Area. Omaha, Nebraska. May 11, 2021.
- HDR, 2021c. *Groundwater Monitoring Statistical Methods Certification*. NOS Ash Disposal Area. Omaha, Nebraska. Revised December 2021.
- HDR, 2021d. *Groundwater Remedy Selection Report*. NOS Ash Disposal Area. Omaha, Nebraska. December 13, 2021.
- HDR, 2022. *Remedial Action Plan / Remedy Selection Report*. NOS Ash Disposal Area. Omaha, Nebraska. November 17, 2022.
- HDR, 2024. *Remedial Action Plan / Remedy Selection Report*. NOS Ash Disposal Area. Omaha, Nebraska. February 14, 2024.
- OPPD, 2019. Memorandum. *Notification of Appendix IV SSLs exceeding the GWPS*. NOS Ash Disposal Area. Omaha, Nebraska. February 14, 2019.

# Figures

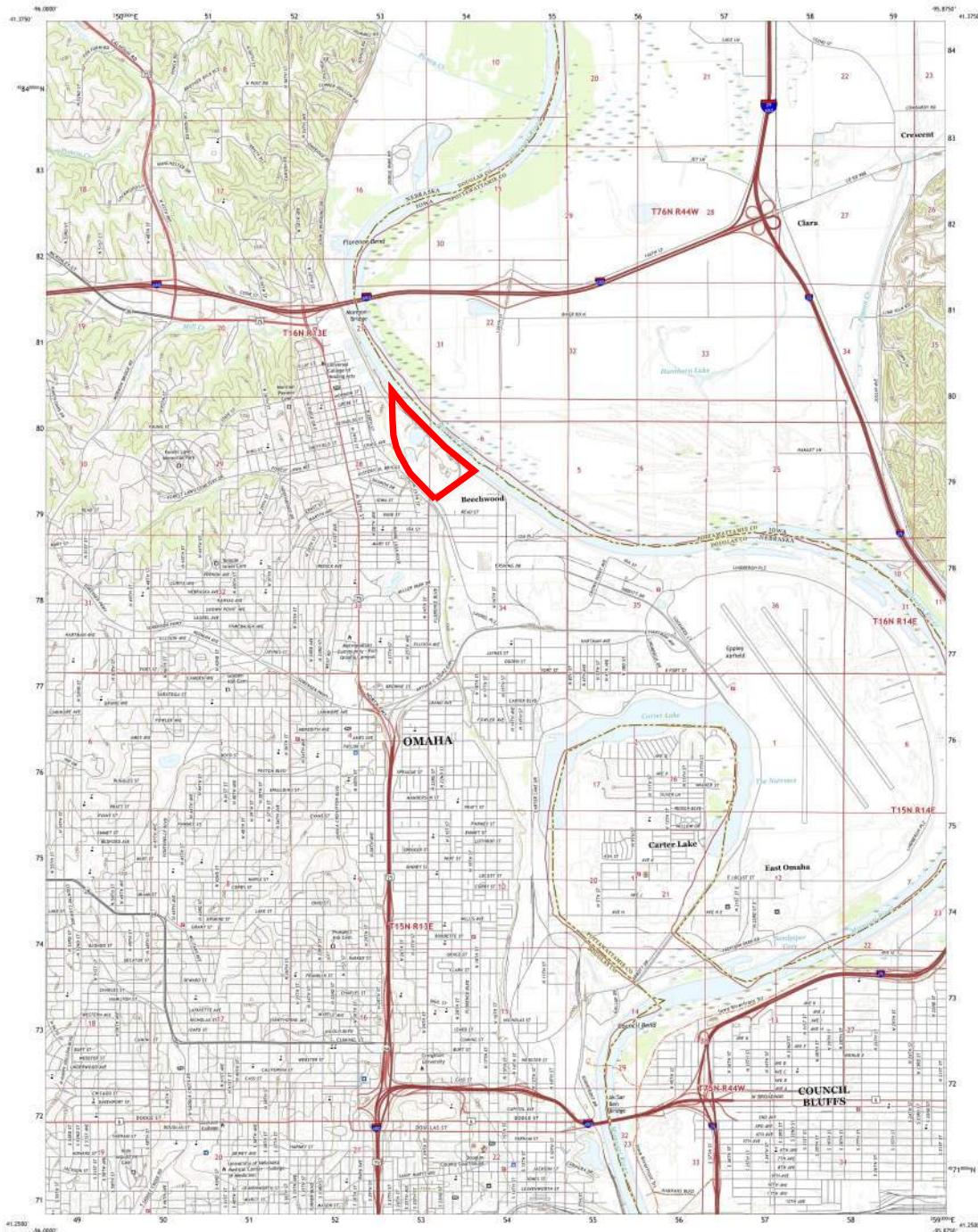
This page intentionally left blank.



U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY



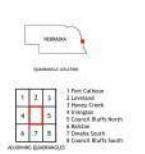
OMAHA NORTH QUADRANGLE  
NEBRASKA - IOWA  
7.5-MINUTE SERIES



Produced by the United States Geological Survey  
North American Series of 1:250,000 Projection  
1:250,000 Scale, 7.5-Minute Series, Approx. Date 1971  
This map is not a legal document. Boundaries may be  
approximate. It is the responsibility of the map user to determine  
if boundaries may not be shown. Obtain permission before  
making any precise survey.



SCALE 1:24,000  
0.5 MILES  
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0  
0.0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET  
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0  
0.0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 METERS  
CONTOUR INTERVAL, 10 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988  
This map was produced to conform with the  
National Geodetic Program (Topo Product Standard).



OMAHA NORTH, NE, IA  
2021



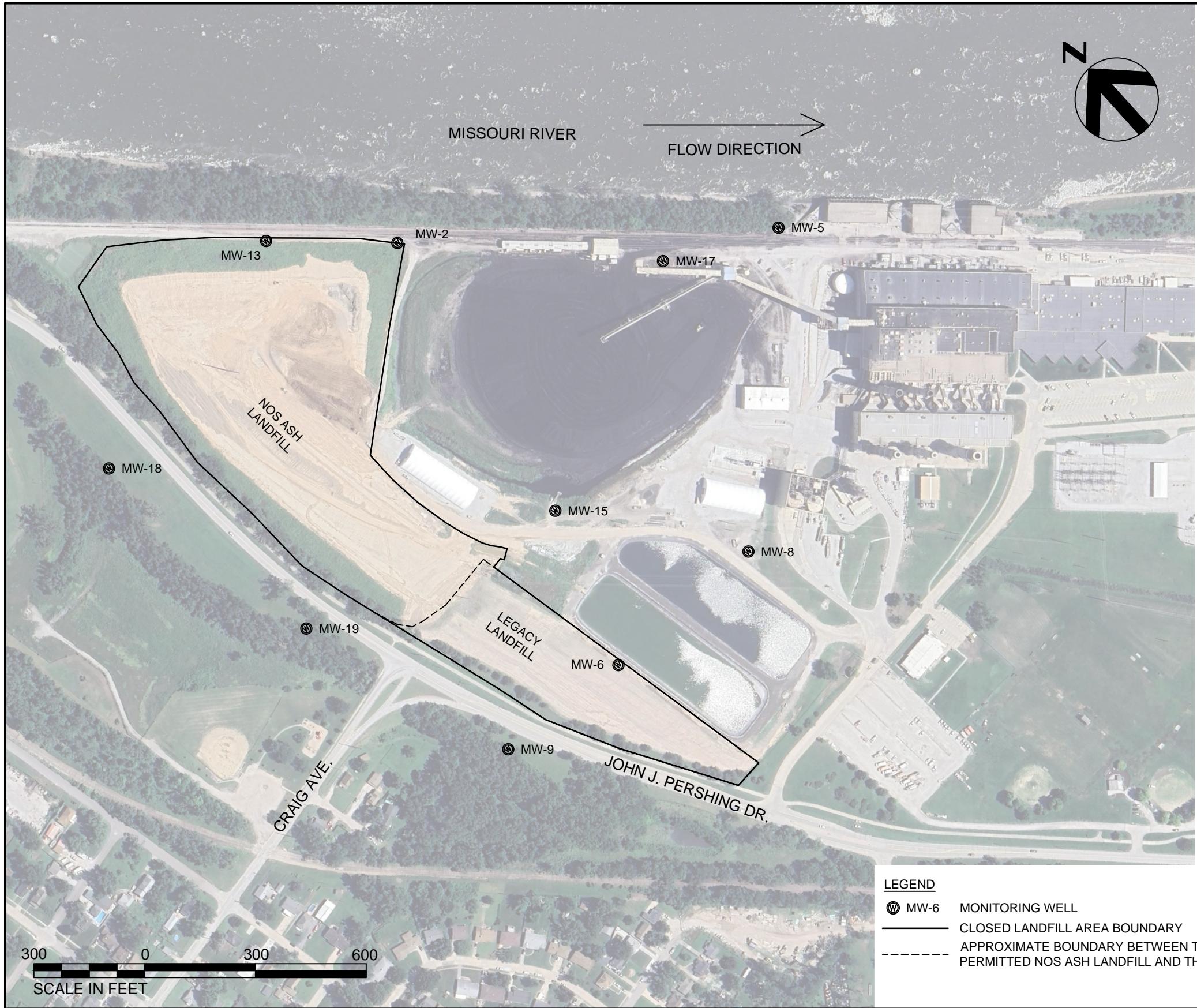
Site Boundary



## SITE LOCATION MAP OPPD - NORTH OMAHA STATION

FIGURE 1

This page left blank intentionally.



#### COMPLIANCE AND BACKGROUND MONITORING WELLS

WELL ID	NORTHING	EASTING	SURFACE ELEVATION (FEET AMSL)	TOP OF CASING ELEVATION (FEET AMSL)	INSTALL DATE	COMMENTS
MW-2	572580	2753258	998.30	1001.41	3/6/1995	DOWNGRADIENT
MW-5	571959.9	2754084	998.10	1000.96	3/2/1995	DOWNGRADIENT
MW-6	571316.1	2753000	999.60	1002.65	3/8/1995	CROSS-GRADIENT
MW-8	571331.8	2753467	1000.30	1003.59	3/7/1995	CROSS-GRADIENT
MW-9	571328	2752624	1027.10	1026.47	5/4/1996	BACKGROUND
MW-13						
MW-15						
MW-17						
MW-18						
MW-19*						
MW-2	572808.9	2752986	999.02	1001.91	4/12/2001	DOWNGRADIENT
MW-15	571747.9	2753132	1002.80	1005.39	4/12/2001	DOWNGRADIENT
MW-17	572087.4	2753785	999.60	1002.54	5/10/2007	DOWNGRADIENT
MW-18	572600.9	2752267	1037.10	1037.00	12/1/2015	BACKGROUND
MW-19*	571927.2	2752407	1037.30	1037.10	1/20/2016	BACKGROUND

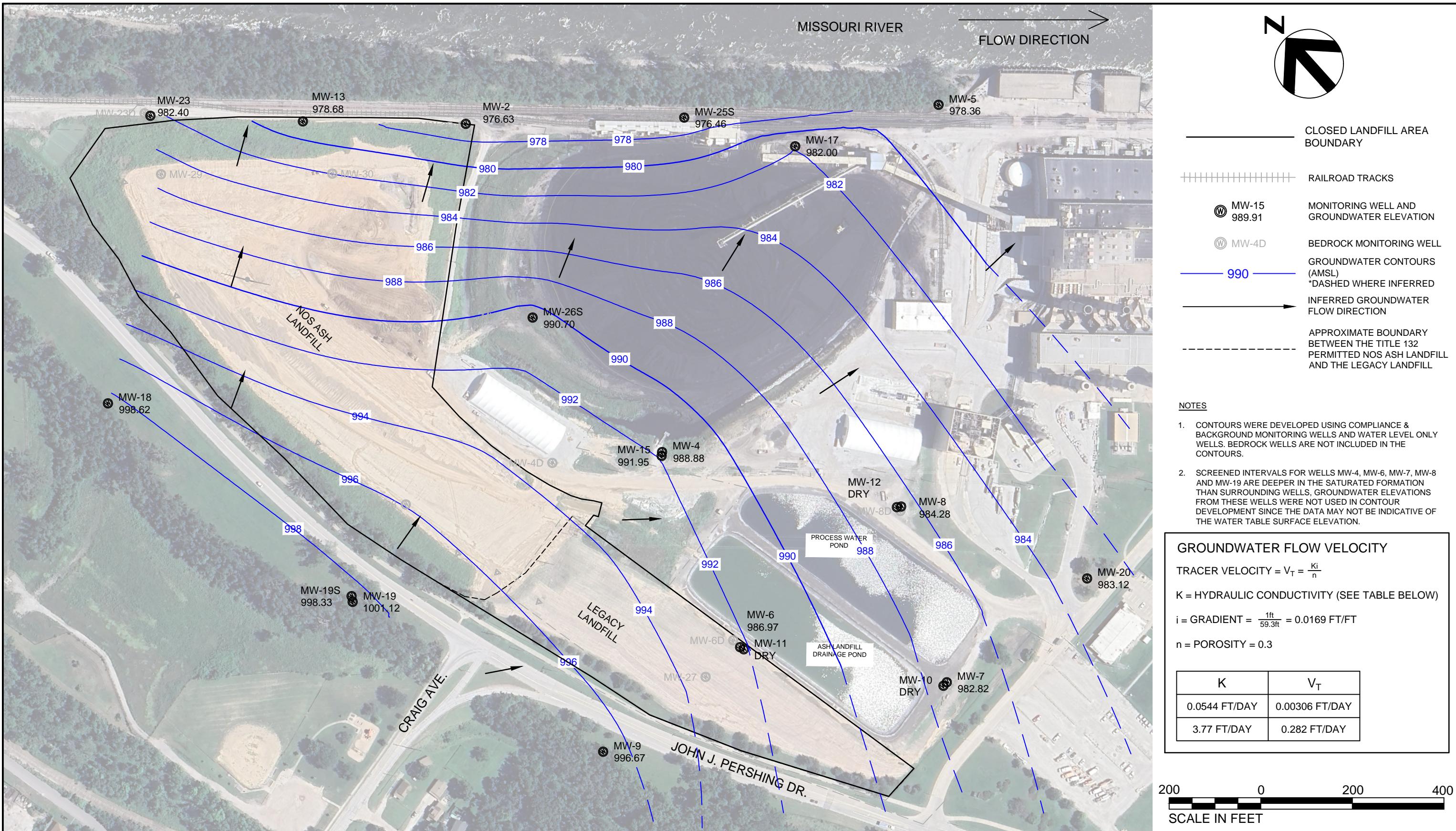
#### NOTES:

1. \* FLUSH MOUNT WELL.
2. AMSL - ABOVE MEAN SEA LEVEL.

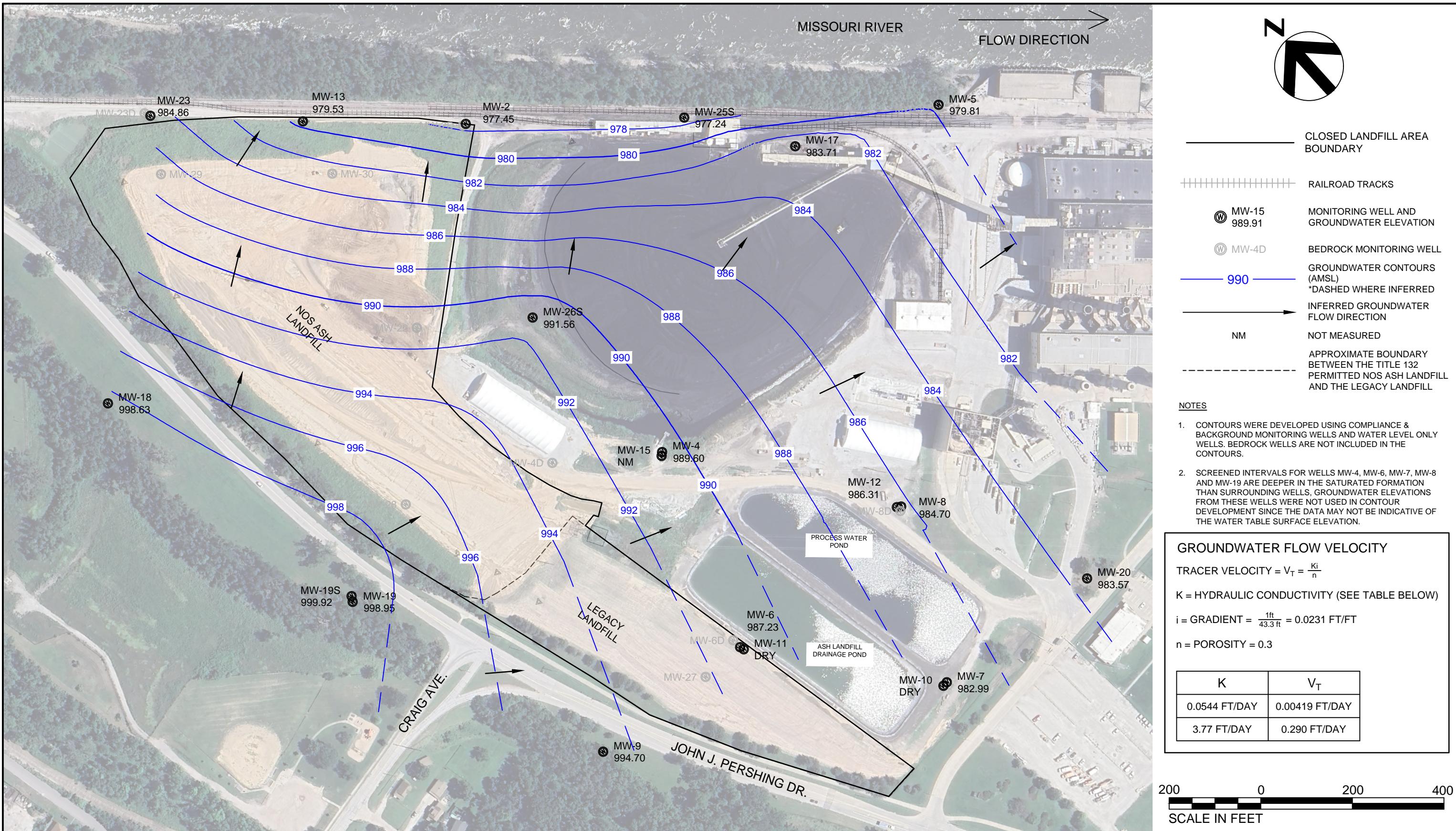
#### OMAHA PUBLIC POWER DISTRICT NORTH OMAHA STATION - ASH LANDFILL MONITORING WELL LOCATION MAP

DATE: JAN 2025  
FIGURE: 2

This page intentionally left blank.



This page intentionally left blank.



This page intentionally left blank.

# Tables

This page intentionally left blank.

**Table 1 - Groundwater Monitoring System**  
 Omaha Public Power District - NOS Ash Landfill

Monitoring Well ID	Date Installed	Well Depth <sup>[1]</sup> (feet bgs)	Location w/respect to NOS Ash Landfill	Ground Surface Elevation (feet AMSL)	Top of Well Casing Elevation <sup>[2]</sup> (feet AMSL)
<b>CCR Monitoring Network Wells</b>					
MW-2	3/6/1995	30	Downgradient	998.30	1001.41
MW-5	3/2/1995	30	Downgradient	998.10	1000.96
MW-6	3/8/1995	31	Cross-gradient	999.60	1002.65
MW-8	3/7/1995	30	Cross-gradient	1000.30	1003.59
MW-9	5/4/1996	63	Background/Upgradient	1027.10	1026.47
MW-13	4/12/2001	30	Downgradient	999.02	1001.91
MW-15	4/12/2001	15	Downgradient	1002.80	1005.39
MW-17	5/10/2007	30	Downgradient	999.60	1002.54
MW-18	12/1/2015	71	Background/Upgradient	1037.10	1036.70
MW-19	1/20/2016	76	Background/Upgradient	1037.30	1036.91
<b>Water Level Only Wells<sup>[3]</sup></b>					
MW-4	3/6/1995	33	Water Level Only Well	1001.30	1004.59
MW-7	3/8/1995	30	Water Level Only Well	999.10	1001.85
MW-10	4/11/2001	15	Water Level Only Well	1000.13	1002.48
MW-11	4/11/2001	15	Water Level Only Well	1000.49	1002.99
MW-12	4/11/2001	15	Water Level Only Well	1001.35	1003.78
MW-19S	10/21/2019	46	Water Level Only Well	1036.71	1036.21
MW-20	11/9/2015	35	Water Level Only Well	991.20	993.47
MW-23	2/26/2019	24	Water Level Only Well	997.70	1000.81
MW-25S	10/18/2019	28	Water Level Only Well	999.24	1002.51
MW-26S	10/18/2020	28	Water Level Only Well	1008.24	1011.54

Notes:

<sup>[1]</sup> bgs - below ground surface

<sup>[2]</sup> AMSL - above mean sea level

<sup>[3]</sup> Monitoring wells MW-22, MW-27, MW-28, MW-29, and MW-30 were decommissioned in October 2023 as part of the landfill closure project.

This page intentionally left blank.

**Table 2 - Groundwater Sampling Event Summary**

Omaha Public Power District - NOS Ash Landfill

Monitoring Well ID	# of Initial Background Samples	Initial Background Sample Dates	# of Detection Monitoring Samples	Detection Monitoring Sample Dates <sup>[1]</sup>	# of Assessment Monitoring Samples	Assessment Monitoring Sample Dates <sup>[2] [3]</sup>
<b>Current Background Monitoring Wells</b>						
MW-9	8	3/22/2016, 6/14/2016, 9/2/2016, 11/28/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017	2	11/7/2017, 3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/13/2020, 10/7/2020, 4/5/2021, 10/11/2021, 4/11/2022, 10/5/2022, 4/3/2023, 10/3/2023, 4/2/2024, 10/1/2024
MW-18	8	3/22/2016, 6/14/2016, 9/2/2016, 11/28/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017	2	11/7/2017, 3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/13/2020, 10/7/2020, 4/5/2021, 10/11/2021, 4/11/2022, 10/5/2022, 4/3/2023, 10/3/2023, 4/2/2024, 10/1/2024
MW-19	8	3/22/2016, 6/14/2016, 9/2/2016, 11/28/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017	2	11/7/2017, 3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/13/2020, 10/7/2020, 4/5/2021, 10/11/2021, 4/11/2022, 10/5/2022, 4/3/2023, 10/3/2023, 4/2/2024, 10/1/2024
<b>Downgradient Monitoring Wells</b>						
MW-2	8	3/22/2016, 6/14/2016, 11/29/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017, 11/7/2017	1	3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/14/2020, 10/7/2020, 4/5/2021, 10/12/2021, 4/11/2022, 10/5/2022, 4/4/2023, 10/4/2023, 4/2/2024, 10/1/2024
MW-5	8	3/23/2016, 6/14/2016, 11/29/2016, 5/2/2017, 6/5/2018, 10/10/2018, 4/16/2019, 10/1/2019	0	N/A <sup>[4]</sup>	11	10/1/2019, 4/14/2020, 10/8/2020, 4/5/2021, 10/12/2021, 4/11/2022, 10/5/2022, 4/4/2023, 10/4/2023, 4/3/2024, 10/3/2024
MW-6	8	3/22/2016, 6/14/2016, 11/28/2016, 5/2/2017, 3/9/2018, 6/5/2018, 10/9/2018, 4/15/2019	0	N/A <sup>[4]</sup>	11	10/1/2019, 4/14/2020, 10/7/2020, 4/5/2021, 10/12/2021, 4/11/2022, 10/5/2022, 4/4/2023, 10/4/2023, 4/2/2024, 10/1/2024
MW-8	8	3/23/2016, 6/14/2016, 11/29/2016, 5/2/2017, 6/5/2018, 10/10/2018, 4/15/2019, 10/1/2019	0	N/A <sup>[4]</sup>	11	10/1/2019, 4/14/2020, 10/8/2020, 4/5/2021, 10/12/2021, 4/11/2022, 10/5/2022, 4/4/2023, 10/4/2023, 4/3/2024, 10/3/2024
MW-13	8	3/22/2016, 6/14/2016, 9/2/2016, 11/28/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017	2	11/7/2017, 3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/14/2020, 10/7/2020, 4/5/2021, 10/11/2021, 4/11/2022, 10/5/2022, 4/3/2023, 10/4/2023, 4/2/2024, 10/1/2024
MW-15	8	3/22/2016, 6/14/2016, 9/2/2016, 11/28/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017	2	11/7/2017, 3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/14/2020, 10/7/2020, 4/5/2021, 10/12/2021, 4/11/2022, 10/5/2022, 4/4/2023, 10/4/2023, 4/2/2024, 10/1/2024
MW-17	8	3/22/2016, 6/14/2016, 9/2/2016, 11/29/2016, 2/17/2017, 5/2/2017, 6/19/2017, 7/31/2017	2	11/7/2017, 3/9/2018	14	6/5/2018, 10/9/2018, 4/15/2019, 10/1/2019, 4/14/2020, 10/8/2020, 4/5/2021, 10/12/2021, 4/11/2022, 10/5/2022, 4/4/2023, 10/4/2023, 4/3/2024, 10/3/2024

**Notes:**

[1] The March 2018 Detection Monitoring event was completed as an Alternate Source Evaluation (ASD) due to detected SSIs in November 2017.

[2] The June 2018 sampling event was completed for initiation of the Assessment Monitoring Program.

[3] The April 2019 sampling event was completed as part of the initiation of Assessment of Corrective Measures in accordance with 40 CFR 257.96(b).

[4] Monitoring wells MW-5, MW-6, and MW-8 were added to the network after the April 2019 sampling event to coordinate with the NDEE Title 132 Permit.

This page intentionally left blank.

**Table 3 - Groundwater Elevations**

Omaha Public Power District - NOS Ash Landfill

CCR Monitoring Network Wells																				
MW-2		MW-5		MW-6		MW-8		MW-9		MW-13		MW-15		MW-17		MW-18		MW-19		
TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation <sup>[1]</sup>		TOC Elevation <sup>[2]</sup>		
1001.41		1000.96		1002.65		1003.59		1026.47		1001.91		1005.39		1002.54		1036.70		1036.91		
Date	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation	Measured Depth to Water (ft)	GW Elevation	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)		
3/22/2016	21.20	980.21	20.30	980.66	12.75	989.90	17.55	986.04	22.41	1004.06	17.41	984.50	10.90	994.49	17.18	985.36	34.75	1002.25	33.85	1003.25
6/14/2016	21.65	979.76	19.15	981.81	12.05	990.60	16.00	987.59	22.10	1004.37	17.40	984.51	10.40	994.99	16.10	986.44	33.92	1003.08	33.40	1003.70
9/2/2016	22.90	978.51	20.50	980.46	13.30	989.35	17.48	986.11	24.70	1001.77	22.50	979.41	10.90	994.49	17.50	985.04	35.50	1001.50	34.95	1002.15
11/28/2016	22.06	979.35	20.55	980.41	13.48	989.17	18.18	985.41	24.65	1001.82	18.20	983.71	11.30	994.09	17.51	985.03	35.35	1001.35	34.91	1002.00
2/17/2017	22.45	978.96	20.73	980.23	13.89	988.76	18.67	984.92	24.70	1001.77	18.80	983.11	11.65	993.74	18.25	984.29	35.95	1000.75	35.30	1001.61
5/2/2017	22.00	979.41	20.25	980.71	13.40	989.25	11.32	992.27	23.71	1002.76	18.41	983.50	10.45	994.94	17.12	985.42	34.80	1001.90	34.22	1002.69
6/19/2017	22.00	979.41	19.60	981.36	12.50	990.15	16.45	987.14	23.90	1002.57	18.30	983.61	10.60	994.79	16.55	985.99	34.70	1002.00	34.20	1002.71
7/31/2017	23.10	978.31	20.21	980.75	13.37	989.28	11.38	992.21	26.65	999.82	19.25	982.66	12.15	993.24	17.10	985.44	36.40	1000.30	35.85	1001.06
11/7/2017	22.95	978.46	23.45	977.51	12.20	990.45	15.80	987.79	21.30	1005.17	19.40	982.51	12.75	992.64	17.50	985.04	36.39	1000.31	35.86	1001.05
3/9/2018	23.33	978.08	21.25	979.71	13.10	989.55	17.17	986.42	26.35	1000.12	20.21	981.70	13.75	991.64	19.21	983.33	36.31	1000.39	37.06	999.85
4/23/2018	23.50	977.91	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	29.27	997.20	20.35	981.56	12.70	992.69	19.00	983.54	35.63	1001.07	35.15	1001.76
6/5/2018	22.43	978.98	19.47	981.49	14.17	988.48	18.27	985.32	26.52	999.95	18.90	983.01	12.12	993.27	17.10	985.44	35.52	1001.18	35.81	1001.10
10/9/2018	19.49	981.92	17.08	983.88	13.49	989.16	17.05	986.54	25.47	1001.00	15.93	985.98	10.71	994.68	14.71	987.83	33.94	1002.76	33.78	1003.13
4/15/2019	17.74	983.67	16.51	984.45	12.78	989.87	17.17	986.42	23.36	1003.11	14.16	987.75	10.67	994.72	14.73	987.81	32.68	1004.02	32.70	1004.21
10/1/2019	16.02	985.39	14.76	986.20	13.17	989.48	16.96	986.63	26.01	1000.46	12.94	988.97	10.76	994.63	13.74	988.80	33.52	1003.18	33.53	1003.38
4/14/2020	21.32	980.09	19.01	981.95	13.15	989.50	17.51	986.08	23.89	1002.58	17.38	984.53	11.29	994.10	16.50	986.04	33.74	1002.96	33.47	1003.44
10/1/2020	23.82	977.59	21.05	979.91	14.98	987.67	19.13	984.46	30.10	996.37	20.39	981.52	14.22	991.17	18.51	984.03	38.03	998.67	37.86	999.05
4/1/2021	23.21	978.20	21.09	979.87	14.07	988.58	17.23	986.36	26.65	999.82	20.58	981.33	10.83	994.56	18.58	983.96	36.00	1000.70	35.29	1001.62
10/11/2021	23.87	977.54	20.41	980.55	14.70	987.95	18.57	985.02	29.34	997.13	20.41	981.50	11.36	994.03	17.78	984.76	36.88	999.82	36.45	1000.46
4/7/2022	23.61	977.80	22.96	978.00	14.42	988.23	19.10	984.49	26.18	1000.29	21.69	980.22	12.18	993.21	19.72	982.82	36.63	1000.07	35.77	1001.14
10/1/2022	24.86	976.55	21.97	978.99	15.60	987.05	19.45	984.14	30.80	995.67	22.04	979.87	15.48	989.91	19.22	983.32	38.70	998.00	38.25	998.66
4/3/2023	24.56	976.85	23.27	977.69	15.44	987.21	19.42	984.17	28.37	998.10	22.54	979.37	13.22	992.17	20.13	982.41	37.97	998.73	37.63	999.28
10/2/2023	25.14	976.27	22.30	978.66	15.98	986.67	19.28	984.31	32.09	994.38	22.61	979.30	13.27	992.12	19.26	983.28	39.43	997.27	39.42	997.49
4/2/2024	24.78	976.63	22.60	978.36	15.68	986.97	19.31	984.28	29.80	996.67	23.23	978.68	13.44	991.95	20.54	982.00	38.08	998.62	35.79	1001.12
10/1/2024	23.96	977.45	21.15	979.81	15.42	987.23	18.89	984.70	31.77	994.70	22.38	979.53	NM	NM	18.83	983.71	38.07	998.63	37.96	998.95

**Notes:**

TOC: Top of PVC well casing

N.D. = not detected

N.M. = not measured

AMSL = above mean sea level

[1] The casing of MW-18 was cut on November 28, 2016. Prior to

**Table 3 - Groundwater Elevations**

Omaha Public Power District - NOS Ash Landfill

Water Level Only Wells																				
MW-4		MW-7		MW-10		MW-11		MW-12		MW-19S		MW-20		MW-22		MW-23		MW-25S		
TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		TOC Elevation		
1004.59		1001.85		1002.48		1002.99		1003.78		1036.21		993.47		1009.31		1000.81		1002.51		
Date	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)		
3/22/2016	11.84	992.75	16.57	985.28	15.50	986.98	10.83	992.16	16.34	987.44	Installed 10/21/2019	8.17	985.30	N.M.	N.M.	N.M.	N.M.	Installed 10/18/2019		
6/14/2016	11.19	993.40	15.70	986.15	14.50	987.98	10.05	992.94	14.55	989.23		7.60	985.87	N.M.	N.M.	N.M.	N.M.			
9/2/2016	12.20	992.39	17.21	984.64	16.04	986.44	11.30	991.69	15.60	988.18		8.35	985.12	N.M.	N.M.	N.M.	N.M.			
11/28/2016	12.30	992.29	17.80	984.05	16.80	985.68	12.20	990.79	17.25	986.53		9.00	984.47	N.M.	N.M.	N.M.	N.M.			
2/17/2017	12.90	991.69	18.30	983.55	16.99	985.49	12.54	990.45	17.71	986.07		9.41	984.06	N.M.	N.M.	N.M.	N.M.			
5/2/2017	12.35	992.24	16.69	985.16	15.55	986.93	12.45	990.54	9.39	994.39		8.20	985.27	N.M.	N.M.	N.M.	N.M.			
6/19/2017	11.85	992.74	16.15	985.70	14.95	987.53	10.50	992.49	15.00	988.78		8.05	985.42	N.M.	N.M.	N.M.	N.M.			
7/31/2017	12.45	992.14	16.72	985.13	16.00	986.48	13.02	989.97	10.20	993.58		8.70	984.77	N.M.	N.M.	N.M.	N.M.			
11/7/2017	12.80	991.79	15.65	986.20	14.25	988.23	12.00	990.99	14.42	989.36		9.03	984.44	N.M.	N.M.	N.M.	N.M.			
3/9/2018	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	12.81	990.18	N.M.	N.M.			N.M.	N.M.	N.M.	N.M.	N.M.			
4/23/2018	N.M.	N.M.		N.M.	N.M.	N.M.	N.M.	N.M.	N.M.											
6/5/2018	13.66	990.93	17.51	984.34	16.27	986.21	12.98	990.01	16.11	987.67		6.08	987.39	N.M.	N.M.	N.M.	N.M.			
10/9/2018	11.94	992.65	16.71	985.14	15.51	986.97	12.81	990.18	13.05	990.73		7.00	986.47	N.M.	N.M.	N.M.	N.M.			
4/15/2019	11.44	993.15	16.21	985.64	15.03	987.45	11.64	991.35	16.23	987.55		7.49	985.98	12.16	997.15	10.77	990.04			
10/1/2019	11.79	992.80	16.90	984.95	15.75	986.73	11.94	991.05	15.73	988.05		N.M.	N.M.	N.M.	N.M.	9.37	991.44			
4/14/2020	12.40	992.19	16.72	985.13	15.74	986.74	12.04	990.95	16.40	987.38	25.39	1010.82	8.20	985.27	12.92	996.39	11.87	988.94	24.29	978.22
10/1/2020	14.41	990.18	19.27	982.58	18.10	984.38	13.94	989.05	17.59	986.19	34.93	1001.28	10.26	983.21	15.53	993.78	14.93	985.88	25.28	977.23
4/1/2021	13.02	991.57	17.12	984.73	15.06	987.42	12.93	990.06	14.57	989.21	31.86	1004.35	8.28	985.19	14.73	994.58	14.32	986.49	24.91	977.60
10/11/2021	13.27	991.32	18.55	983.30	17.50	984.98	14.06	988.93	17.46	986.32	32.48	1003.73	9.40	984.07	15.48	993.83	13.90	986.91	25.27	977.24
4/7/2022	14.05	990.54	18.38	983.47	17.30	985.18	13.97	989.02	17.56	986.22	29.56	1006.65	9.83	983.64	16.27	993.04	14.91	985.90	25.50	977.01
10/1/2022	15.66	988.93	19.46	982.39	18.20	984.28	14.21	988.78	17.73	986.05	36.88	999.33	10.38	983.09	17.46	991.85	15.78	985.03	26.12	976.39
4/3/2023	15.44	989.15	19.02	982.83	17.87	984.61	N.D.	N.D.	17.61	986.17	34.95	1001.26	10.33	983.14	18.41	990.90	16.58	984.23	25.94	976.57
10/2/2023	15.91	988.68	19.56	982.29	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	38.34	997.87	10.31	983.16	Abandoned	16.74	984.07	26.36	976.15	
4/2/2024	15.71	988.88	19.03	982.82	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	37.88	998.33	10.35	983.12		18.41	982.40	26.05	976.46	
10/1/2024	14.99	989.60	18.86	982.99	N.D.	N.D.	N.D.	N.D.	17.47	986.31	36.29	999.92	9.90	983.57		15.95	984.86	25.27	977.24	

**Notes:**

TOC: Top of PVC well casing

N.D. = not detected

N.M. = not measured

AMSL = above mean sea level

**Table 3 - Groundwater Elevations**

Omaha Public Power District - NOS Ash Landfill

Water Level Only Wells										
	MW-26S		MW-27		MW-28		MW-29		MW-30	
	TOC Elevation	TOC Elevation								
	1011.54	1021.09	1043.74	1031.59	1029.75					
Date	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)
3/22/2016										
6/14/2016										
9/2/2016										
11/28/2016										
2/17/2017										
5/2/2017										
6/19/2017										
7/31/2017	Installed 10/18/2019	Installed 2/6/2020	Installed 2/6/2020	Installed 2/4/2020	Installed 2/5/2020					
11/7/2017										
3/9/2018										
4/23/2018										
6/5/2018										
10/9/2018										
4/15/2019										
10/1/2019										
4/14/2020	18.35	993.19	28.72	992.37	43.95	999.79	35.58	996.01	33.65	996.10
10/1/2020	19.26	992.28	31.37	989.72	47.18	996.56	38.15	993.44	36.24	993.51
4/1/2021	18.04	993.50	31.03	990.06	46.72	997.02	39.42	992.17	37.08	992.67
10/11/2021	17.68	993.86	32.07	989.02	46.42	997.32	38.41	993.18	36.60	993.15
4/7/2022	19.17	992.37	31.96	989.13	47.69	996.05	39.72	991.87	37.48	992.27
10/1/2022	20.94	990.60	32.80	988.29	48.95	994.79	40.30	991.29	38.35	991.40
4/3/2023	20.79	990.75	32.67	988.42	50.24	993.50	42.32	989.27	39.85	989.90
10/2/2023	20.62	990.92	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
4/2/2024	20.84	990.70								
10/1/2024	19.98	991.56								

**Notes:**

TOC: Top of PVC well casing

N.D. = not detected

N.M. = not measured

AMSL = above mean sea level

This page intentionally left blank.

**Table 4 - Appendix III Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

	<b>Constituent:</b>	Boron	Calcium	Chloride	Fluoride*	pH	Sulfate	TDS
	<b>Reporting Unit:</b>	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
MW-2	3/22/2016	1.6	267	23.1	<0.5	6.85	1320	1920
	6/14/2016	1.52	278	25.7	<0.5	6.80	774	1560
	9/2/2016	1.22	197	24.9	<0.5	7.04	503	2890
	11/28/2016	1.31	262	24.4	0.318	7.49	650	1420
	2/17/2017	1.92	292	19.3	0.563	7.79	915	2120
	5/2/2017	1.79	300	22.9	1.94	7.27	889	1840
	6/19/2017	1.48	277	24.1	<0.5	7.09	631	2020
	7/31/2017	1.81	299	24.8	0.583	7.37	799	1850
	11/7/2017	1.59	263	21.2	0.529	7.29	907	2210
	3/9/2018	1.88	292	27.4	<0.5	6.73	745	1570
	6/5/2018	1.15	239	28.5	<0.5	7.02	618	1460
	10/9/2018	1.38	302	22.2	<0.5	6.96	808	1720
	4/15/2019	2.26	339	22.5	<0.5	7.07	753	1850
	10/1/2019	2.17	306	18.2	<0.5	6.89	841	1930
	4/14/2020	1.90	319	22.0	0.427J	6.59	816	1670
	10/7/2020	2.16	265	21.4	0.352J	6.81	807	1840
	4/5/2021	1.30	243	36.9	<0.275	6.73	553	1340
	10/12/2021	1.03	222	33.6	<0.275	6.44	467	940
	4/11/2022	1.44	284	28.7	0.232J	6.87	707	1490
	10/5/2022	0.863	226	32.9	<0.220	6.89	354	1230
	4/4/2023	1.09	249	35.0	0.539	6.55	476	1080
	10/4/2023	0.590	193	40.2	<0.375	6.75	302	1090
	4/2/2024	0.82	219	39.6	<0.375	6.31	405	1190
	10/1/2024	1.19	333	22.4	<0.375	7.15	731	1720
MW-5	3/23/2016	0.545	458	47.7	<0.5	NA	1230	3150
	6/14/2016	0.533	434	52.1	<0.5	NA	1160	2530
	11/29/2016	0.565	443	44.3	<0.5	NA	1340	3150
	5/2/2017	0.564	435	46.9	1.82	NA	1330	2910
	6/5/2018	0.580	413	44.2	<0.5	7.44	1230	2610
	10/10/2018	0.528	412	41.6	<0.5	7.03	1240	2410
	4/16/2019 <sup>[1]</sup>	NA	NA	NA	NA	7.34	1150	NA
	10/1/2019	0.614	428	40.9	<0.5	6.88	1160	2620
	4/14/2020	0.573	439	40.7	0.460J	6.70	1080	2120
	10/8/2020	0.664	424	39.7	<0.23	6.81	1200	2380
	4/5/2021	0.592	380	40.5	0.642	7.22	1100	2020
	10/12/2021	0.530	330	45.7	<0.275	6.61	993	1530
	4/11/2022	0.729	415	39.6	<0.220	7.00	1040	1790
	10/5/2022	0.580	391	34.2	0.516	7.07	1010	2160
	4/4/2023	0.541	329	42.0	0.428J	7.13	865	1420
	10/4/2023	0.504	335	37.6	<0.375	6.86	943	1870
	4/3/2024	0.647	413	44.4	<0.375	7.24	1300	2490
	10/3/2024	0.603	412	38.3	<0.375	7.07	1060	2010

**Table 4 - Appendix III Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

	<b>Constituent:</b>	Boron	Calcium	Chloride	Fluoride*	pH	Sulfate	TDS
	<b>Reporting Unit:</b>	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
MW-6	3/23/2016	0.376	263	217	<0.5	NA	219	1200
	6/14/2016	0.383	261	230	<0.5	NA	226	1100
	11/28/2016	0.468	314	272	<0.5	NA	366	1730
	5/2/2017	0.461	279	224	1.32	NA	314	1340
	3/9/2018	<0.8	316	315	0.525	6.44	349	1240
	6/5/2018	0.589	339	287	<0.5	7.03	293	1690
	10/9/2018	0.415	250	181	0.52	7.03	179	988
	4/15/2019 <sup>[1]</sup>	NA	NA	NA	NA	6.83	213	NA
	10/1/2019	0.543	348	326	0.511	6.67	309	1400
	4/14/2020	0.517	347	349	0.487J	6.55	297	1380
	10/7/2020	0.557	319	409	0.373J	6.47	346	320
	4/5/2020	0.502	283	313	0.310J	6.65	275	1280
	10/12/2021	0.502	289	324	<0.275	6.32	277	1100
	4/11/2022	0.592	285	308	0.244J	6.65	241	1230
	10/5/2022	0.620	300	330	0.637	6.64	235	1360
	4/4/2023	0.623	322	375	0.524	6.52	288	1140
	10/4/2023	0.663	304	345	<0.375	6.77	278	1380
	4/2/2024	0.647	300	351	<0.375	6.16	279	1320
	10/1/2024	0.654	294	326	<0.375	7.00	248	1360
MW-8	3/23/2016	1.01	133	10.6	<0.5	NA	618	964
	6/14/2016	0.974	142	15.1	0.518	NA	608	934
	11/29/2016	1.04	143	9.38	<0.5	NA	589	956
	5/2/2017	1.04	121	10.5	1.7	NA	519	814
	6/5/2018	1.54	149	12.9	<0.5	8.24	519	908
	10/10/2018	1.52	132	10.8	<0.5	7.96	548	900
	4/15/2019 <sup>[1]</sup>	NA	NA	NA	NA	7.88	611	NA
	10/1/2019	2.18	159	9.03	<0.5	7.21	604	1010
	4/14/2020	2.22	162	10.9	0.577	7.60	565	948
	10/8/2020	2.24	139	10.8	<0.23	7.65	560	986
	4/5/2021	2.04	127	10.6	<0.275	7.77	528	814
	10/12/2021	2.20	137	10.8	<0.275	7.51	526	826
	4/11/2022	2.70	141	10.4	<0.220	7.54	561	918
	10/5/2022	2.30	140	10.8	0.266J	7.97	496	916
	4/4/2023	2.21	138	12.4	0.349J	7.69	609	860
	10/4/2023	2.71	155	12.8	<0.375	8.25	588	1050
	4/3/2024	2.76	165	14.6	<0.375	7.64	647	964
	10/3/2024	2.66	172	14.6	<0.375	8.03	633	978

**Table 4 - Appendix III Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

	<b>Constituent:</b>	Boron	Calcium	Chloride	Fluoride*	pH	Sulfate	TDS
	<b>Reporting Unit:</b>	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
MW-9	3/22/2016	<0.2	147	121	1.35	6.83	23	708
	6/14/2016	<0.2	159	165	0.864	6.78	31.7	770
	9/2/2016	<0.2	122	146	<0.5	7.27	19.9	766
	11/28/2016	<0.2	166	177	<0.5	7.02	35.4	790
	2/17/2017	<0.2	116	120	0.585	7.47	26.2	640
	5/2/2017	<0.2	148	127	1.84	7.35	25.5	760
	19/6/2017	<0.2	150	149	0.52	6.99	22.0	888
	7/31/2017	<0.2	190	275	0.617	7.87	57.1	1180
	11/7/2017	<0.2	153	220	0.55	7.46	37.7	1090
	3/20/2018	<0.2	146	210	<0.5	6.68	46.1	844
	6/5/2018	<0.2	185	231	<0.5	7.00	57.5	1190
	10/9/2018	<0.2	159	194	0.592	6.74	45.5	872
	4/15/2019	<0.2	157	127	0.947	7.00	32.7	610
	10/1/2019	<0.2	140	164	<0.5	6.56	40.1	728
	4/13/2020	<0.1	165	160	0.562	6.58	36.4	732
	10/7/2020	0.101	145	217	0.410J	6.74	48.0	820
	4/5/2021	0.125	158	164	0.422J	6.46	30.6	724
	10/11/2021	<0.0580	137	135	<0.275	6.38	17.9	664
	4/11/2022	0.0960J	180	176	0.380J	6.84	47.5	820
	10/5/2022	0.160	158	157	0.274J	6.85	30.4	774
	4/3/2023	<0.0760	188	199	0.507	6.25	54.3	826
	10/3/2023	0.0993J	155	166	<0.375	6.45	31.6	768
	4/2/2024	0.113	209	207	<0.375	6.14	34	796
	10/1/2024	0.116	155	144	0.399J	7.22	13.4	706
MW-13	3/22/2016	2.05	127	7.97	0.796	6.89	486	1050
	6/14/2016	1.97	138	6.7	<0.5	6.70	500	1030
	9/2/2016	2.02	116	8.06	0.652	7.03	458	1170
	11/28/2016	2.21	155	11.3	2.55	7.25	583	1140
	2/17/2017	2.02	153	6.35	<0.5	7.44	603	1320
	5/2/2017	1.8	156	7.52	1.05	7.30	650	1450
	6/19/2017	2.09	179	7.83	<0.5	7.07	590	1400
	7/31/2017	2.26	133	6.3	0.587	7.20	512	1150
	11/7/2017	1.71	129	6.81	0.67	6.79	581	1080
	3/9/2018	1.98	152	7.35	0.53	7.03	663	1340
	6/5/2018	1.78	151	7.93	<0.5	8.31	654	1490
	10/9/2018	1.77	161	7.05	<0.5	6.96	644	1190
	4/15/2019	2.73	215	10.5	1.05	7.13	808	1420
	10/1/2019	2.46	206	8.24	0.544	6.92	673	1440
	4/14/2020	2.22	213	9.24	0.817	6.58	794	1410
	10/7/2020	2.19	188	8.82	0.391J	6.89	821	1640
	4/5/2021	1.70	144	7.98	0.496J	6.69	790	1330
	10/11/2021	1.62	169	8.47	<0.275	6.26	888	980
	4/11/2022	1.89	171	7.52	0.340J	6.76	893	1460
	10/5/2022	1.50	157	8.09	<0.220	6.69	840	1460
	4/3/2023	1.71	230	9.17	0.62	6.29	1100	1730
	10/4/2023	1.73	182	8.16	<0.375	6.57	880	1610
	4/2/2024	2.16	263	9.99	0.387J	6.21	1080	1630
	10/1/2024	1.4	146	8.65	<0.375	7.34	740	1330

**Table 4 - Appendix III Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

	<b>Constituent:</b>	<b>Boron</b>	<b>Calcium</b>	<b>Chloride</b>	<b>Fluoride*</b>	<b>pH</b>	<b>Sulfate</b>	<b>TDS</b>
	<b>Reporting Unit:</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>S.U.</b>	<b>mg/L</b>	<b>mg/L</b>
MW-15	3/22/2016	3.11	311	24.3	<0.5	7.09	262	1510
	6/14/2016	5.39	340	13	<0.5	6.80	934	1640
	9/2/2016	3.36	220	3.52	0.278	6.97	625	1460
	11/28/2016	2.87	285	28.2	3.48	7.32	886	1500
	2/17/2017	2.81	266	16.8	<0.5	7.65	863	1370
	2/5/2017	2.80	263	11.2	0.878	7.02	861	1280
	6/19/2017	2.57	248	10.0	<0.5	7.05	643	1320
	7/31/2017	3.01	247	11.4	<0.5	7.02	641	1140
	7/11/2017	4.13	293	11.6	<0.5	7.10	900	1520
	3/9/2018	4.10	283	13.4	<0.5	7.24	819	1330
	6/5/2018	3.26	265	16.6	<0.5	7.42	745	1640
	10/9/2018	2.48	230	11.5	<0.5	7.10	656	1130
	4/15/2019	4.65	256	8.07	<0.5	7.09	634	1070
	10/1/2019	5.13	306	6.6	<0.5	6.61	633	1220
	4/14/2020	3.60	239	7.81	<0.23	7.68	514	928
	10/7/2020	3.44	199	9.51	<0.23	7.14	495	978
	4/5/2021	3.36	224	6.19	<0.275	7.09	586	974
	10/12/2021	1.94	190	7.32	<0.275	6.54	500	876
	4/11/2022	3.09	226	7.91	<0.220	7.07	589	962
	10/5/2022	2.82	229	7.17	<0.220	7.08	468	1010
	4/4/2023	2.57	189	12.20	<0.220	7.60	576	942
	10/4/2023	3.41	222	13.4	<0.375	7.50	564	1030
	4/2/2024	2.8	169	12.6	<0.375	6.74	420	820
	10/1/2024	3.46	211	9.37	<0.375	7.74	519	952
MW-16	3/22/2016	0.367	180	64.7	1.84	6.86	345	948
	6/14/2016	0.409	180	65.5	<0.5	6.67	340	968
	9/2/2016	0.333	143	57.3	<0.5	7.18	277	1160
	11/28/2016	0.312	184	60.7	<0.5	7.11	357	1040
	2/17/2017	0.433	181	59.2	1.37	7.51	374	1410
	5/2/2017	0.320	184	60.7	1.85	7.26	381	1030
	6/19/2017	0.371	194	59.3	<0.5	6.97	326	1460
	7/31/2017	0.423	200	57.9	0.53	7.12	352	1200

Abandoned on August 4, 2017

**Table 4 - Appendix III Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

	<b>Constituent:</b>	<b>Boron</b>	<b>Calcium</b>	<b>Chloride</b>	<b>Fluoride*</b>	<b>pH</b>	<b>Sulfate</b>	<b>TDS</b>
	<b>Reporting Unit:</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>S.U.</b>	<b>mg/L</b>	<b>mg/L</b>
MW-17	3/23/2016	0.668	392	51.3	1.36	6.60	1010	3150
	6/14/2016	0.706	376	50	<0.5	6.59	990	2360
	2/09/2016	0.637	320	43.0	<0.5	6.98	807	2660
	11/29/2016	0.644	390	49.7	<0.5	6.76	1080	2640
	2/17/2017	0.700	380	62.6	2.91	7.31	1010	2250
	5/2/2017	0.649	364	45.3	1.66	7.47	1090	3040
	6/19/2017	0.679	373	42.3	<0.5	6.93	944	2640
	7/31/2017	0.753	365	44.4	<0.5	7.05	913	2300
	11/7/2017	0.660	323	46.2	<0.5	7.14	952	2590
	3/9/2018	0.745	357	46.8	1.29	6.31	907	2010
	6/5/2018	0.745	363	43.6	<0.5	6.95	918	1990
	10/10/2018	0.615	328	41.9	<0.5	6.39	872	1980
	4/15/2019	0.762	297	38.7	0.573	6.53	834	1900
	10/1/2019	0.783	342	32.7	<0.5	6.06	724	1890
	4/14/2020	0.757	323	30.2	0.274J	6.31	671	1650
	10/8/2020	0.709	269	31.1	<0.23	6.39	684	1600
	4/5/2021	0.695	274	30.1	<0.275	6.70	677	1500
	10/12/2021	0.580	287	33.0	<0.275	6.21	708	1210
	4/11/2022	0.715	321	37.7	<0.220	6.67	807	1630
	10/5/2022	0.629	333	36.2	0.640	6.49	787	1870
	4/4/2023	0.562	325	40.4	0.545	6.59	829	1580
	10/4/2023	0.720	356	41.5	<0.375	6.51	865	2200
	4/3/2024	0.732	343	45.3	<0.375	6.41	877	1870
	10/3/2024	0.733	391	43.4	<0.375	6.65	897	1910
MW-18	3/22/2016	<0.2	115	<5	<0.5	6.86	24.8	504
	6/14/2016	<0.2	96.1	<5	<0.5	7.18	5	468
	9/2/2016	<0.2	73.4	<5	<0.5	7.20	<5	460
	11/28/2016	<0.2	97.6	<5	<0.5	7.47	<5	628
	2/17/2017	<0.2	94.8	<5	0.508	7.70	<5	474
	5/2/2017	<0.2	98.9	<5	1.32	7.27	<5	542
	6/19/2017	<0.2	98.4	<5	<0.5	7.20	<5	514
	7/31/2017	<0.2	98.8	<5	0.632	7.63	<5	468
	7/11/2017	<0.2	87.5	<5	0.704	7.22	<5	518
	3/9/2018	<0.2	97.3	<5	0.530	6.46	<5	438
	6/5/2018	<0.2	106	<5	0.528	6.91	<5	438
	10/9/2018	<0.2	94.2	<5	0.817	6.64	<5	398
	4/15/2019	<0.2	74.6	<5	0.518	6.51	<5	416
	10/1/2019	<0.2	97.00	<5	<0.5	6.11	<5	384
	4/13/2020	<0.1	111	3.55J	0.559	6.43	<3.55	414
	10/7/2020	0.0811J	72.6	6.48	0.320J	6.75	<3.55	316
	4/5/2021	0.123	98.3	3.63J	0.540	6.24	<2.45	384
	10/11/2021	<0.0580	96.2	3.76J	<0.275	6.52	<2.45	348
	4/11/2022	0.0833J	102	2.74J	0.412J	6.89	<2.00	448
	10/5/2022	0.0884J	87.4	4.86J	<0.220	6.88	<2.00	378
	4/3/2023	<0.0760	92.9	5.26	0.534	6.15	<2.00	368
	10/3/2023	<0.0760	92.5	3.70J	<0.375	6.17	<2.10	402
	4/2/2024	0.0920J	96.3	3.16J	<0.375	6.01	<2.10	416
	10/1/2024	0.0828J	95	4.44J	0.493J	6.84	<2.10	416

**Table 4 - Appendix III Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

	<b>Constituent:</b>	<b>Boron</b>	<b>Calcium</b>	<b>Chloride</b>	<b>Fluoride*</b>	<b>pH</b>	<b>Sulfate</b>	<b>TDS</b>
	<b>Reporting Unit:</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>S.U.</b>	<b>mg/L</b>	<b>mg/L</b>
MW-19	3/22/2016	<0.2	103	6.5	<0.5	6.85	29.5	494
	6/14/2016	<0.2	110	7.2	<0.5	6.80	29.9	508
	9/2/2016	<0.2	82.8	<5	<0.5	7.12	21.5	492
	11/28/2016	<0.2	110	6.02	<0.5	7.29	20.7	484
	2/17/2017	<0.2	90.5	3.55	0.418	7.49	15.7	484
	5/2/2017	<0.2	107	3.7	0.804	7.39	10.6	566
	6/19/2017	<0.2	103	<5	<0.5	7.05	10.2	518
	7/31/2017	<0.2	105	<5	0.693	7.53	8.35	480
	11/7/2017	<0.2	93.0	<5	<0.5	6.98	6.91	410
	3/9/2018	<0.2	113	<5	<0.5	6.53	8.89	426
	6/5/2018	<0.2	100	<5	0.524	6.91	5.53	440
	10/9/2018	<0.2	106	11.9	<0.5	6.49	16.5	460
	4/15/2019	<0.2	101	<5	0.905	6.73	<5	444
	10/1/2019	<0.2	113	<5	0.511	6.05	<5	438
	4/13/2020	0.113J	123	3.83J	0.701	6.49	<3.55	432
	10/7/2020	0.107	109	23.3	0.469J	6.79	33.5	482
	4/5/2021	0.119	101	3.44J	0.517	6.30	<2.45	402
	10/11/2021	0.0629J	104	3.68J	<0.275	6.46	<2.45	356
	4/11/2022	0.0935J	113	<2.25	0.390J	6.83	<2.00	376
	10/5/2022	0.110	115	22.7	<0.220	6.91	35.6	494
	4/3/2023	<0.0760	111	3.48J	0.509	6.00	<2.00	398
	10/3/2023	0.0931J	113	23.7	<0.375	6.27	43.2	502
	4/2/2024	0.0951J	103	2.39J	<0.375	5.94	<2.10	392
	10/1/2024	0.101	119	17.3	<0.375	6.93	37.6	482

**Notes:**

mg/L = milligrams per liter

S.U. = Standard Units

NA = Analyte Not Analyzed/Measured

< = for the period of March 2016 through October 2019, the symbol indicates analyte not detected above the Reporting Limit, which is the value shown following the "<" symbol. Starting in January 2020, the symbol indicates analyte not detected above the Method Detection Limit, which is the value shown following the "<" symbol.

\* Fluoride is listed in both Appendix III and Appendix IV of the CCR Final Rule (40 CFR Part 257).

J = Value is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

Concentrations in gray text indicate a value that is below the laboratory's reporting limit and method detection limit.

This page intentionally left blank.

**Table 5 - Appendix IV Constituents in Groundwater**  
Omaha Public Power District - NOS Ash Landfill

	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium (Ra 226 + Ra 228)	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-2	3/22/2016	<0.001	0.245	0.115	<0.001	<0.0005	<0.005	0.000514	0.664	<0.5	0.000601	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/14/2016	<0.001	0.234	0.113	<0.001	<0.0005	<0.005	0.000566	0.488	<0.5	0.00211	<0.05	<0.0002	<0.002	<0.005	<0.001
	9/2/2016	<0.001	0.22	0.104	<0.001	<0.0005	<0.005	0.000619	0.300	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	11/28/2016	<0.001	0.204	0.0952	<0.001	<0.0005	<0.005	0.000559	0.914	0.318	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	2/17/2017	<0.001	0.234	0.126	<0.001	<0.0005	<0.005	0.000656	0.679	0.563	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	5/2/2017	<0.001	0.231	0.118	<0.001	<0.0005	<0.005	0.000833	0.123	1.94	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/19/2017	<0.001	0.212	0.101	<0.001	<0.0005	<0.005	0.000725	0.469	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	7/31/2017	<0.001	0.217	0.117	<0.001	<0.0005	<0.005	0.000953	0.549	0.583	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	07/11/2017	NA	0.137	0.0923	NA	<0.0005	<0.005	NA	NA	0.529	<0.0005	NA	<0.0002	NA	<0.005	NA
	3/9/2018	<0.001	0.219	0.113	<0.001	<0.0005	<0.005	0.000620	1.050	<0.5	<0.0005	0.0415	<0.0002	<0.002	<0.005	<0.001
	6/5/2018	<0.001	0.225	0.0896	<0.001	<0.0005	<0.005	0.000997	0.422	<0.5	0.000586	0.0330	<0.0002	<0.002	<0.005	<0.001
	10/9/2018	<0.001	0.247	0.112	NA	<0.0005	<0.005	0.00135	0.901	<0.5	<0.0005	0.0423	<0.0002	<0.002	<0.005	NA
	4/15/2019	<0.001	0.234	0.140	<0.001	<0.0005	<0.005	0.00156	1.010	<0.5	<0.0005	0.0444	<0.0002	<0.002	<0.005	<0.001
	10/1/2019	<0.001	0.141	0.141	<0.001	<0.0001	<0.005	0.000828	0.620	<0.5	<0.0005	0.0424	<0.0002	<0.002	<0.005	<0.001
	4/14/2020	<0.00058	0.241	0.0997	<0.00027	<0.000039	<0.0011	0.00113	0.455	0.427J	0.000437J	0.0398	<0.0001	<0.0011	<0.001	<0.00026
	10/7/2020	<0.00051	0.224	0.100	<0.00027	<0.000049	<0.00110	0.000535	0.846	0.352J	0.000455J	0.0392	<0.0001	0.00112J	<0.001	<0.00026
	4/5/2021	<0.00110	0.213	0.100	<0.00027	<0.000051	<0.00110	0.000472J	0.493	<0.275	0.000515	0.0435	<0.000150	<0.00130	<0.00096	<0.00026
	10/12/2021	<0.00110	0.191	0.0880	<0.00027	<0.000051	<0.00110	0.000437J	0.856	<0.275	<0.000210	0.0404	<0.000150	<0.00130	<0.00096	<0.00026
	4/11/2022	<0.000690	0.237	0.116	<0.000270	<0.0000550	<0.00110	0.000635	0.167U	0.232J	0.000304J	0.0513	<0.000110	0.00128J	<0.000960	<0.000260
	10/5/2022	<0.000690	0.163	0.105	<0.000270	<0.0000550	<0.00110	0.000379J	1.67	<0.220	<0.000240	0.0433	<0.000110	0.00123J	<0.000960	<0.000260
	4/4/2023	<0.00100	0.215	0.111	0.000356J	0.000132J	<0.00110	0.000626	0.405U	0.539	0.000358J	0.0426	<0.000140	0.00194J	0.00225J	0.00101
	10/4/2023	<0.00100	0.237	0.104	<0.000330	<0.000100	<0.00110	0.000350J	1.47	<0.375	<0.000240	0.0440	<0.000140	0.00188J	<0.00140	0.00278
	4/2/2024	<0.00100	0.240	0.115	<0.000330	<0.000100	<0.00110	0.000306J	1.50	<0.375	<0.000240	0.0432	<0.000140	0.00104J	<0.00140	<0.000260
	10/1/2024	<0.00100	0.177	0.132	<0.000330	<0.000100	<0.00120	0.000932	1.24	<0.375	<0.000260	0.0511	<0.000110	<0.00130	<0.00140	0.00105
MW-5	3/23/2016	<0.001	0.0432	0.0437	<0.001	<0.0005	<0.005	<0.0005	0.391U	<0.5	<0.0005	0.0799	<0.0002	<0.002	<0.005	<0.001
	6/14/2016	<0.001	0.0389	0.0701	<0.001	<0.0005	<0.005	0.000509	0.653	<0.5	<0.0005	0.0866	<0.0002	<0.002	<0.005	<0.001
	11/29/2016	<0.001	0.0564	0.0491	<0.001	<0.0005	<0.005	<0.0005	0.637	<0.5	<0.0005	0.0894	<0.0002	<0.002	<0.005	<0.001
	5/2/2017	<0.001	0.0544	0.0488	<0.001	<0.0005	<0.005	<0.0005	0.0966U	1.82	<0.0005	0.0819	<0.0002	<0.002	<0.005	<0.001
	6/5/2018	<0.001	0.0486	0.0447	<0.001	<0.0005	<0.005	<0.0005	NA	<0.5	0.00262	0.07	<0.0002	<0.002	<0.005	<0.001
	10/10/2018	<0.001	0.0549	0.0402	NA	<0.0005	<0.005	<0.0005	0.305	<0.5	0.000627	0.0797	<0.0002	<0.002	<0.005	NA
	4/16/2019	NA	0.0545	0.0625	NA	<0.0005	<0.005	NA	NA	NA	<0.0005	NA	NA	<0.005	NA	
	10/1/2019	<0.001	0.0557	0.0467	<0.001	<0.0001	<0.005	<0.0005	0.373U	<0.5	<0.0005	0.0869	<0.0002	<0.002	<0.005	<0.001
	4/14/2020	<0.00058	0.0568	0.0669	<0.00027	<0.000039	<0.0011	0.000388J	0.0513U	0.460J	0.000542	0.0718	<0.0001	<0.0011	<0.001	<0.00026
	10/8/2020	<0.00051	0.0681	0.0477	<0.00027	<0.000049	<0.0011	0.000350J	0.722	<0.23	<0.00011	0.0848	<0.0001	0.00110J	<0.001	

**Table 5 - Appendix IV Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium (Ra 226 + Ra 228)	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	
Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
MW-6	3/22/2016	<0.001	0.0365	0.183	<0.001	0.00213	<0.005	0.00592	1.16	<0.5	0.00596	<0.05	<0.0002	0.0435	<0.005	<0.001
	6/14/2016	<0.001	0.0324	0.225	<0.001	<0.0005	<0.005	0.00527	0.825	<0.5	0.00269	<0.05	<0.0002	0.0507	<0.005	<0.001
	11/28/2016	<0.001	0.0133	0.166	<0.001	<0.0005	<0.005	0.0064	0.653	<0.5	0.00139	<0.05	<0.0002	0.0696	<0.005	<0.001
	5/2/2017	<0.001	0.0243	0.195	<0.001	<0.0005	<0.005	0.00562	0.819	1.32	0.00169	<0.05	<0.0002	0.061	<0.005	<0.001
	3/9/2018	<0.004	0.0194	0.165	<0.004	<0.002	<0.02	0.00654	0.673	0.525	<0.002	0.0407	<0.0002	0.0683	<0.02	<0.004
	6/5/2018	<0.001	0.0136	0.196	<0.001	0.000564	<0.005	0.007	NA	<0.5	0.00319	0.048	<0.0002	0.0702	<0.005	<0.001
	10/9/2018	<0.001	0.0393	0.295	NA	0.000834	<0.005	0.00661	1.05	0.52	0.0066	0.0407	<0.0002	0.0537	<0.005	NA
	4/15/2019	NA	0.0200	0.212	NA	<0.0005	<0.005	NA	NA	NA	0.00286	NA	NA	<0.005	NA	
	10/1/2019	<0.001	0.017	0.192	<0.001	0.000317	<0.005	0.00761	0.985	0.511	0.00287	0.051	<0.0002	0.0654	<0.005	<0.001
	4/14/2020	<0.00058	0.0198	0.197	<0.00027	0.000209	<0.0011	0.00673	0.462U	0.487J	0.00132	0.0432	<0.0001	0.0605	<0.001	<0.00026
	10/7/2020	<0.00051	0.0123	0.143	<0.00027	0.00025	<0.0011	0.0077	0.827	0.373J	0.00159	0.0461	<0.0001	0.0642	<0.001	<0.00026
	4/5/2021	<0.00110	0.0119	0.192	<0.00027	0.000198	<0.0011	0.00613	0.456U	0.310J	0.000707	0.0454	<0.000150	0.0550	<0.00096	<0.00026
	10/12/2021	<0.00110	0.0324	0.174	<0.00027	0.000181	<0.0011	0.00610	0.910	<0.275	0.000739	0.0424	<0.000150	0.0563	<0.00096	<0.00026
	4/11/2022	0.000693J	0.0211	0.167	<0.000270	0.000146	<0.00110	0.00581	1.73	0.244J	0.000836	0.0503	<0.000110	0.0598	<0.000960	<0.000260
	10/5/2022	<0.000690	0.0128	0.147	<0.000270	0.000152	<0.00110	0.00594	0.954	0.637	0.000533	0.0465	<0.000110	0.0633	<0.000960	<0.000260
	4/4/2023	<0.00100	0.00712	0.176	<0.000330	0.000288	<0.00110	0.00741	0.197U	0.524	0.00110	0.0478	<0.000140	0.0690	<0.00140	<0.000260
	10/4/2023	<0.00100	0.0115	0.136	<0.000330	0.000144J	<0.00110	0.00552	1.20	<0.375	<0.000240	0.0507	<0.000140	0.0603	<0.00140	0.000524J
	4/2/2024	<0.00100	0.0099	0.143	<0.000330	0.000118J	0.00334J	0.00636	1.20	<0.375	0.000599	0.0465	<0.000140	0.0610	<0.00140	<0.000260
	10/1/2024	<0.00100	0.0116	0.16	<0.000330	<0.000100	<0.00120	0.0053	0.61	<0.375	0.000265J	0.0506	<0.000110	0.0582	<0.00140	0.00154
MW-8	3/23/2016	<0.001	0.0163	0.088	<0.001	<0.0005	<0.005	<0.0005	0.353U	<0.5	0.00168	<0.05	<0.0002	0.107	<0.005	<0.001
	6/14/2016	<0.001	0.0162	0.100	<0.001	<0.0005	<0.005	<0.0005	0.380U	0.518	0.00169	<0.05	<0.0002	0.102	<0.005	<0.001
	11/29/2016	<0.001	0.0210	0.0954	<0.001	<0.0005	<0.005	0.000516	0.565	<0.5	0.0019	<0.05	<0.0002	0.0994	<0.005	<0.001
	5/2/2017	<0.001	0.0256	0.0813	<0.001	<0.0005	<0.005	<0.0005	0.647	1.7	0.00155	<0.05	<0.0002	0.101	<0.005	<0.001
	6/5/2018	<0.001	0.0189	0.0954	<0.001	<0.0005	<0.005	0.00281	NA	<0.5	0.00956	0.0115	<0.0002	0.0753	<0.005	<0.001
	10/10/2018	<0.001	0.0121	0.0892	NA	<0.0005	<0.005	0.000864	0.310	<0.5	0.002	0.0108	<0.0002	0.095	<0.005	NA
	4/16/2019	NA	0.0122	0.101	NA	<0.0005	<0.005	NA	NA	NA	0.000657	NA	NA	<0.005	NA	
	10/1/2019	<0.001	0.0106	0.101	<0.001	<0.0001	<0.005	0.000623	0.535U	<0.5	<0.0005	0.0149	<0.0002	0.111	<0.005	<0.001
	10/1/2019	<0.001	0.0106	0.101	<0.001	<0.0001	<0.005	0.000623	0.535U	<0.5	<0.0005	0.0149	<0.0002	0.111	<0.005	<0.001
	4/14/2020	<0.00058	0.0120	0.0955	<0.00027	<0.000039	<0.0011	0.000503	0.215U	0.577	0.000349J	0.0131	<0.0001	0.102	<0.001	<0.00026
	10/8/2020	<0.00051	0.00998	0.0851	<0.00027	0.0000660J	<0.0011	0.000543	0.216U	<0.23	0.000146J	0.0133	<0.0001	0.101	<0.001	<0.00026
	4/5/2021	<0.00110	0.0110	0.0846	<0.00027	0.0000780J	<0.0011	0.000487J	0.488	<0.275	0.000488J	0.0118	<0.00015	0.100	<0.00096	<0.00026
	10/12/2021	<0.00110	0.0104	0.0806	<0.00027	0.0000790J	<0.0011	0.000611	0.355	<0.275	0.000263J	0.0124	<0.00015	0.0944	<0.00096	<0.00026
	4/11/2022	<0.000690	0.0112	0.0819	<0.000270	<0.0000550	<0.00110	0.000549	0.506U	<0.220	0.000268J	0.0138	<0.000110	0.100	<0.000960	<0.000260
	10/5/2022	<0.000690	0.0111	0.0802	<0.000270	<0.0000550	<0.00110	0.000497J	0.516U	0.266J	<0.000240	0.0126	<0.000110	0.0982	<0.000960	<0.000260
	4/4/2023	<0.00100	0.													

**Table 5 - Appendix IV Constituents in Groundwater**  
 Omaha Public Power District - NOS Ash Landfill

	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium (Ra 226 + Ra 228)	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-9	3/22/2016	<0.001	0.00454	0.442	<0.001	<0.0005	<0.005	0.00146	1.240	1.35	0.00366	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/14/2016	<0.001	0.00542	0.542	<0.001	<0.0005	<0.005	0.00148	0.822	0.864	0.00339	<0.05	<0.0002	<0.002	<0.005	<0.001
	9/2/2016	<0.001	0.00397	0.538	<0.001	<0.0005	<0.005	0.00103	2.010	<0.5	0.00289	<0.05	<0.0002	<0.002	<0.005	<0.001
	11/28/2016	<0.001	0.00572	0.536	<0.001	<0.0005	<0.005	0.00159	1.910	<0.5	0.00499	0.0533	<0.0002	<0.002	<0.005	<0.001
	2/17/2017	<0.001	0.0118	0.383	<0.001	<0.0005	0.00555	0.00265	0.623	0.585	0.00419	<0.05	<0.0002	<0.002	<0.005	<0.001
	5/2/2017	<0.001	0.00423	0.487	<0.001	<0.0005	<0.005	0.000974	1.160	1.84	0.00246	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/19/2017	<0.001	0.00345	0.481	<0.001	<0.0005	<0.005	0.00123	2.620	0.517	0.00322	<0.05	<0.0002	<0.002	<0.005	<0.001
	7/31/2017	<0.001	0.00662	0.624	<0.001	<0.0005	<0.005	0.00195	3.280	0.617	0.00474	0.0505	0.00022	<0.002	<0.005	<0.001
	07/11/2017	NA	0.00772	0.500	NA	<0.0005	<0.005	NA	NA	0.55	0.00461	NA	<0.0002	NA	<0.005	NA
	3/20/2018	<0.001	0.00777	0.526	<0.001	<0.0005	<0.005	0.000895	1.250	<0.5	0.00284	0.0428	<0.0002	<0.002	<0.005	<0.001
	6/5/2018	<0.001	0.00768	0.625	<0.001	<0.0005	<0.005	0.00293	2.450	<0.5	0.00885	0.0541	<0.0002	<0.002	<0.005	<0.001
	10/9/2018	<0.001	0.00571	0.469	NA	<0.0005	<0.005	0.00150	2.410	0.592	0.00407	0.0482	<0.0002	<0.002	<0.005	NA
	4/15/2019	<0.001	0.00677	0.576	<0.001	<0.0005	<0.005	0.00234	1.030	0.947	0.00559	0.0426	<0.0002	<0.002	<0.005	<0.001
	10/1/2019	<0.001	0.0054	0.468	<0.001	<0.001	<0.005	<0.0005	0.939	<0.5	0.000655	0.0473	<0.0002	<0.002	<0.005	<0.001
	4/13/2020	<0.00058	0.00626	0.605	<0.00027	0.000161	0.00154J	0.00166	1.16	0.562	0.00392	0.048	<0.0001	<0.0011	<0.001	<0.00026
	10/7/2020	<0.00051	0.00544	0.523	<0.00027	<0.000049	<0.0011	0.000199J	1.38	0.410J	0.000464J	0.0478	<0.0001	<0.0011	<0.001	<0.00026
	4/5/2021	<0.00110	0.0042	0.562	<0.00027	0.000168	0.00137J	0.00119	1.83	0.422J	0.00289	0.0504	<0.00015	<0.00130	<0.00096	<0.00026
	10/11/2021	<0.00110	0.00188J	0.477	<0.00027	0.0000740J	<0.00110	0.000556	1.37	<0.275	0.00122	0.0446	<0.00015	<0.00130	<0.00096	<0.00026
	4/11/2022	<0.000690	0.00782	0.642	<0.000270	0.000264	0.00345J	0.00346	1.80	0.380J	0.00665	0.0572	<0.000110	<0.00120	<0.000960	<0.000260
	10/5/2022	<0.000690	0.00307	0.556	<0.000270	<0.0000550	<0.00110	0.000579	1.26	0.274J	0.00136	0.0515	<0.000110	<0.00120	<0.000960	<0.000260
	4/3/2023	<0.00100	0.0143	0.726	0.000681J	0.000626	0.0208	0.00851	2.09U	0.507	0.0126	0.0547	<0.000140	0.00234	0.00208J	<0.000260
	10/3/2023	<0.00100	0.00285	0.550	<0.000330	0.000111J	0.00113J	0.00112	2.27	<0.375	0.00229	0.0536	<0.000140	0.00100J	<0.00140	<0.000260
	4/2/2024	<0.00100	0.00396	0.620	0.000471J	0.000286	0.00255J	0.00348	5.43	<0.375	0.0067	0.0601	<0.000140	<0.000910	<0.00140	<0.000260
	10/1/2024	<0.00100	0.00113J	0.596	<0.000330	<0.000100	<0.00120	0.000976	1.91	0.399J	0.00222	0.0519	<0.000110	<0.00130	<0.00140	0.00135
MW-13	3/22/2016	<0.001	0.0923	0.0652	<0.001	<0.0005	<0.005	<0.0005	0.575	0.796	<0.0005	<0.05	<0.0002	0.704	0.0205	<0.001
	6/14/2016	<0.001	0.217	0.0906	<0.001	<0.0005	<0.005	<0.0005	0.389	<0.5	<0.0005	<0.05	<0.0002	0.592	0.0141	<0.001
	9/2/2016	<0.001	0.142	0.0825	<0.001	<0.0005	<0.005	<0.0005	0.362	0.652	<0.0005	<0.05	<0.0002	0.945	0.0313	<0.001
	11/28/2016	<0.001	0.154	0.0959	<0.001	<0.0005	<0.005	<0.0005	0.27	2.55	<0.0005	<0.05	<0.0002	0.837	0.0248	<0.001
	2/17/2017	<0.001	0.112	0.0946	<0.001	<0.0005	<0.005	<0.0005	0.455	<0.5	<0.0005	<0.05	<0.0002	0.817	0.0345	<0.001
	5/2/2017	<0.001	0.133	0.0882	<0.001	<0.0005	<0.005	<0.0005	0.301	1.05	<0.0005	<0.05	<0.0002	0.951	0.0403	<0.001
	6/19/2017	<0.001	0.260	0.1180	<0.001	<0.0005	<0.005	<0.0005	0.3	<0.5	<0.0005	<0.05	<0.0002	0.881	0.0372	<0.001
	7/31/2017	<0.001	0.274	0.1120	<0.001	<0.0005	<0.005	<0.0005	0.298	0.587	<0.0005	<0.05	<0.0002	0.839	0.0233	<0.001
	07/11/2017	NA	0.0925	0.0682	NA	<0.0005	<0.005	NA	NA	0.67	<0.0005	NA	<0.0002	NA	0.00837	NA
	3/9/2018	<0.001	0.205	0.0982	<0.001	<0.0005	<0.005	0.000613	0.546	0.53	<0.0005	0.0212	<0.0002	1.22	0.0609	<0.001
	6/5/2018	<0.001	0.0544	0.0605	<											

**Table 5 - Appendix IV Constituents in Groundwater**  
 Omaha Public Power District - NOS Ash Landfill

	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium (Ra 226 + Ra 228)	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-15	3/22/2016	0.00145	<0.002	0.0314	<0.001	<0.0005	0.0194	<0.0005	0.245	<0.5	<0.0005	<0.05	<0.0002	0.389	0.104	<0.001
	6/14/2016	0.00195	<0.002	0.0552	<0.001	<0.0005	0.0199	<0.0005	0.378	<0.5	0.000668	<0.05	<0.0002	0.254	0.115	<0.001
	9/2/2016	0.0015	<0.002	0.0660	<0.001	<0.0005	0.00548	<0.0005	0.0439	0.278	<0.0005	<0.05	<0.0002	0.319	0.0867	<0.001
	11/28/2016	0.00166	<0.002	0.0523	<0.001	<0.0005	<0.005	<0.0005	0.871	3.48	<0.0005	<0.05	<0.0002	0.402	0.0896	<0.001
	2/17/2017	0.00204	0.00241	0.0448	<0.001	<0.0005	<0.005	<0.0005	0.143	<0.5	<0.0005	<0.05	<0.0002	0.408	0.105	<0.001
	5/2/2017	0.0013	<0.002	0.0382	<0.001	<0.0005	0.0153	<0.0005	0.158	0.878	<0.0005	<0.05	<0.0002	0.316	0.0785	<0.001
	6/19/2017	0.00119	<0.002	0.0447	<0.001	<0.0005	0.00678	<0.0005	0.229	<0.5	<0.0005	<0.05	<0.0002	0.242	0.0638	<0.001
	7/31/2017	0.00131	<0.002	0.0467	<0.001	<0.0005	<0.005	<0.0005	0.455	<0.5	<0.0005	<0.05	<0.0002	0.264	0.0699	<0.001
	07/11/2017	NA	0.00240	0.0428	NA	<0.0005	0.0253	NA	NA	<0.5	<0.0005	NA	<0.0002	NA	0.0850	NA
	3/9/2018	0.00172	0.00337	0.0405	<0.001	<0.0005	<0.005	<0.0005	0.232	<0.5	<0.0005	0.0126	<0.0002	0.353	0.0653	<0.001
	6/5/2018	0.00157	<0.002	0.0424	<0.001	<0.0005	0.0267	<0.0005	0.282U	<0.5	<0.0005	<0.0100	<0.0002	0.353	0.0934	<0.001
	10/9/2018	0.00168	<0.002	0.0394	NA	<0.0005	0.0182	<0.0005	0.303U	<0.5	<0.0005	0.0139	<0.0002	0.290	0.0631	NA
	4/15/2019	0.00207	<0.002	0.0752	<0.001	<0.0005	0.0204	<0.0005	-0.0756U	<0.5	<0.0005	0.0111	<0.0002	0.208	0.0553	<0.001
	10/1/2019	0.00218	<0.002	0.0666	<0.001	0.000109	0.0284	<0.0005	0.419U	<0.5	<0.0005	0.0156	<0.0002	0.245	0.068	<0.001
	4/14/2020	0.00122	0.00159J	0.0701	<0.00027	0.0000540J	0.00495J	<0.000091	0.175U	<0.23	<0.00027	0.00782J	<0.0001	0.211	0.056	<0.00026
	10/7/2020	0.00155	0.0023	0.0612	<0.00027	0.0000710J	0.00178J	<0.000091	0.162U	<0.23	0.000224J	0.00986J	<0.0001	0.216	0.054	<0.00026
	4/5/2021	0.00126J	0.00149J	0.0644	<0.00027	0.0000860J	0.0363	<0.000091	-0.0719U	<0.275	<0.000260	0.0145	<0.00015	0.219	0.0568	<0.00026
	10/12/2021	0.00115J	0.00468	0.0553	<0.00027	0.000118	0.00686	<0.000910	0.383	<0.275	<0.000210	0.0130	<0.00015	0.235	0.0532	<0.00026
	4/11/2022	0.00183J	0.00154J	0.0490	<0.000270	0.0000650J	0.00789	<0.000190	0.189U	<0.220	<0.000240	0.00812J	<0.000110	0.274	0.0699	<0.000260
	10/5/2022	0.00153J	0.00227	0.0584	<0.000270	<0.0000550	0.00386J	<0.000190	0.716	<0.220	<0.000240	0.0118	<0.000110	0.197	0.0830	<0.000260
	4/4/2023	0.00152J	0.00187J	0.0493	<0.000330	<0.000100	0.00213J	<0.000170	-0.0933U	<0.220	<0.000240	0.00837J	<0.000140	0.247	0.0815	<0.000260
	10/4/2023	0.00159J	0.00229	0.0454	<0.000330	0.000155J	0.00167J	<0.000170	0.983	<0.375	<0.000240	0.0142	<0.000140	0.267	0.0623	<0.000260
	4/2/2024	0.00175J	0.00222	0.0747	<0.000330	<0.000100	0.00902	<0.000170	0.862	<0.375	<0.000240	0.00767J	<0.000140	0.200	0.0822	<0.000260
	10/1/2024	0.002	0.0023	0.0608	<0.000330	<0.000100	0.0121	<0.000170	0.364	<0.375	<0.000260	0.00993J	<0.000110	0.199	0.0537	<0.000570
MW-16	3/22/2016	<0.001	<0.002	0.0665	<0.001	<0.0005	<0.005	0.00083	0.214	1.84	<0.0005	<0.05	<0.0002	0.018	<0.005	<0.001
	6/14/2016	<0.001	<0.002	0.0730	<0.001	<0.0005	<0.005	0.000634	0.392	<0.5	<0.0005	0.0514	<0.0002	0.0125	<0.005	<0.001
	9/2/2016	<0.001	0.00233	0.0837	<0.001	<0.0005	<0.005	0.00126	0.22	<0.5	<0.0005	<0.05	<0.0002	0.0262	<0.005	<0.001
	11/28/2016	<0.001	<0.002	0.0794	<0.001	<0.0005	<0.005	0.000925	0.436	<0.5	<0.0005	0.0501	<0.0002	0.0193	<0.005	<0.001
	2/17/2017	<0.001	<0.002	0.0857	<0.001	<0.0005	<0.005	0.00102	0.362	1.37	<0.0005	0.053	<0.0002	0.0164	<0.005	<0.001
	5/2/2017	<0.001	<0.002	0.0818	<0.001	<0.0005	<0.005	0.000952	0.354	1.85	<0.0005	0.0503	<0.0002	0.00651	<0.005	<0.001
	6/19/2017	<0.001	<0.002	0.0752	<0.001	<0.0005	<0.005	0.000769	0.463	<0.5	<0.0005	<0.05	<0.0002	0.0105	<0.005	<0.001
	7/31/2017	<0.001	<0.002	0.0722	<0.001	<0.0005	<0.005	0.000519	0.353	0.528	<0.0005	<0.05	<0.0002	0.0185	<0.005	<0.001

Abandoned on August 4, 2017

**Table 5 - Appendix IV Constituents in Groundwater**  
Omaha Public Power District - NOS Ash Landfill

	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium (Ra 226 + Ra 228)	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-17	3/23/2016	<0.001	0.00735	0.0276	<0.001	<0.0005	<0.005	0.00813	0.366	1.36	<0.0005	0.114	<0.0002	<0.002	<0.005	<0.001
	6/14/2016	<0.001	0.0360	0.0396	<0.001	<0.0005	<0.005	0.0127	0.469	<0.5	<0.0005	0.129	<0.0002	<0.002	<0.005	<0.001
	9/2/2016	<0.001	0.0152	0.0424	<0.001	<0.0005	<0.005	0.0134	0.651	<0.5	<0.0005	0.116	<0.0002	<0.002	<0.005	<0.001
	11/29/2016	<0.001	0.00691	0.0356	<0.001	<0.0005	<0.005	0.00829	0.479	<0.5	<0.0005	0.116	<0.0002	0.00219	<0.005	<0.001
	2/17/2017	<0.001	0.0219	0.0406	<0.001	<0.0005	<0.005	0.0112	NA	2.91	0.0071	0.115	<0.0002	0.00214	<0.005	<0.001
	5/2/2017	<0.001	0.0300	0.0411	<0.001	<0.0005	<0.005	0.0113	0.059	1.66	<0.0005	0.116	<0.0002	<0.002	<0.005	<0.001
	6/19/2017	<0.001	0.0163	0.0361	<0.001	<0.0005	<0.005	0.012	0.777	<0.5	<0.0005	0.114	<0.0002	<0.002	<0.005	<0.001
	7/31/2017	<0.001	0.0159	0.0373	<0.001	<0.0005	<0.005	0.0123	0.284	<0.5	<0.0005	0.109	<0.0002	<0.002	<0.005	<0.001
	07/11/2017	NA	0.00794	0.0305	NA	<0.0005	<0.005	NA	NA	<0.5	<0.0005	NA	<0.0002	NA	<0.005	NA
	3/9/2018	<0.001	0.0257	0.0351	<0.001	<0.0005	<0.005	0.0107	0.738	1.29	<0.0005	0.112	<0.0002	0.0032	<0.005	<0.001
	6/5/2018	<0.001	0.0224	0.0505	<0.001	<0.0005	<0.005	0.0134	0.960	<0.5	<0.0005	0.0990	<0.0002	0.00356	<0.005	<0.001
	10/10/2018	<0.001	0.0173	0.0346	NA	<0.0005	<0.005	0.0114	1.02	<0.5	<0.0005	0.104	<0.0002	<0.002	<0.005	NA
	4/15/2019	<0.001	0.0102	0.0369	<0.001	<0.0005	<0.005	0.0103	0.328U	0.573	<0.0005	0.0948	<0.0002	<0.002	<0.005	<0.001
	10/1/2019	<0.001	0.0117	0.0407	<0.001	<0.0001	<0.005	0.0123	1.12	<0.5	<0.0005	0.12	<0.0002	0.00212	<0.005	<0.001
	4/14/2020	<0.000058	0.0111	0.0330	<0.000027	<0.000039	<0.0011	0.0101	0.467	0.274J	<0.000027	0.0969	<0.0001	0.00264	<0.001	<0.00026
	10/8/2020	<0.000051	0.0206	0.0323	<0.000027	<0.000049	<0.0011	0.00898	0.702	<0.23	<0.000011	0.0948	<0.0001	<0.00440	<0.001	<0.00026
	4/5/2021	<0.000110	0.00927	0.0341	<0.000027	<0.000051	<0.0011	0.00915	0.654	<0.275	<0.000021	0.0974	<0.000015	0.00398	<0.000096	<0.00026
	10/12/2021	<0.000110	0.0166	0.0364	<0.000027	<0.000051	<0.0011	0.00983	0.605	<0.275	<0.000021	0.0902	<0.000015	0.00184J	<0.000096	<0.00026
	4/11/2022	<0.000690	0.0203	0.0377	<0.0000270	<0.0000550	<0.00110	0.00975	0.554	<0.220	<0.0000240	0.107	<0.0000110	0.00355	<0.0000960	<0.000260
	10/5/2022	<0.000690	0.0405	0.0413	<0.0000270	<0.0000550	<0.00110	0.0108	0.884	0.640	<0.0000240	0.103	<0.0000110	0.00214	<0.0000960	<0.000260
	4/4/2023	<0.000100	0.0806	0.0420	<0.0000330	<0.000100	<0.00110	0.0104	0.178U	0.545	<0.0000240	0.0972	<0.0000140	0.00260	<0.00140	<0.000260
	10/4/2023	<0.000100	0.0257	0.0385	<0.0000330	<0.000100	<0.00110	0.0119	1.28	<0.375	<0.0000240	0.119	<0.0000140	0.00472	<0.00140	<0.000260
	4/3/2024	<0.000100	0.0199	0.0385	<0.0000330	<0.000100	<0.00110	0.0117	0.961	<0.375	<0.0000240	0.111	<0.0000140	0.00251	<0.00140	<0.000260
	10/3/2024	<0.000100	0.0234	0.043	<0.0000330	<0.000100	<0.00120	0.0116	0.55	<0.375	<0.0000260	0.117	<0.0000110	0.00239	<0.00140	0.00166
MW-18	3/22/2016	<0.001	0.00345	0.343	<0.001	<0.0005	<0.005	0.00152	2.7	<0.5	0.00479	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/14/2016	<0.001	<0.002	0.319	<0.001	<0.0005	<0.005	<0.0005	0.72	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	9/2/2016	<0.001	<0.002	0.307	<0.001	<0.0005	<0.005	<0.0005	0.814	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	11/28/2016	<0.001	<0.002	0.306	<0.001	<0.0005	<0.005	<0.0005	1.56	<0.5	0.000577	<0.05	<0.0002	<0.002	<0.005	<0.001
	2/17/2017	<0.001	<0.002	0.314	<0.001	<0.0005	<0.005	<0.0005	0.907	0.508	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	5/2/2017	<0.001	<0.002	0.329	<0.001	<0.0005	<0.005	<0.0005	NA	1.32	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/19/2017	<0.001	<0.002	0.304	<0.001	<0.0005	<0.005	<0.0005	0.465	<0.5	<0.0005	<0.05	0.000204	<0.002	<0.005	<0.001
	7/31/2017	<0.001	<0.002	0.309	<0.001	<0.0005	<0.005	<0.0005	0.899	0.632	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	07/11/2017	NA	NA	NA	NA	NA	NA	NA	NA	0.704	NA	NA	NA	NA	NA	NA
	3/9/2018	<0.001	<0.002	0.303	<0.001	<0.0005	<0.005	<0.0005	1.090	0.530	0.00137	0.0282	<0.0002	<0.002	<0.005	<0.001
	6/5/201															

**Table 5 - Appendix IV Constituents in Groundwater**

Omaha Public Power District - NOS Ash Landfill

Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium (Ra 226 + Ra 228)	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	
Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
MW-19	3/22/2016	<0.001	<0.002	0.330	<0.001	<0.0005	<0.005	<0.0005	1.93	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	6/14/2016	<0.001	<0.002	0.324	<0.001	<0.0005	<0.005	<0.0005	0.386	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	9/2/2016	<0.001	<0.002	0.325	<0.001	<0.0005	<0.005	<0.0005	1.55	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	11/28/2016	<0.001	<0.002	0.317	<0.001	<0.0005	<0.005	<0.0005	1.14	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	2/17/2017	<0.001	<0.002	0.281	<0.001	<0.0005	<0.005	<0.0005	0.82	0.418	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	5/2/2017	<0.001	<0.002	0.328	<0.001	<0.0005	<0.005	<0.0005	NA	0.804	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	19/6/2017	<0.001	<0.002	0.297	<0.001	<0.0005	<0.005	<0.0005	0.744	<0.5	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	31/7/2017	<0.001	<0.002	0.296	<0.001	<0.0005	<0.005	<0.0005	1	0.693	<0.0005	<0.05	<0.0002	<0.002	<0.005	<0.001
	07/11/2017	NA	NA	NA	NA	NA	NA	NA	<0.5	NA	NA	NA	NA	NA	NA	
	3/9/2018	<0.001	<0.002	0.323	<0.001	<0.0005	<0.005	<0.0005	0.691	<0.5	<0.0005	0.0334	<0.0002	<0.002	<0.005	<0.001
	6/5/2018	<0.001	<0.002	0.355	<0.001	<0.0005	<0.005	<0.0005	1.40	0.524	0.00121	0.0306	<0.0002	<0.002	<0.005	<0.001
	10/9/2018	<0.001	<0.002	0.334	NA	<0.0005	<0.005	<0.0005	0.364U	<0.5	<0.0005	0.0336	NA	<0.002	<0.005	NA
	4/15/2019	<0.001	<0.002	0.322	<0.001	<0.0005	<0.005	<0.0005	0.614	0.905	<0.0005	0.0333	<0.0002	<0.002	<0.005	<0.001
	10/1/2019	<0.001	<0.002	0.331	<0.001	<0.0001	<0.005	<0.0005	0.932	0.511	<0.0005	0.0386	<0.0002	<0.002	<0.005	<0.001
	4/13/2020	<0.000058	<0.000088	0.328	<0.000027	<0.000039	<0.0011	<0.000091	0.623	0.701	<0.000027	0.0359	<0.0001	<0.0011	<0.001	<0.00026
	10/7/2020	<0.000051	<0.000088	0.363	<0.000027	<0.000049	<0.0011	<0.000091	0.698U	0.469J	<0.000011	0.0363	<0.0001	<0.0011	<0.001	<0.00026
	4/5/2021	<0.00110	<0.00075	0.297	<0.00027	<0.000051	<0.0011	<0.000091	0.977	0.517	<0.000021	0.0343	<0.000015	<0.0013	<0.00096	<0.00026
	10/11/2021	<0.00110	<0.00075	0.292	<0.00027	<0.000051	<0.0011	<0.000091	1.58	<0.275	<0.000021	0.0355	<0.000015	<0.0013	<0.00096	<0.00026
	4/11/2022	<0.000690	<0.000750	0.305	<0.000270	<0.0000550	<0.00110	<0.000090	1.23	0.390J	<0.0000240	0.0373	<0.000110	<0.00120	<0.000960	<0.000260
	10/5/2022	<0.000690	<0.000750	0.392	<0.000270	<0.0000550	<0.00110	<0.000090	1.64	<0.220	<0.0000240	0.0355	<0.000110	<0.00120	<0.000960	<0.000260
	4/3/2023	<0.00100	<0.000530	0.307	<0.000330	<0.000100	<0.00110	<0.000170	0.799	0.509	<0.0000240	0.0356	<0.000140	<0.000910	<0.00140	<0.000260
	10/3/2023	<0.00100	<0.000530	0.461	<0.000330	<0.000100	<0.00110	<0.000170	1.64	<0.375	<0.0000240	0.0385	<0.000140	<0.000910	<0.00140	<0.000260
	4/2/2024	<0.00100	<0.000530	0.280	<0.000330	<0.000100	<0.00110	<0.000170	3.02	<0.375	<0.0000240	0.0370	<0.000140	<0.000910	<0.00140	<0.000260
	10/1/2024	<0.00100	<0.000530	0.524	<0.000330	<0.000100	<0.00120	<0.000170	1.95	<0.375	<0.0000260	0.0397	<0.000110	<0.00130	<0.00140	<0.000570

**Notes:**

mg/L = milligrams per liter

pCi/L = picoCuries per liter

NA = Analyte Not Analyzed/Measured

&lt; = for the period of March 2016 through October 2019, the symbol indicates analyte not detected above the Reporting Limit, which is the value shown following the "&lt;" symbol. Starting in January 2020, the symbol indicates analyte not detected above the Method Detection Limit, which is the value shown following the "&lt;" symbol.

\* Fluoride is listed in both Appendix III and Appendix IV of the CCR Final Rule (40 CFR Part 257).

U = Result is less than the sample detection limit.

J = Value is less than the Reporting Limit but greater than or equal to the Method Detection Limit. The concentration is an approximate value.

Concentrations in gray text indicate a value that is below the laboratory's reporting limit and method detection limit.

This page intentionally left blank.

**Table 6 - Background Threshold Values for Assessment Monitoring**  
 Omaha Public Power District - NOS Ash Landfill

Constituents	Units	Background Threshold Values (BTVs)
<b>Appendix III</b>		
Boron	mg/l	0.200
Calcium	mg/l	190
Chloride	mg/l	275
Fluoride <sup>[1]</sup>	mg/l	0.944
pH (LPL) <sup>[2]</sup>	SU	6.03
pH (UPL) <sup>[3]</sup>	SU	7.68
Sulfate	mg/l	57.5
TDS	mg/l	1,190
<b>Appendix IV</b>		
Antimony	mg/l	0.002
Arsenic	mg/l	0.0143
Barium	mg/l	0.726
Beryllium	mg/l	0.001
Cadmium	mg/l	0.000662
Chromium	mg/l	0.00590
Cobalt	mg/l	0.00346
Fluoride <sup>[1]</sup>	mg/l	0.944
Lead	mg/l	0.00885
Lithium	mg/l	0.0624
Mercury	mg/l	0.000214
Molybdenum	mg/l	0.00234
Radium 226 + 228	pCi/l	4.13
Selenium	mg/l	0.005
Thallium	mg/l	0.001

Notes:

<sup>[1]</sup> Fluoride is listed in both Appendix III and Appendix IV of the CCR Final Rule (40 CFR Part 257).

<sup>[2]</sup> Indicates the lower bound of the range is the lower prediction limit (LPL).

<sup>[3]</sup> Indicates the upper bound is the upper prediction limit (UPL).

This page intentionally left blank.

**Table 7 - Established Groundwater Protection Standards**

Omaha Public Power District - NOS Ash Landfill

Constituents	Units	Established Groundwater Protection Standard (GWPS) <sup>[1]</sup>
<b>Appendix IV</b>		
Antimony	mg/l	0.006
Arsenic	mg/l	0.0143 <sup>[2]</sup>
Barium	mg/l	2
Beryllium	mg/l	0.004
Cadmium	mg/l	0.005
Chromium	mg/l	0.1
Cobalt	mg/l	0.006
Fluoride	mg/l	4
Lead	mg/l	0.015
Lithium	mg/l	0.0624 <sup>[2]</sup>
Mercury	mg/l	0.002
Molybdenum	mg/l	0.1
Radium 226 + 228	pCi/l	5
Selenium	mg/l	0.05
Thallium	mg/l	0.002

**Notes:**

<sup>[1]</sup> GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in §257.95(h)(2); unless otherwise specified.

<sup>[2]</sup> GWPS is established as the upper tolerance limit (UTL) when the background level is higher than the U.S. EPA MCL or the GWPS specified in §257.95(h)(2).

This page intentionally left blank.

# Appendix A

Field Sampling Forms

This page intentionally left blank.

# NORTH OMAHA STATION

Water Levels Prior to Purging (Feet Below TOC)

MW2	Date of Sampling	4/2/2024	Time of Sampling	10:09	Static Water Level	24.78
MW4	Date of Sampling	4/2/2024	Time of Sampling	10:27	Static Water Level	15.71
MW5	Date of Sampling	4/2/2024	Time of Sampling	10:55	Static Water Level	22.60
MW6	Date of Sampling	4/2/2024	Time of Sampling	10:32	Static Water Level	15.68
MW7	Date of Sampling	4/2/2024	Time of Sampling	10:37	Static Water Level	19.03
MW8	Date of Sampling	4/2/2024	Time of Sampling	10:44	Static Water Level	19.31
MW9	Date of Sampling	4/2/2024	Time of Sampling	9:55	Static Water Level	29.80
MW10	Date of Sampling	4/2/2024	Time of Sampling	10:37	Static Water Level	Dry@18.15
MW11	Date of Sampling	4/2/2024	Time of Sampling	10:35	Static Water Level	Dry@14.25
MW12	Date of Sampling	4/2/2024	Time of Sampling	10:46	Static Water Level	Dry@17.77
MW13	Date of Sampling	4/2/2024	Time of Sampling	10:06	Static Water Level	23.23
MW15	Date of Sampling	4/2/2024	Time of Sampling	10:26	Static Water Level	13.44
MW17	Date of Sampling	4/2/2024	Time of Sampling	10:50	Static Water Level	20.54
MW18	Date of Sampling	4/2/2024	Time of Sampling	9:42	Static Water Level	38.08
MW19	Date of Sampling	4/2/2024	Time of Sampling	9:46	Static Water Level	37.88
MW20	Date of Sampling	4/2/2024	Time of Sampling	11:04	Static Water Level	10.35
MW23	Date of Sampling	4/2/2024	Time of Sampling	10:01	Static Water Level	18.41

**NOTES:**

TOC = Top of Casing

NM = Not Measured, Inaccessible

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW2 - 5</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, Breezy, 54°F

## **Groundwater Measurements and Purge Data**

Time of Water Level Measurement	16:32	Pump Start Time	16:34
Static Water Level (+/- 0.01 feet)*	24.76	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	28.35	Time to Purge Well (hours:minutes)	0:23
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	2.22		
Actual Volume of Water Purged (mL)	2,300		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## **Groundwater Parameter Data**

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
16:57	2,300	13.92	0.18	23.7	6.31	1.78	25.23
Duplicate?	Yes, DUP1	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

### **Equipment Information**

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~30 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW5 - 10</b>	Date: 4/3/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, Windy, 39°F

## **Groundwater Measurements and Purge Data**

Time of Water Level Measurement	10:09	Pump Start Time	10:05
Static Water Level (+/- 0.01 feet)*	Top of Pump	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	33.20	Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	Not Measured		
Actual Volume of Water Purged (mL)	2,000		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## **Groundwater Parameter Data**

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
10:25	2,000	13.21	6.32	7.1	7.24	2.80	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

### Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/3/2024, 8:00
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW6 - 7</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Cloudy, Windy, 52°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	18:46	Pump Start Time	18:48
Static Water Level (+/- 0.01 feet)*	15.66	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	33.18	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	10.82		
Actual Volume of Water Purged (mL)	1,700		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
19:05	1,700	11.43	9.27	5.9	6.16	2.30	16.07
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

### Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW8 - 8</b>	Date: 4/3/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Windy, 35°F

## **Groundwater Measurements and Purge Data**

Time of Water Level Measurement	8:03	Pump Start Time	8:05
Static Water Level (+/- 0.01 feet)*	19.30	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	25.45	Time to Purge Well (hours:minutes)	0:26
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	3.80		
Actual Volume of Water Purged (mL)	2,600		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## **Groundwater Parameter Data**

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
8:31	2,600	11.14	0.44	2.4	7.64	1.31	20.54
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/3/2024, 8:00
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW9 - 3</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Cloudy, Sunny, Windy, 48°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	13:42	Pump Start Time	13:45
Static Water Level (+/- 0.01 feet)*	29.75	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	56.65	Time to Purge Well (hours:minutes)	0:26
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	16.61		
Actual Volume of Water Purged (mL)	2,600		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## **Groundwater Parameter Data**

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
14:11	2,600	12.61	7.05	263	6.14	1.55	33.88
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## **Equipment Information**

Sample Characteristics		Equipment Information	
Sample Clarity	Lightly Turbid	QED Pump Control Information	CPM-2, 28/2, ~35 psi
Sample Color	Light Brown	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	None	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24

## Notes / Unusual Occurrences: Stable Turbidity - Sampled Early

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW13 - 4</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Cloudy, Windy, 53°F

## **Groundwater Measurements and Purge Data**

Time of Water Level Measurement	15:16	Pump Start Time	15:21
Static Water Level (+/- 0.01 feet)*	23.25	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	23.98	Time to Purge Well (hours:minutes)	0:26
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	0.45		
Actual Volume of Water Purged (mL)	2,600		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
15:47	2,600	13.96	1.98	24.3	6.21	2.33	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

### **Equipment Information**

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW15 - 6</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Cloudy, Sunny, Breezy, 54°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	17:42	Pump Start Time	17:42
Static Water Level (+/- 0.01 feet)*	13.44	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	15.60	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	1.33		
Actual Volume of Water Purged (mL)	1,700		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
17:59	1,700	12.74	8.38	5.8	6.74	1.18	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### Sample Physical Characteristics

### Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 28/2, ~15 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW17 - 9</b>	Date: 4/3/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Cloudy, Sunny, Windy, 36°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	8:55	Pump Start Time	8:58
Static Water Level (+/- 0.01 feet)*	20.54	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	25.45	Time to Purge Well (hours:minutes)	0:29
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	3.03		
Actual Volume of Water Purged (mL)	2,900		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
9:27	2,900	11.95	2.55	21.9	6.41	2.40	22.48
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/3/2024, 8:00
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW18 - 1</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Overcast, 42°F

## **Groundwater Measurements and Purge Data**

Time of Water Level Measurement	11:53	Pump Start Time	11:54
Static Water Level (+/- 0.01 feet)*	30.08	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	70.90	Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	25.20		
Actual Volume of Water Purged (mL)	2,000		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## **Groundwater Parameter Data**

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
12:14	2,000	11.97	1.56	9.2	6.01	0.742	40.89
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

### Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 28/2, ~65 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW19 - 2</b>	Date: 4/2/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 46°F

## **Groundwater Measurements and Purge Data**

Time of Water Level Measurement	12:57	Pump Start Time	12:59
Static Water Level (+/- 0.01 feet)*	37.89	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	76.70	Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	23.96		
Actual Volume of Water Purged (mL)	2,000		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

#### **Groundwater Sample Information**

Groundwater Sample Information							
Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
13:19	2,000	11.71	0.02	3.6	5.94	0.737	38.02
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~65 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/2/2024, 11:24
Notes / Unusual Occurrences: None			

## Equipment Calibration Sheet

Date: 4/2/2024  
Time: 11:24

Person Calibrating Instrument: Kyle K. Uhing

Instrument Type	Instrument Brand	Instrument Model	Instrument Serial Number
Multiparameter Water Meter	Horiba	U-5000/U-52	KE3AGWPR/NTKDC76Y

Parameter:	Reading	Units
pH 4	4.00	SU
Conductivity	4.43	µS/cm
Turbidity	0.0	NTU
DO	9.84	mg/L

Comments:

The Horiba was calibrated using pH 4.0 AutoCal buffer solution.

SU = Standard Units

## Equipment Calibration Sheet

Date: 4/3/2024  
Time: 8:00

Person Calibrating Instrument: Kyle K. Uhing

Instrument Type	Instrument Brand	Instrument Model	Instrument Serial Number
Multiparameter Water Meter	Horiba	U-5000/U-52	KE3AGWPR/NTKDC76Y

Parameter:	Reading	Units
pH 4	4.00	SU
Conductivity	4.46	µS/cm
Turbidity	0.0	NTU
DO	8.31	mg/L

Comments:

The Horiba was calibrated using pH 4.0 AutoCal buffer solution.

SU = Standard Units

This page intentionally left blank.

# NORTH OMAHA STATION

Water Levels Prior to Purging (Feet Below TOC)

MW2	Date of Sampling	10/1/2024	Time of Sampling	10:13	Static Water Level	23.96
MW4	Date of Sampling	10/1/2024	Time of Sampling	10:39	Static Water Level	14.99
MW5	Date of Sampling	10/1/2024	Time of Sampling	11:11	Static Water Level	21.15
MW6	Date of Sampling	10/1/2024	Time of Sampling	10:42	Static Water Level	15.42
MW7	Date of Sampling	10/1/2024	Time of Sampling	10:50	Static Water Level	18.86
MW8	Date of Sampling	10/1/2024	Time of Sampling	10:54	Static Water Level	18.89
MW9	Date of Sampling	10/1/2024	Time of Sampling	8:50	Static Water Level	31.77
MW10	Date of Sampling	10/1/2024	Time of Sampling	10:51	Static Water Level	Dry@18.15
MW11	Date of Sampling	10/1/2024	Time of Sampling	10:44	Static Water Level	Dry@14.25
MW12	Date of Sampling	10/1/2024	Time of Sampling	10:57	Static Water Level	17.47
MW13	Date of Sampling	10/1/2024	Time of Sampling	10:10	Static Water Level	22.38
MW15	Date of Sampling	10/1/2024	Time of Sampling	10:37	Static Water Level	Top of Pump
MW17	Date of Sampling	10/1/2024	Time of Sampling	11:01	Static Water Level	18.83
MW18	Date of Sampling	10/1/2024	Time of Sampling	8:35	Static Water Level	38.07
MW19	Date of Sampling	10/1/2024	Time of Sampling	8:41	Static Water Level	37.96
MW20	Date of Sampling	10/1/2024	Time of Sampling	11:27	Static Water Level	9.90
MW23	Date of Sampling	10/1/2024	Time of Sampling	9:52	Static Water Level	15.95

**NOTES:**

TOC = Top of Casing

NM = Not Measured, Inaccessible

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW2 - 5</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 67°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	15:42	Pump Start Time	15:44
Static Water Level (+/- 0.01 feet)*	23.86	Purge Rate (mL/minute)	150
Bottom of Well Casing (+/- 0.01 feet)*	28.35	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	2.77		
Actual Volume of Water Purged (mL)	2,550		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

### **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
16:01	2,550	16.92	0.00	18.7	7.15	2.25	24.39
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## **Equipment Information**

Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~30 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW5 - 10</b>	Date: 10/3/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 75°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	12:43	Pump Start Time	12:46
Static Water Level (+/- 0.01 feet)*	21.25	Purge Rate (mL/minute)	150
Bottom of Well Casing (+/- 0.01 feet)*	33.20	Time to Purge Well (hours:minutes)	0:29
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	7.38		
Actual Volume of Water Purged (mL)	4,350		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## **Groundwater Parameter Data**

Well Evacuated to Dryness? No

Recharge time? Not Measured

### **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
13:15	4,350	18.41	8.72	23.7	7.07	2.63	21.41
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		150

## Sample Physical Characteristics

## **Equipment Information**

Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/3/2024, 9:51
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW6 - 7</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 69°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	17:21	Pump Start Time	17:24
Static Water Level (+/- 0.01 feet)*	15.38	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	33.18	Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	10.99		
Actual Volume of Water Purged (mL)	2,000		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

## **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
17:44	2,000	16.00	0.07	7.0	7.00	2.19	15.87
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

## Sample Physical Characteristics

## **Equipment Information**

Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Sulfur	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW8 - 8</b>	Date: 10/3/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 65°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	10:29	Pump Start Time	10:31
Static Water Level (+/- 0.01 feet)*	18.76	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	25.45	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	4.13		
Actual Volume of Water Purged (mL)	1,700		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

## **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
10:48	1,700	15.63	0.16	3.6	8.03	1.40	20.81
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## **Equipment Information**

Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/3/2024, 9:51
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW9 - 3</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, 66°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	8:50	Pump Start Time	13:01
Static Water Level (+/- 0.01 feet)*	31.77	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	56.65	Time to Purge Well (hours:minutes)	0:26
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	15.36		
Actual Volume of Water Purged (mL)	2,600		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

### **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
13:27	2,600	13.88	0.00	399	7.22	1.37	33.88
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

## Sample Physical Characteristics

## **Equipment Information**

Sample Clarity	Mostly Clear	QED Pump Control Information	CPM-2, 28/2, ~35 psi
Sample Color	Light Brown	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Light Sulfur	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37

## Notes / Unusual Occurrences: Stable Turbidity - Sampled Early

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW13 - 4</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 67°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	14:08	Pump Start Time	14:10
Static Water Level (+/- 0.01 feet)*	22.32	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	23.98	Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	1.02		
Actual Volume of Water Purged (mL)	2,000		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

## **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
14:30	2,000	16.57	0.48	81.8	7.34	2.00	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### Sample Physical Characteristics

## **Equipment Information**

Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37

#### Notes / Unusual Occurrences: Well Purge Rate Dropped, Sampled As Early As Possible

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW15 - 6</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, Breezy, 69°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	16:35	Pump Start Time	16:37
Static Water Level (+/- 0.01 feet)*	Top of Pump	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	15.60	Time to Purge Well (hours:minutes)	0:11
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED	
2" Well Casing Volume (L)	Not Measured	Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
Actual Volume of Water Purged (mL)	1,100		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

## Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
16:48	1,100	16.32	0.00	18.2	7.74	1.24	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

## Sample Physical Characteristics

## Equipment Information

Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 28/2, ~15 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW17 - 9</b>	Date: 10/3/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 69°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	11:11	Pump Start Time	11:14
Static Water Level (+/- 0.01 feet)*	18.44	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	25.45	Time to Purge Well (hours:minutes)	0:41
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	4.33		
Actual Volume of Water Purged (mL)	4,100		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

### **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
11:55	4,100	18.20	0.80	24.3	6.65	2.60	21.83
Duplicate?	Yes, DUP1	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### Sample Physical Characteristics

## Equipment Information

Sample & Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Odorless	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/3/2024, 9:51
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW18 - 1</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 60°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	8:35	Pump Start Time	11:44
Static Water Level (+/- 0.01 feet)*	38.07	Purge Rate (mL/minute)	100-150
Bottom of Well Casing (+/- 0.01 feet)*	70.90	Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	20.27		
Actual Volume of Water Purged (mL)	2,250		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

### **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
12:04	2,250	13.53	0.00	14.6	6.84	0.766	43.72
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		100

### **Sample Physical Characteristics**

## Equipment Information

Sample & Physical Characteristics		Equipment Information	
Sample Clarity	Clear	QED Pump Control Information	CPM-2, 28/2, ~65 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Light Sulfur	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37
Notes / Unusual Occurrences: None			

# Field Notes For Monitoring Well Sampling

Facility Name: OPPD North Omaha Station	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: <b>MW19 - 2</b>	Date: 10/1/2024
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 64°F

## Groundwater Measurements and Purge Data

Time of Water Level Measurement	8:41	Pump Start Time	12:22
Static Water Level (+/- 0.01 feet)*	37.96	Purge Rate (mL/minute)	250
Bottom of Well Casing (+/- 0.01 feet)*	76.70	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator	
2" Well Casing Volume (L)	23.92		
Actual Volume of Water Purged (mL)	4,250		

\*Measurement collected from a defined point on the edge of the surveyed top of monitoring well casing using an electronic water level indicator.

## Groundwater Parameter Data

Well Evacuated to Dryness? No

Recharge time? Not Measured

## **Groundwater Sample Information**

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	pH	Conductivity (mS/cm)	Water Level (feet)
12:39	4,250	13.33	0.00	6.7	6.93	0.755	38.18
Duplicate?	No	Preservation?	Cool on Ice, HNO <sub>3</sub> for Metals		Pump Rate (mL/minute)		250

## Sample Physical Characteristics

## **Equipment Information**

Sample Clarity	Clear	QED Pump Control Information	CPM-2, 27/3, ~65 psi
Sample Color	Clear	Decontamination Procedure	Alconox and DI Water Rinse
Sample Odor	Light Sulfur	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	10/1/2024, 7:37
Notes / Unusual Occurrences: None			

## Equipment Calibration Sheet

Date: 10/1/2024

Time: 7:37

Person Calibrating Instrument: Kyle K. Uhing

Instrument Type	Instrument Brand	Instrument Model	Instrument Serial Number
Multiparameter Water Meter	Horiba	U-5000/U-52	KE3AGWPR/NTKDC76Y

Parameter:	Reading	Units
pH 4	4.00	SU
Conductivity	4.48	µS/cm
Turbidity	0.0	NTU
DO	9.60	mg/L

Comments:

The Horiba was calibrated using pH 4.0 AutoCal buffer solution.

SU = Standard Units

## Equipment Calibration Sheet

Date: 10/3/2024

Time: 9:51

Person Calibrating Instrument: Kyle K. Uhing

Instrument Type	Instrument Brand	Instrument Model	Instrument Serial Number
Multiparameter Water Meter	Horiba	U-5000/U-52	KE3AGWPR/NTKDC76Y

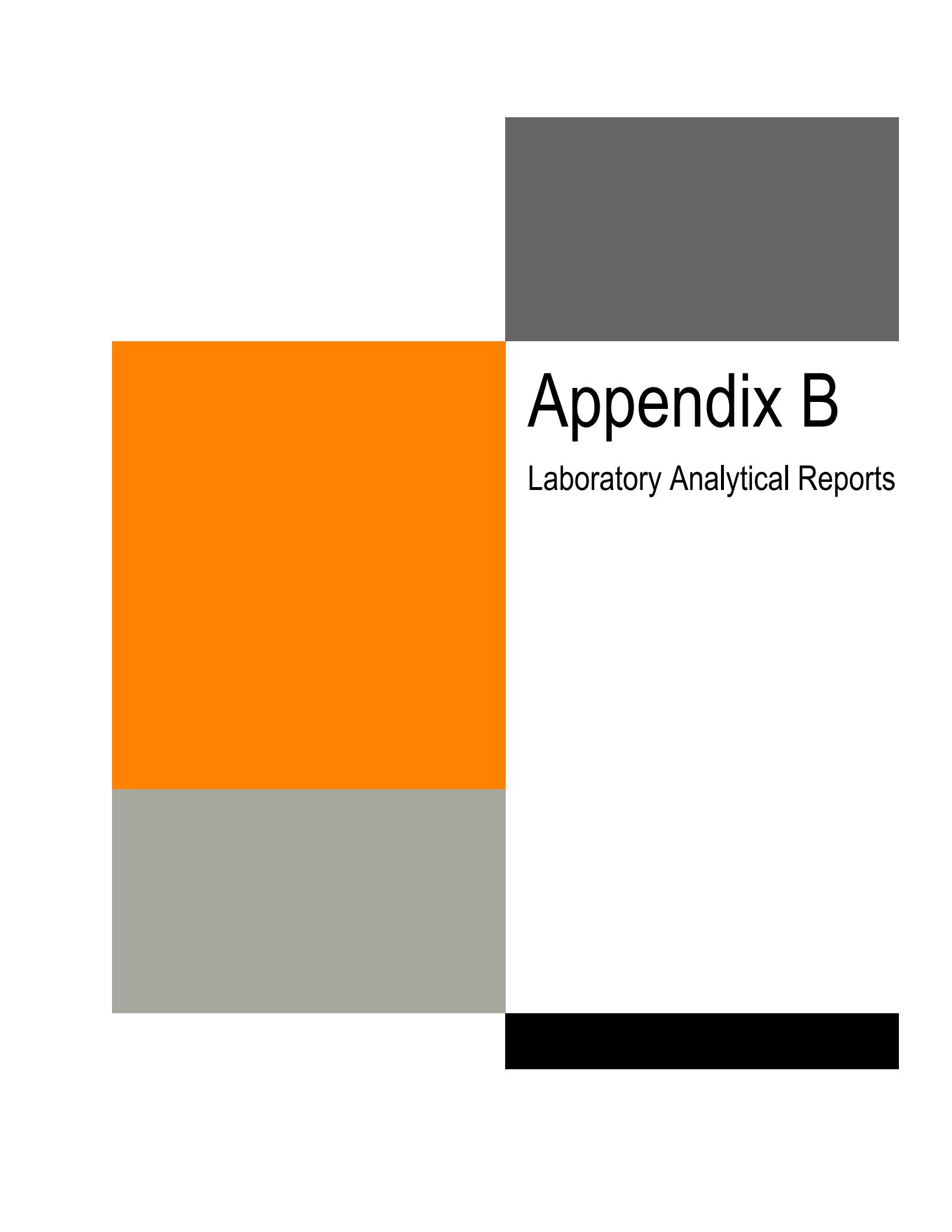
Parameter:	Reading	Units
pH 4	4.00	SU
Conductivity	4.49	µS/cm
Turbidity	0.0	NTU
DO	10.05	mg/L

Comments:

The Horiba was calibrated using pH 4.0 AutoCal buffer solution.

SU = Standard Units

This page intentionally left blank.



# Appendix B

## Laboratory Analytical Reports

This page intentionally left blank.

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kyle Uhing  
Omaha Public Power District  
Attn: Accounts Payable, 4E/EP-5  
444 South 16th Street Mall  
Omaha, Nebraska 68102-2247

Generated 5/17/2024 4:16:34 PM Revision 1

## JOB DESCRIPTION

North Omaha Station CCR

## JOB NUMBER

310-278282-1

# Eurofins Cedar Falls

## 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  
5/17/2024 4:16:34 PM  
Revision 1

Authorized for release by  
Bob Michels, Project Manager I  
[Bob.Michels@et.eurofinsus.com](mailto:Bob.Michels@et.eurofinsus.com)  
(319)277-2401

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Case Narrative .....	4
Sample Summary .....	5
Detection Summary .....	6
Client Sample Results .....	9
Definitions .....	20
QC Sample Results .....	21
QC Association .....	25
Chronicle .....	28
Certification Summary .....	32
Method Summary .....	33
Chain of Custody .....	34
Receipt Checklists .....	38

# Case Narrative

Client: Omaha Public Power District  
Project: North Omaha Station CCR

Job ID: 310-278282-1

**Job ID: 310-278282-1**

**Eurofins Cedar Falls**

## Job Narrative 310-278282-1

### REVISION

The report being provided is a revision of the original report sent on 4/18/2024. The report (revision 1) is being revised due to Revised to remove Iron results from all samples.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### **Receipt**

The samples were received on 4/4/2024 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.1°C, 1.6°C and 2.8°C.

### **HPLC/IC**

Method 9056A\_ORGFM\_28D: The following samples were diluted due to the nature of the sample matrix: MW2 (310-278282-1), MW5 (310-278282-2), MW6 (310-278282-3), MW8 (310-278282-4), MW9 (310-278282-5), MW15 (310-278282-7), MW17 (310-278282-8), MW18 (310-278282-9), MW19 (310-278282-10) and DUP1 (310-278282-11). Elevated reporting limits (RLs) are provided.

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

### **Metals**

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

### **General Chemistry**

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

# Sample Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-278282-1	MW2	Water	04/02/24 16:57	04/04/24 16:00
310-278282-2	MW5	Water	04/03/24 10:25	04/04/24 16:00
310-278282-3	MW6	Water	04/02/24 19:05	04/04/24 16:00
310-278282-4	MW8	Water	04/03/24 08:31	04/04/24 16:00
310-278282-5	MW9	Water	04/02/24 14:11	04/04/24 16:00
310-278282-6	MW13	Water	04/02/24 15:47	04/04/24 16:00
310-278282-7	MW15	Water	04/02/24 17:59	04/04/24 16:00
310-278282-8	MW17	Water	04/03/24 09:27	04/04/24 16:00
310-278282-9	MW18	Water	04/02/24 12:14	04/04/24 16:00
310-278282-10	MW19	Water	04/02/24 13:19	04/04/24 16:00
310-278282-11	DUP1	Water	04/02/24 00:00	04/04/24 16:00

# Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Client Sample ID: MW2

## Lab Sample ID: 310-278282-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	39.6		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	405		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.240	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.115		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.823		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	219		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.000306	J		0.000500	0.000170 mg/L	1		6020B	Total/NA
Lithium	0.0432		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.00104	J		0.000200	0.000910 mg/L	1		6020B	Total/NA
Total Dissolved Solids	1190		50.0	34.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW5

## Lab Sample ID: 310-278282-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	44.4		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	1300		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0371	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0463		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.647		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	413		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.00105			0.000500	0.000170 mg/L	1		6020B	Total/NA
Lithium	0.0813		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.00324		0.00200	0.000910	mg/L	1		6020B	Total/NA
Thallium	0.000412	J		0.00100	0.000260 mg/L	1		6020B	Total/NA
Total Dissolved Solids	2490		250	170	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW6

## Lab Sample ID: 310-278282-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	351		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	279		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.00990	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.143		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.647		0.100	0.0760	mg/L	1		6020B	Total/NA
Cadmium	0.000118	J		0.000200	0.000100 mg/L	1		6020B	Total/NA
Calcium	300		0.500	0.190	mg/L	1		6020B	Total/NA
Chromium	0.00334	J		0.00500	0.00110 mg/L	1		6020B	Total/NA
Cobalt	0.00636			0.000500	0.000170 mg/L	1		6020B	Total/NA
Lead	0.000599			0.000500	0.000240 mg/L	1		6020B	Total/NA
Lithium	0.0465		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.0610		0.00200	0.000910	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1320		250	170	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW8

## Lab Sample ID: 310-278282-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14.6		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	647		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0125	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0893		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	2.76		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	165		0.500	0.190	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Client Sample ID: MW8 (Continued)

## Lab Sample ID: 310-278282-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.000503		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000273	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Lithium	0.0131		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.0923		0.00200	0.000910	mg/L	1		6020B	Total/NA
Total Dissolved Solids	964		50.0	34.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW9

## Lab Sample ID: 310-278282-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	207		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	34.0		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.00396	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.620		0.00200	0.000640	mg/L	1		6020B	Total/NA
Beryllium	0.000471	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Boron	0.113		0.100	0.0760	mg/L	1		6020B	Total/NA
Cadmium	0.000286		0.000200	0.000100	mg/L	1		6020B	Total/NA
Calcium	209		0.500	0.190	mg/L	1		6020B	Total/NA
Chromium	0.00255	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.00348		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.00670		0.000500	0.000240	mg/L	1		6020B	Total/NA
Lithium	0.0601		0.0100	0.00250	mg/L	1		6020B	Total/NA
Total Dissolved Solids	796		50.0	34.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW13

## Lab Sample ID: 310-278282-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.99		5.00	2.25	mg/L	5		9056A	Total/NA
Fluoride	0.387	J	1.00	0.375	mg/L	5		9056A	Total/NA
Sulfate	1080		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0188	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0867		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	2.16		0.100	0.0760	mg/L	1		6020B	Total/NA
Cadmium	0.000129	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Calcium	263		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.000419	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000279	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Lithium	0.0462		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.760		0.00200	0.000910	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1630		250	170	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW15

## Lab Sample ID: 310-278282-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12.6		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	420		5.00	2.10	mg/L	5		9056A	Total/NA
Antimony	0.00175	J	0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.00222	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0747		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	2.80		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	169		0.500	0.190	mg/L	1		6020B	Total/NA
Chromium	0.00902		0.00500	0.00110	mg/L	1		6020B	Total/NA
Lithium	0.00767	J	0.0100	0.00250	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: Omaha Public Power District  
 Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Client Sample ID: MW15 (Continued)

## Lab Sample ID: 310-278282-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.200		0.00200	0.000910	mg/L	1		6020B	Total/NA
Selenium	0.0822		0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Dissolved Solids	820		50.0	34.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW17

## Lab Sample ID: 310-278282-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	45.3		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	877		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0199	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0385		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.732		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	343		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.0117		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lithium	0.111		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.00251		0.00200	0.000910	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1870		250	170	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW18

## Lab Sample ID: 310-278282-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.16	J	5.00	2.25	mg/L	5		9056A	Total/NA
Arsenic	0.00139	J B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.292		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.0920	J	0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	96.3		0.500	0.190	mg/L	1		6020B	Total/NA
Lead	0.000317	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Lithium	0.0273		0.0100	0.00250	mg/L	1		6020B	Total/NA
Total Dissolved Solids	416		50.0	34.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW19

## Lab Sample ID: 310-278282-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.39	J	5.00	2.25	mg/L	5		9056A	Total/NA
Barium	0.280		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.0951	J	0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	103		0.500	0.190	mg/L	1		6020B	Total/NA
Lithium	0.0370		0.0100	0.00250	mg/L	1		6020B	Total/NA
Total Dissolved Solids	392		50.0	34.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: DUP1

## Lab Sample ID: 310-278282-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	39.7		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	400		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.312	B	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.127		0.00200	0.000640	mg/L	1		6020B	Total/NA
Boron	0.867		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	232		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.000305	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lithium	0.0471		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.00110	J	0.00200	0.000910	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1180		50.0	34.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW2**

**Lab Sample ID: 310-278282-1**

Matrix: Water

Date Collected: 04/02/24 16:57

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.6		5.00	2.25	mg/L			04/08/24 18:24	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 18:24	5
Sulfate	405		5.00	2.10	mg/L			04/08/24 18:24	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 20:26	1
Arsenic	0.240	B	0.00200	0.000530	mg/L			04/17/24 18:52	1
Barium	0.115		0.00200	0.000640	mg/L			04/15/24 20:26	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 20:26	1
Boron	0.823		0.100	0.0760	mg/L			04/15/24 20:26	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			04/15/24 20:26	1
Calcium	219		0.500	0.190	mg/L			04/15/24 20:26	1
Chromium	<0.00110		0.00500	0.00110	mg/L			04/15/24 20:26	1
Cobalt	0.000306	J	0.000500	0.000170	mg/L			04/15/24 20:26	1
Lead	<0.000240		0.000500	0.000240	mg/L			04/15/24 20:26	1
Lithium	0.0432		0.0100	0.00250	mg/L			04/15/24 20:26	1
Molybdenum	0.00104	J	0.00200	0.000910	mg/L			04/15/24 20:26	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 20:26	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 20:26	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			04/11/24 11:27	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1190		50.0	34.0	mg/L			04/05/24 13:40	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW5**

**Lab Sample ID: 310-278282-2**

**Matrix: Water**

Date Collected: 04/03/24 10:25  
Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.4		5.00	2.25	mg/L			04/08/24 18:36	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 18:36	5
Sulfate	1300		50.0	21.0	mg/L			04/09/24 09:16	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/08/24 09:00	04/15/24 20:37	1
Arsenic	0.0371	B	0.00200	0.000530	mg/L		04/08/24 09:00	04/17/24 19:04	1
Barium	0.0463		0.00200	0.000640	mg/L		04/08/24 09:00	04/15/24 20:37	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/08/24 09:00	04/15/24 20:37	1
Boron	0.647		0.100	0.0760	mg/L		04/08/24 09:00	04/15/24 20:37	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/08/24 09:00	04/15/24 20:37	1
Calcium	413		0.500	0.190	mg/L		04/08/24 09:00	04/15/24 20:37	1
Chromium	<0.00110		0.00500	0.00110	mg/L		04/08/24 09:00	04/15/24 20:37	1
Cobalt	0.00105		0.000500	0.000170	mg/L		04/08/24 09:00	04/15/24 20:37	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/08/24 09:00	04/15/24 20:37	1
Lithium	0.0813		0.0100	0.00250	mg/L		04/08/24 09:00	04/15/24 20:37	1
Molybdenum	0.00324		0.00200	0.000910	mg/L		04/08/24 09:00	04/15/24 20:37	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/08/24 09:00	04/15/24 20:37	1
Thallium	0.000412	J	0.00100	0.000260	mg/L		04/08/24 09:00	04/15/24 20:37	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		04/10/24 10:33	04/11/24 11:29	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2490		250	170	mg/L			04/08/24 15:53	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW6**

**Lab Sample ID: 310-278282-3**

**Matrix: Water**

Date Collected: 04/02/24 19:05  
Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	351		5.00	2.25	mg/L			04/08/24 18:49	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 18:49	5
Sulfate	279		5.00	2.10	mg/L			04/08/24 18:49	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 20:39	1
Arsenic	0.00990	B	0.00200	0.000530	mg/L			04/17/24 19:06	1
Barium	0.143		0.00200	0.000640	mg/L			04/15/24 20:39	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 20:39	1
Boron	0.647		0.100	0.0760	mg/L			04/15/24 20:39	1
Cadmium	0.000118	J	0.000200	0.000100	mg/L			04/15/24 20:39	1
Calcium	300		0.500	0.190	mg/L			04/15/24 20:39	1
Chromium	0.00334	J	0.00500	0.00110	mg/L			04/15/24 20:39	1
Cobalt	0.00636		0.000500	0.000170	mg/L			04/15/24 20:39	1
Lead	0.000599		0.000500	0.000240	mg/L			04/15/24 20:39	1
Lithium	0.0465		0.0100	0.00250	mg/L			04/15/24 20:39	1
Molybdenum	0.0610		0.00200	0.000910	mg/L			04/15/24 20:39	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 20:39	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 20:39	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			04/11/24 11:36	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1320		250	170	mg/L			04/05/24 13:40	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW8**

**Lab Sample ID: 310-278282-4**

**Matrix: Water**

Date Collected: 04/03/24 08:31

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.6		5.00	2.25	mg/L			04/08/24 19:27	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 19:27	5
Sulfate	647		50.0	21.0	mg/L			04/09/24 09:28	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/08/24 09:00	4/15/24 20:41
Arsenic	0.0125	B	0.00200	0.000530	mg/L			04/08/24 09:00	04/17/24 19:08
Barium	0.0893		0.00200	0.000640	mg/L			04/08/24 09:00	04/15/24 20:41
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/08/24 09:00	04/15/24 20:41
Boron	2.76		0.100	0.0760	mg/L			04/08/24 09:00	04/15/24 20:41
Cadmium	<0.000100		0.000200	0.000100	mg/L			04/08/24 09:00	04/15/24 20:41
Calcium	165		0.500	0.190	mg/L			04/08/24 09:00	04/15/24 20:41
Chromium	<0.00110		0.00500	0.00110	mg/L			04/08/24 09:00	04/15/24 20:41
Cobalt	0.000503		0.000500	0.000170	mg/L			04/08/24 09:00	04/15/24 20:41
Lead	0.000273	J	0.000500	0.000240	mg/L			04/08/24 09:00	04/15/24 20:41
Lithium	0.0131		0.0100	0.00250	mg/L			04/08/24 09:00	04/15/24 20:41
Molybdenum	0.0923		0.00200	0.000910	mg/L			04/08/24 09:00	04/15/24 20:41
Selenium	<0.00140		0.00500	0.00140	mg/L			04/08/24 09:00	04/15/24 20:41
Thallium	<0.000260		0.00100	0.000260	mg/L			04/08/24 09:00	04/15/24 20:41

## 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		04/10/24 10:33	04/11/24 11:38	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	964		50.0	34.0	mg/L			04/08/24 15:53	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW9**

**Lab Sample ID: 310-278282-5**

**Matrix: Water**

Date Collected: 04/02/24 14:11

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	207		5.00	2.25	mg/L			04/08/24 19:39	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 19:39	5
Sulfate	34.0		5.00	2.10	mg/L			04/08/24 19:39	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 20:44	1
Arsenic	0.00396	B	0.00200	0.000530	mg/L			04/17/24 19:11	1
Barium	0.620		0.00200	0.000640	mg/L			04/15/24 20:44	1
Beryllium	0.000471	J	0.00100	0.000330	mg/L			04/15/24 20:44	1
Boron	0.113		0.100	0.0760	mg/L			04/15/24 20:44	1
Cadmium	0.000286		0.000200	0.000100	mg/L			04/15/24 20:44	1
Calcium	209		0.500	0.190	mg/L			04/15/24 20:44	1
Chromium	0.00255	J	0.00500	0.00110	mg/L			04/15/24 20:44	1
Cobalt	0.00348		0.000500	0.000170	mg/L			04/15/24 20:44	1
Lead	0.00670		0.000500	0.000240	mg/L			04/15/24 20:44	1
Lithium	0.0601		0.0100	0.00250	mg/L			04/15/24 20:44	1
Molybdenum	<0.000910		0.00200	0.000910	mg/L			04/15/24 20:44	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 20:44	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 20:44	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			04/11/24 11:40	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	796		50.0	34.0	mg/L			04/05/24 13:40	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW13**

**Lab Sample ID: 310-278282-6**

**Matrix: Water**

Date Collected: 04/02/24 15:47

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.99		5.00	2.25	mg/L			04/08/24 19:52	5
Fluoride	0.387	J	1.00	0.375	mg/L			04/08/24 19:52	5
Sulfate	1080		50.0	21.0	mg/L			04/09/24 09:41	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 20:46	1
Arsenic	0.0188	B	0.00200	0.000530	mg/L			04/17/24 19:22	1
Barium	0.0867		0.00200	0.000640	mg/L			04/15/24 20:46	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 20:46	1
Boron	2.16		0.100	0.0760	mg/L			04/15/24 20:46	1
Cadmium	0.000129	J	0.000200	0.000100	mg/L			04/15/24 20:46	1
Calcium	263		0.500	0.190	mg/L			04/15/24 20:46	1
Chromium	<0.00110		0.00500	0.00110	mg/L			04/15/24 20:46	1
Cobalt	0.000419	J	0.000500	0.000170	mg/L			04/15/24 20:46	1
Lead	0.000279	J	0.000500	0.000240	mg/L			04/15/24 20:46	1
Lithium	0.0462		0.0100	0.00250	mg/L			04/15/24 20:46	1
Molybdenum	0.760		0.00200	0.000910	mg/L			04/15/24 20:46	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 20:46	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 20:46	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			04/11/24 11:42	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1630		250	170	mg/L			04/05/24 14:12	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW15**

**Lab Sample ID: 310-278282-7**

**Matrix: Water**

Date Collected: 04/02/24 17:59

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.6		5.00	2.25	mg/L			04/08/24 20:05	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 20:05	5
Sulfate	420		5.00	2.10	mg/L			04/08/24 20:05	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00175	J	0.00200	0.00100	mg/L			04/15/24 20:57	1
Arsenic	0.00222	B	0.00200	0.000530	mg/L			04/17/24 19:25	1
Barium	0.0747		0.00200	0.000640	mg/L			04/15/24 20:57	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 20:57	1
Boron	2.80		0.100	0.0760	mg/L			04/15/24 20:57	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			04/15/24 20:57	1
Calcium	169		0.500	0.190	mg/L			04/15/24 20:57	1
Chromium	0.00902		0.00500	0.00110	mg/L			04/15/24 20:57	1
Cobalt	<0.000170		0.000500	0.000170	mg/L			04/15/24 20:57	1
Lead	<0.000240		0.000500	0.000240	mg/L			04/15/24 20:57	1
Lithium	0.00767	J	0.0100	0.00250	mg/L			04/15/24 20:57	1
Molybdenum	0.200		0.00200	0.000910	mg/L			04/15/24 20:57	1
Selenium	0.0822		0.00500	0.00140	mg/L			04/15/24 20:57	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 20:57	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			04/11/24 11:44	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	820		50.0	34.0	mg/L			04/05/24 14:12	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW17**

**Lab Sample ID: 310-278282-8**

**Matrix: Water**

Date Collected: 04/03/24 09:27

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.3		5.00	2.25	mg/L			04/08/24 20:17	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 20:17	5
Sulfate	877		50.0	21.0	mg/L			04/09/24 09:53	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 21:00	1
Arsenic	0.0199	B	0.00200	0.000530	mg/L			04/17/24 19:27	1
Barium	0.0385		0.00200	0.000640	mg/L			04/15/24 21:00	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 21:00	1
Boron	0.732		0.100	0.0760	mg/L			04/15/24 21:00	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			04/15/24 21:00	1
Calcium	343		0.500	0.190	mg/L			04/15/24 21:00	1
Chromium	<0.00110		0.00500	0.00110	mg/L			04/15/24 21:00	1
Cobalt	0.0117		0.000500	0.000170	mg/L			04/15/24 21:00	1
Lead	<0.000240		0.000500	0.000240	mg/L			04/15/24 21:00	1
Lithium	0.111		0.0100	0.00250	mg/L			04/15/24 21:00	1
Molybdenum	0.00251		0.00200	0.000910	mg/L			04/15/24 21:00	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 21:00	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 21:00	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			04/11/24 11:46	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1870		250	170	mg/L			04/08/24 15:53	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW18**

**Lab Sample ID: 310-278282-9**

**Matrix: Water**

Date Collected: 04/02/24 12:14  
Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.16	J	5.00	2.25	mg/L			04/08/24 20:30	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 20:30	5
Sulfate	<2.10		5.00	2.10	mg/L			04/08/24 20:30	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/08/24 09:00	04/15/24 21:02	1
Arsenic	0.00139	J B	0.00200	0.000530	mg/L		04/08/24 09:00	04/17/24 19:29	1
Barium	0.292		0.00200	0.000640	mg/L		04/08/24 09:00	04/15/24 21:02	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/08/24 09:00	04/15/24 21:02	1
Boron	0.0920	J	0.100	0.0760	mg/L		04/08/24 09:00	04/15/24 21:02	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/08/24 09:00	04/15/24 21:02	1
Calcium	96.3		0.500	0.190	mg/L		04/08/24 09:00	04/15/24 21:02	1
Chromium	<0.00110		0.00500	0.00110	mg/L		04/08/24 09:00	04/15/24 21:02	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/08/24 09:00	04/15/24 21:02	1
Lead	0.000317	J	0.000500	0.000240	mg/L		04/08/24 09:00	04/15/24 21:02	1
Lithium	0.0273		0.0100	0.00250	mg/L		04/08/24 09:00	04/15/24 21:02	1
Molybdenum	<0.000910		0.00200	0.000910	mg/L		04/08/24 09:00	04/15/24 21:02	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/08/24 09:00	04/15/24 21:02	1
Thallium	<0.000260		0.00100	0.000260	mg/L		04/08/24 09:00	04/15/24 21:02	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		04/10/24 10:33	04/11/24 11:48	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	416		50.0	34.0	mg/L			04/05/24 14:12	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW19**

**Lab Sample ID: 310-278282-10**

**Matrix: Water**

Date Collected: 04/02/24 13:19

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.39	J	5.00	2.25	mg/L			04/08/24 20:42	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 20:42	5
Sulfate	<2.10		5.00	2.10	mg/L			04/08/24 20:42	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 21:04	1
Arsenic	<0.000530		0.00200	0.000530	mg/L			04/17/24 19:32	1
Barium	0.280		0.00200	0.000640	mg/L			04/15/24 21:04	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 21:04	1
Boron	0.0951	J	0.100	0.0760	mg/L			04/15/24 21:04	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			04/15/24 21:04	1
Calcium	103		0.500	0.190	mg/L			04/15/24 21:04	1
Chromium	<0.00110		0.00500	0.00110	mg/L			04/15/24 21:04	1
Cobalt	<0.000170		0.000500	0.000170	mg/L			04/15/24 21:04	1
Lead	<0.000240		0.000500	0.000240	mg/L			04/15/24 21:04	1
Lithium	0.0370		0.0100	0.00250	mg/L			04/15/24 21:04	1
Molybdenum	<0.000910		0.00200	0.000910	mg/L			04/15/24 21:04	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 21:04	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 21:04	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			04/11/24 11:51	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	392		50.0	34.0	mg/L			04/05/24 14:12	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: DUP1**

**Lab Sample ID: 310-278282-11**

Date Collected: 04/02/24 00:00

Matrix: Water

Date Received: 04/04/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.7		5.00	2.25	mg/L			04/08/24 20:55	5
Fluoride	<0.375		1.00	0.375	mg/L			04/08/24 20:55	5
Sulfate	400		5.00	2.10	mg/L			04/08/24 20:55	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			04/15/24 21:06	1
Arsenic	0.312	B	0.00200	0.000530	mg/L			04/17/24 19:34	1
Barium	0.127		0.00200	0.000640	mg/L			04/15/24 21:06	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			04/15/24 21:06	1
Boron	0.867		0.100	0.0760	mg/L			04/15/24 21:06	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			04/15/24 21:06	1
Calcium	232		0.500	0.190	mg/L			04/15/24 21:06	1
Chromium	<0.00110		0.00500	0.00110	mg/L			04/15/24 21:06	1
Cobalt	0.000305	J	0.000500	0.000170	mg/L			04/15/24 21:06	1
Lead	<0.000240		0.000500	0.000240	mg/L			04/15/24 21:06	1
Lithium	0.0471		0.0100	0.00250	mg/L			04/15/24 21:06	1
Molybdenum	0.00110	J	0.00200	0.000910	mg/L			04/15/24 21:06	1
Selenium	<0.00140		0.00500	0.00140	mg/L			04/15/24 21:06	1
Thallium	<0.000260		0.00100	0.000260	mg/L			04/15/24 21:06	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			04/11/24 11:53	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1180		50.0	34.0	mg/L			04/05/24 14:12	1

# Definitions/Glossary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Qualifiers

### HPLC/IC

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.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
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

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID:** MB 310-418258/3

**Matrix:** Water

**Analysis Batch:** 418258

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.450		1.00	0.450	mg/L			04/08/24 15:53	1
Fluoride	<0.0750		0.200	0.0750	mg/L			04/08/24 15:53	1
Sulfate	<0.420		1.00	0.420	mg/L			04/08/24 15:53	1

**Lab Sample ID:** LCS 310-418258/4

**Matrix:** Water

**Analysis Batch:** 418258

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride		10.0	9.953		mg/L		100	90 - 110
Fluoride		2.00	1.969		mg/L		98	90 - 110
Sulfate		10.0	10.58		mg/L		106	90 - 110

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

**Lab Sample ID:** MB 310-418030/1-A

**Matrix:** Water

**Analysis Batch:** 418822

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 418030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/08/24 09:00	04/15/24 20:12	1
Barium	<0.000640		0.00200	0.000640	mg/L		04/08/24 09:00	04/15/24 20:12	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/08/24 09:00	04/15/24 20:12	1
Boron	<0.0760		0.100	0.0760	mg/L		04/08/24 09:00	04/15/24 20:12	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/08/24 09:00	04/15/24 20:12	1
Calcium	<0.190		0.500	0.190	mg/L		04/08/24 09:00	04/15/24 20:12	1
Chromium	<0.00110		0.00500	0.00110	mg/L		04/08/24 09:00	04/15/24 20:12	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/08/24 09:00	04/15/24 20:12	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/08/24 09:00	04/15/24 20:12	1
Lithium	<0.00250		0.0100	0.00250	mg/L		04/08/24 09:00	04/15/24 20:12	1
Molybdenum	<0.000910		0.00200	0.000910	mg/L		04/08/24 09:00	04/15/24 20:12	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/08/24 09:00	04/15/24 20:12	1
Thallium	<0.000260		0.00100	0.000260	mg/L		04/08/24 09:00	04/15/24 20:12	1

**Lab Sample ID:** MB 310-418030/1-A

**Matrix:** Water

**Analysis Batch:** 419086

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 418030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0007140	J	0.00200	0.000530	mg/L		04/08/24 09:00	04/17/24 18:50	1

**Lab Sample ID:** LCS 310-418030/2-A

**Matrix:** Water

**Analysis Batch:** 418822

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 418030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.1945		mg/L		97	80 - 120
Arsenic	0.200	0.2202		mg/L		110	80 - 120
Barium	0.100	0.1018		mg/L		102	80 - 120
Beryllium	0.100	0.1075		mg/L		107	80 - 120

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

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

**Lab Sample ID: LCS 310-418030/2-A**

**Matrix: Water**

**Analysis Batch: 418822**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Boron	0.200	0.1979		mg/L	99	80 - 120		
Cadmium	0.100	0.09987		mg/L	100	80 - 120		
Calcium	2.00	1.618		mg/L	81	80 - 120		
Chromium	0.100	0.1045		mg/L	104	80 - 120		
Cobalt	0.100	0.1094		mg/L	109	80 - 120		
Iron	0.200	0.1697		mg/L	85	80 - 120		
Lead	0.200	0.2205		mg/L	110	80 - 120		
Lithium	0.200	0.2038		mg/L	102	80 - 120		
Molybdenum	0.200	0.2032		mg/L	102	80 - 120		
Selenium	0.400	0.3801		mg/L	95	80 - 120		
Thallium	0.100	0.1032		mg/L	103	80 - 120		

**Lab Sample ID: 310-278282-1 MS**

**Matrix: Water**

**Analysis Batch: 418822**

**Client Sample ID: MW2**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
Antimony	<0.00100		0.200	0.2085		mg/L	104	75 - 125		
Barium	0.115		0.100	0.2208		mg/L	106	75 - 125		
Beryllium	<0.000330		0.100	0.1119		mg/L	112	75 - 125		
Boron	0.823		0.200	1.093	4	mg/L	135	75 - 125		
Cadmium	<0.000100		0.100	0.09971		mg/L	100	75 - 125		
Calcium	219		2.00	230.9	4	mg/L	609	75 - 125		
Chromium	<0.00110		0.100	0.1075		mg/L	108	75 - 125		
Cobalt	0.000306	J	0.100	0.1112		mg/L	111	75 - 125		
Iron	26.0		0.200	27.34	4	mg/L	659	75 - 125		
Lead	<0.000240		0.200	0.2211		mg/L	111	75 - 125		
Lithium	0.0432		0.200	0.2555		mg/L	106	75 - 125		
Molybdenum	0.00104	J	0.200	0.2089		mg/L	104	75 - 125		
Selenium	<0.00140		0.400	0.3939		mg/L	98	75 - 125		
Thallium	<0.000260		0.100	0.09905		mg/L	99	75 - 125		

**Lab Sample ID: 310-278282-1 MS**

**Matrix: Water**

**Analysis Batch: 419086**

**Client Sample ID: MW2**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
Arsenic	0.240	B	0.200	0.4515		mg/L	106	75 - 125		

**Lab Sample ID: 310-278282-1 MSD**

**Matrix: Water**

**Analysis Batch: 418822**

**Client Sample ID: MW2**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.00100		0.200	0.2081		mg/L	104	75 - 125	0	20	
Barium	0.115		0.100	0.2214		mg/L	107	75 - 125	0	20	
Beryllium	<0.000330		0.100	0.1085		mg/L	108	75 - 125	3	20	
Boron	0.823		0.200	1.072	4	mg/L	125	75 - 125	2	20	
Cadmium	<0.000100		0.100	0.09999		mg/L	100	75 - 125	0	20	

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

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

**Lab Sample ID: 310-278282-1 MSD**

**Matrix: Water**

**Analysis Batch: 418822**

**Client Sample ID: MW2**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
								Limits	Limit
Calcium	219		2.00	232.8	4	mg/L	702	75 - 125	1 20
Chromium	<0.00110		0.100	0.1056		mg/L	106	75 - 125	2 20
Cobalt	0.000306	J	0.100	0.1096		mg/L	109	75 - 125	1 20
Iron	26.0		0.200	27.41	4	mg/L	693	75 - 125	0 20
Lead	<0.000240		0.200	0.2205		mg/L	110	75 - 125	0 20
Lithium	0.0432		0.200	0.2559		mg/L	106	75 - 125	0 20
Molybdenum	0.00104	J	0.200	0.2108		mg/L	105	75 - 125	1 20
Selenium	<0.00140		0.400	0.3883		mg/L	97	75 - 125	1 20
Thallium	<0.000260		0.100	0.09791		mg/L	98	75 - 125	1 20

**Lab Sample ID: 310-278282-1 MSD**

**Matrix: Water**

**Analysis Batch: 419086**

**Client Sample ID: MW2**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
								Limits	Limit
Arsenic	0.240	B	0.200	0.4580		mg/L	109	75 - 125	1 20

**Lab Sample ID: 310-278282-11 DU**

**Matrix: Water**

**Analysis Batch: 418822**

**Client Sample ID: DUP1**

**Prep Type: Total/NA**

**Prep Batch: 418030**

Analyte	Sample Result	Sample Qualifier	DU		DU		D	RPD	Limit
			Result	Qualifier	Result	Qualifier			
Antimony	<0.00100		<0.00100					NC	20
Arsenic	0.312	B	0.3255					4	20
Barium	0.131		0.1274					3	20
Beryllium	<0.000330		<0.000330					NC	20
Boron	0.820		0.8867					8	20
Cadmium	<0.000100		<0.000100					NC	20
Calcium	222		236.4					6	20
Chromium	<0.00110		<0.00110					NC	20
Cobalt	0.000284	J	0.0003100	J				9	20
Lead	<0.000240		<0.000240					NC	20
Lithium	0.0442		0.04481					1	20
Molybdenum	0.00102	J	0.001049	J				3	20
Selenium	<0.00140		<0.00140					NC	20
Thallium	<0.000260		<0.000260					NC	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 310-418339/1-A**

**Matrix: Water**

**Analysis Batch: 418535**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 418339**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000140		0.000200	0.000140	mg/L	04/10/24 10:33	04/11/24 11:23		1

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID:** LCS 310-418339/2-A

**Matrix:** Water

**Analysis Batch:** 418535

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 418339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
Mercury	0.00167	0.001831		mg/L	110	80 - 120	

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID:** MB 310-418008/1

**Matrix:** Water

**Analysis Batch:** 418008

**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			04/05/24 13:40	1

**Lab Sample ID:** LCS 310-418008/2

**Matrix:** Water

**Analysis Batch:** 418008

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
Total Dissolved Solids	1000	928.0		mg/L		93	90 - 110

**Lab Sample ID:** MB 310-418013/1

**Matrix:** Water

**Analysis Batch:** 418013

**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			04/05/24 14:12	1

**Lab Sample ID:** LCS 310-418013/2

**Matrix:** Water

**Analysis Batch:** 418013

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
Total Dissolved Solids	1000	924.0		mg/L		92	90 - 110

**Lab Sample ID:** MB 310-418158/1

**Matrix:** Water

**Analysis Batch:** 418158

**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			04/08/24 15:53	1

**Lab Sample ID:** LCS 310-418158/2

**Matrix:** Water

**Analysis Batch:** 418158

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
Total Dissolved Solids	1000	950.0		mg/L		95	90 - 110

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## HPLC/IC

### Analysis Batch: 418258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	9056A	
310-278282-2	MW5	Total/NA	Water	9056A	
310-278282-2	MW5	Total/NA	Water	9056A	
310-278282-3	MW6	Total/NA	Water	9056A	
310-278282-4	MW8	Total/NA	Water	9056A	
310-278282-4	MW8	Total/NA	Water	9056A	
310-278282-5	MW9	Total/NA	Water	9056A	
310-278282-6	MW13	Total/NA	Water	9056A	
310-278282-6	MW13	Total/NA	Water	9056A	
310-278282-7	MW15	Total/NA	Water	9056A	
310-278282-8	MW17	Total/NA	Water	9056A	
310-278282-8	MW17	Total/NA	Water	9056A	
310-278282-9	MW18	Total/NA	Water	9056A	
310-278282-10	MW19	Total/NA	Water	9056A	
310-278282-11	DUP1	Total/NA	Water	9056A	
MB 310-418258/3	Method Blank	Total/NA	Water	9056A	
LCS 310-418258/4	Lab Control Sample	Total/NA	Water	9056A	

## Metals

### Prep Batch: 418030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	3005A	
310-278282-2	MW5	Total/NA	Water	3005A	
310-278282-3	MW6	Total/NA	Water	3005A	
310-278282-4	MW8	Total/NA	Water	3005A	
310-278282-5	MW9	Total/NA	Water	3005A	
310-278282-6	MW13	Total/NA	Water	3005A	
310-278282-7	MW15	Total/NA	Water	3005A	
310-278282-8	MW17	Total/NA	Water	3005A	
310-278282-9	MW18	Total/NA	Water	3005A	
310-278282-10	MW19	Total/NA	Water	3005A	
310-278282-11	DUP1	Total/NA	Water	3005A	
MB 310-418030/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-418030/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-278282-1 MS	MW2	Total/NA	Water	3005A	
310-278282-1 MSD	MW2	Total/NA	Water	3005A	
310-278282-11 DU	DUP1	Total/NA	Water	3005A	

### Prep Batch: 418339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	7470A	
310-278282-2	MW5	Total/NA	Water	7470A	
310-278282-3	MW6	Total/NA	Water	7470A	
310-278282-4	MW8	Total/NA	Water	7470A	
310-278282-5	MW9	Total/NA	Water	7470A	
310-278282-6	MW13	Total/NA	Water	7470A	
310-278282-7	MW15	Total/NA	Water	7470A	
310-278282-8	MW17	Total/NA	Water	7470A	
310-278282-9	MW18	Total/NA	Water	7470A	
310-278282-10	MW19	Total/NA	Water	7470A	

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Metals (Continued)

### Prep Batch: 418339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-11	DUP1	Total/NA	Water	7470A	
MB 310-418339/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-418339/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Analysis Batch: 418535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	7470A	418339
310-278282-2	MW5	Total/NA	Water	7470A	418339
310-278282-3	MW6	Total/NA	Water	7470A	418339
310-278282-4	MW8	Total/NA	Water	7470A	418339
310-278282-5	MW9	Total/NA	Water	7470A	418339
310-278282-6	MW13	Total/NA	Water	7470A	418339
310-278282-7	MW15	Total/NA	Water	7470A	418339
310-278282-8	MW17	Total/NA	Water	7470A	418339
310-278282-9	MW18	Total/NA	Water	7470A	418339
310-278282-10	MW19	Total/NA	Water	7470A	418339
310-278282-11	DUP1	Total/NA	Water	7470A	418339
MB 310-418339/1-A	Method Blank	Total/NA	Water	7470A	418339
LCS 310-418339/2-A	Lab Control Sample	Total/NA	Water	7470A	418339

### Analysis Batch: 418822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	6020B	418030
310-278282-2	MW5	Total/NA	Water	6020B	418030
310-278282-3	MW6	Total/NA	Water	6020B	418030
310-278282-4	MW8	Total/NA	Water	6020B	418030
310-278282-5	MW9	Total/NA	Water	6020B	418030
310-278282-6	MW13	Total/NA	Water	6020B	418030
310-278282-7	MW15	Total/NA	Water	6020B	418030
310-278282-8	MW17	Total/NA	Water	6020B	418030
310-278282-9	MW18	Total/NA	Water	6020B	418030
310-278282-10	MW19	Total/NA	Water	6020B	418030
310-278282-11	DUP1	Total/NA	Water	6020B	418030
MB 310-418030/1-A	Method Blank	Total/NA	Water	6020B	418030
LCS 310-418030/2-A	Lab Control Sample	Total/NA	Water	6020B	418030
310-278282-1 MS	MW2	Total/NA	Water	6020B	418030
310-278282-1 MSD	MW2	Total/NA	Water	6020B	418030
310-278282-11 DU	DUP1	Total/NA	Water	6020B	418030

### Analysis Batch: 419086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	6020B	418030
310-278282-2	MW5	Total/NA	Water	6020B	418030
310-278282-3	MW6	Total/NA	Water	6020B	418030
310-278282-4	MW8	Total/NA	Water	6020B	418030
310-278282-5	MW9	Total/NA	Water	6020B	418030
310-278282-6	MW13	Total/NA	Water	6020B	418030
310-278282-7	MW15	Total/NA	Water	6020B	418030
310-278282-8	MW17	Total/NA	Water	6020B	418030
310-278282-9	MW18	Total/NA	Water	6020B	418030
310-278282-10	MW19	Total/NA	Water	6020B	418030

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Metals (Continued)

### Analysis Batch: 419086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-11	DUP1	Total/NA	Water	6020B	418030
MB 310-418030/1-A	Method Blank	Total/NA	Water	6020B	418030
310-278282-1 MS	MW2	Total/NA	Water	6020B	418030
310-278282-1 MSD	MW2	Total/NA	Water	6020B	418030

## General Chemistry

### Analysis Batch: 418008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	SM 2540C	9
310-278282-3	MW6	Total/NA	Water	SM 2540C	10
310-278282-5	MW9	Total/NA	Water	SM 2540C	11
MB 310-418008/1	Method Blank	Total/NA	Water	SM 2540C	12
LCS 310-418008/2	Lab Control Sample	Total/NA	Water	SM 2540C	13

### Analysis Batch: 418013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-6	MW13	Total/NA	Water	SM 2540C	14
310-278282-7	MW15	Total/NA	Water	SM 2540C	15
310-278282-9	MW18	Total/NA	Water	SM 2540C	16
310-278282-10	MW19	Total/NA	Water	SM 2540C	17
310-278282-11	DUP1	Total/NA	Water	SM 2540C	18
MB 310-418013/1	Method Blank	Total/NA	Water	SM 2540C	19
LCS 310-418013/2	Lab Control Sample	Total/NA	Water	SM 2540C	20

### Analysis Batch: 418158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-2	MW5	Total/NA	Water	SM 2540C	21
310-278282-4	MW8	Total/NA	Water	SM 2540C	22
310-278282-8	MW17	Total/NA	Water	SM 2540C	23
MB 310-418158/1	Method Blank	Total/NA	Water	SM 2540C	24
LCS 310-418158/2	Lab Control Sample	Total/NA	Water	SM 2540C	25

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW2**

Date Collected: 04/02/24 16:57

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 18:24
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:26
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 18:52
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:27
Total/NA	Analysis	SM 2540C		1	418008	D7CP	EET CF	04/05/24 13:40

**Client Sample ID: MW5**

Date Collected: 04/03/24 10:25

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 18:36
Total/NA	Analysis	9056A		50	418258	QTZ5	EET CF	04/09/24 09:16
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:37
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:04
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:29
Total/NA	Analysis	SM 2540C		1	418158	D7CP	EET CF	04/08/24 15:53

**Client Sample ID: MW6**

Date Collected: 04/02/24 19:05

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 18:49
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:39
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:06
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:36
Total/NA	Analysis	SM 2540C		1	418008	D7CP	EET CF	04/05/24 13:40

**Client Sample ID: MW8**

Date Collected: 04/03/24 08:31

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 19:27

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW8**

Date Collected: 04/03/24 08:31

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		50	418258	QTZ5	EET CF	04/09/24 09:28
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:41
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:08
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:38
Total/NA	Analysis	SM 2540C		1	418158	D7CP	EET CF	04/08/24 15:53

**Client Sample ID: MW9**

Date Collected: 04/02/24 14:11

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 19:39
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:44
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:11
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:40
Total/NA	Analysis	SM 2540C		1	418008	D7CP	EET CF	04/05/24 13:40

**Client Sample ID: MW13**

Date Collected: 04/02/24 15:47

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 19:52
Total/NA	Analysis	9056A		50	418258	QTZ5	EET CF	04/09/24 09:41
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:46
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:22
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:42
Total/NA	Analysis	SM 2540C		1	418013	D7CP	EET CF	04/05/24 14:12

**Client Sample ID: MW15**

Date Collected: 04/02/24 17:59

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 20:05

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW15**

**Lab Sample ID: 310-278282-7**

**Matrix: Water**

Date Collected: 04/02/24 17:59

Date Received: 04/04/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 20:57
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:25
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:44
Total/NA	Analysis	SM 2540C		1	418013	D7CP	EET CF	04/05/24 14:12

**Client Sample ID: MW17**

**Lab Sample ID: 310-278282-8**

**Matrix: Water**

Date Collected: 04/03/24 09:27

Date Received: 04/04/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 20:17
Total/NA	Analysis	9056A		50	418258	QTZ5	EET CF	04/09/24 09:53
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 21:00
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:27
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:46
Total/NA	Analysis	SM 2540C		1	418158	D7CP	EET CF	04/08/24 15:53

**Client Sample ID: MW18**

**Lab Sample ID: 310-278282-9**

**Matrix: Water**

Date Collected: 04/02/24 12:14

Date Received: 04/04/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 20:30
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 21:02
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:29
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:48
Total/NA	Analysis	SM 2540C		1	418013	D7CP	EET CF	04/05/24 14:12

**Client Sample ID: MW19**

**Lab Sample ID: 310-278282-10**

**Matrix: Water**

Date Collected: 04/02/24 13:19

Date Received: 04/04/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 20:42
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 21:04

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
 Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

**Client Sample ID: MW19**

**Lab Sample ID: 310-278282-10**

**Matrix: Water**

Date Collected: 04/02/24 13:19

Date Received: 04/04/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:32
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:51
Total/NA	Analysis	SM 2540C		1	418013	D7CP	EET CF	04/05/24 14:12

**Client Sample ID: DUP1**

**Lab Sample ID: 310-278282-11**

**Matrix: Water**

Date Collected: 04/02/24 00:00

Date Received: 04/04/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418258	QTZ5	EET CF	04/08/24 20:55
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	418822	NFT2	EET CF	04/15/24 21:06
Total/NA	Prep	3005A			418030	QTZ5	EET CF	04/08/24 09:00
Total/NA	Analysis	6020B		1	419086	NFT2	EET CF	04/17/24 19:34
Total/NA	Prep	7470A			418339	A6US	EET CF	04/10/24 10:33
Total/NA	Analysis	7470A		1	418535	A6US	EET CF	04/11/24 11:53
Total/NA	Analysis	SM 2540C		1	418013	D7CP	EET CF	04/05/24 14:12

**Laboratory References:**

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

# Accreditation/Certification Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

## Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	04-18-24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Method Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF

### Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Environment Testing  
America

310-278282 Chain of Custody

## Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: OPPD			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE 4/4/24	TIME 1600	Received By: GM
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 1 of 3	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ _____	
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____	<input type="checkbox"/> 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):	0.1	Corrected Temp (°C): 0.1	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			
_____			
_____			
_____			



## Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: OPPD			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE 4/4/24	TIME 1600	Received By: GM
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
	<input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # 2 of 3
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓   
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> 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): 1.6	Corrected Temp (°C): 1.6		
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



## Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: OPPD			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE 4/4/24	TIME 1600	Received By: GM
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <u>3</u> of <u>3</u>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ _____
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> 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): 2.8	Corrected Temp (°C): 2.8		
<b>• Sample Container Temperature</b>			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			
_____			
_____			
_____			

### TestAmerica Cedar Falls

704 Enterprise Drive  
Cedar Falls IA 50613  
Phone (319) 277-2401 Fax (319) 277-2425

### TestAmerica

Ames"ca Omaha SC  
268

### Chain of Custody Record

<b>Client Information</b>		Sampler Kyle K. Uhing	Lab PM Hayes	Carrier Tracking No(s) Shawn M	COC No. Page																																																																																																																																					
Client Contact: Kyle Uhing Company: Omaha Public Power District Address: 444 South 16th Street Mall 9E/EP1 City: Omaha State Zip: NE 68102-2247 Phone: (531) 226-2515 Email: kkuhing@oppd.com Project Name: TestAmerica Project #: Site: North Omaha Station CCR SSOW#:		Phone (531) 226-2515	E-Mail shawn.hayes@testamericainc.com	Job #:																																																																																																																																						
<b>Analysis Requested</b> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">         Total Number of Containers          2540C TDS, 9056A Chloride, Fluoride, Sulfate          Total 6020A CCR Appendix III and IV, 7470A Mercury          9315 Ra226, 9320 Ra226, Combined Ra226 and Ra228       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">         Preservation Codes          A HCl          B NaOH          C Zn Acetate          D Nitric Acid          E NaHSO4          F MeOH          G Amchiar          H Ascorbic Acid          I Ice          J DI Water          K EDTA          L EDA          Other: _____       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">         Special Instructions/Note          X CCR Appendix III and IV Constituents          4       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">         X Field Filtered Sample (Yes or No)          X Perform MS/MSD (Yes or No)       </div>																																																																																																																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample Identification</th> <th rowspan="2">Sample Date</th> <th rowspan="2">Sample Time</th> <th rowspan="2">Sample Type (C=comp, G=grab)</th> <th rowspan="2">Preservation Code:</th> <th colspan="4">Matrix</th> </tr> <tr> <th>W</th> <th>N</th> <th>D</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>MW2</td> <td>4/2/24</td> <td>16:51</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW5</td> <td>4/3/24</td> <td>10:35</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW6</td> <td>4/3/24</td> <td>19:05</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW8</td> <td>4/3/24</td> <td>8:31</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW9</td> <td>4/3/24</td> <td>11:11</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW13</td> <td>4/3/24</td> <td>15:44</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW15</td> <td>4/2/24</td> <td>17:59</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW17</td> <td>4/3/24</td> <td>9:27</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW18</td> <td>4/2/24</td> <td>10:14</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>MW19</td> <td>4/2/24</td> <td>15:19</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>DUP1</td> <td>4/2/24</td> <td>---</td> <td>G</td> <td>W</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td colspan="6" style="text-align: right;"><i>Sample Disposal / A Fee may be assessed if samples are retained longer than 1 month)</i></td> <td colspan="2" style="text-align: center;">Method of Shipment:</td> </tr> <tr> <td colspan="2"> <input type="checkbox"/> Possible Hazard Identification  <input type="checkbox"/> Non-Hazard  <input type="checkbox"/> Flammable  <input type="checkbox"/> Skin Irritant  <input type="checkbox"/> Poison B  <input type="checkbox"/> Unknown  <input type="checkbox"/> Radiological       </td> <td colspan="2"> <input type="checkbox"/> Disposal By Lab  <input type="checkbox"/> Return To Client  <input type="checkbox"/> Archive For _____ Months       </td> <td colspan="4"></td> </tr> <tr> <td colspan="6">         Deliverable Requested I II III IV Other (specify)          Empty Kit Relinquished by _____          Relinquished by _____          Relinquished by _____          Relinquished by _____          Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No  <input type="checkbox"/> Yes <input type="checkbox"/> No       </td> <td colspan="2">         Date _____ Time _____ Received by _____          Date _____ Time _____ Received by _____       </td> </tr> <tr> <td colspan="6"></td> <td colspan="2">         Cooler Temperature(s) °C and Other Remarks:          _____       </td> </tr> </tbody> </table>						Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code:	Matrix				W	N	D	D	MW2	4/2/24	16:51	G	W	X	X	X	MW5	4/3/24	10:35	G	W	X	X	X	MW6	4/3/24	19:05	G	W	X	X	X	MW8	4/3/24	8:31	G	W	X	X	X	MW9	4/3/24	11:11	G	W	X	X	X	MW13	4/3/24	15:44	G	W	X	X	X	MW15	4/2/24	17:59	G	W	X	X	X	MW17	4/3/24	9:27	G	W	X	X	X	MW18	4/2/24	10:14	G	W	X	X	X	MW19	4/2/24	15:19	G	W	X	X	X	DUP1	4/2/24	---	G	W	X	X	X	<i>Sample Disposal / A Fee may be assessed if samples are retained longer than 1 month)</i>						Method of Shipment:		<input type="checkbox"/> Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Return To Client <input type="checkbox"/> Archive For _____ Months						Deliverable Requested I II III IV Other (specify) Empty Kit Relinquished by _____ Relinquished by _____ Relinquished by _____ Relinquished by _____ Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No <input type="checkbox"/> Yes <input type="checkbox"/> No						Date _____ Time _____ Received by _____ Date _____ Time _____ Received by _____								Cooler Temperature(s) °C and Other Remarks: _____	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code:	Matrix																																																																																																																																					
					W	N	D	D																																																																																																																																		
MW2	4/2/24	16:51	G	W	X	X	X																																																																																																																																			
MW5	4/3/24	10:35	G	W	X	X	X																																																																																																																																			
MW6	4/3/24	19:05	G	W	X	X	X																																																																																																																																			
MW8	4/3/24	8:31	G	W	X	X	X																																																																																																																																			
MW9	4/3/24	11:11	G	W	X	X	X																																																																																																																																			
MW13	4/3/24	15:44	G	W	X	X	X																																																																																																																																			
MW15	4/2/24	17:59	G	W	X	X	X																																																																																																																																			
MW17	4/3/24	9:27	G	W	X	X	X																																																																																																																																			
MW18	4/2/24	10:14	G	W	X	X	X																																																																																																																																			
MW19	4/2/24	15:19	G	W	X	X	X																																																																																																																																			
DUP1	4/2/24	---	G	W	X	X	X																																																																																																																																			
<i>Sample Disposal / A Fee may be assessed if samples are retained longer than 1 month)</i>						Method of Shipment:																																																																																																																																				
<input type="checkbox"/> Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Return To Client <input type="checkbox"/> Archive For _____ Months																																																																																																																																								
Deliverable Requested I II III IV Other (specify) Empty Kit Relinquished by _____ Relinquished by _____ Relinquished by _____ Relinquished by _____ Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No <input type="checkbox"/> Yes <input type="checkbox"/> No						Date _____ Time _____ Received by _____ Date _____ Time _____ Received by _____																																																																																																																																				
						Cooler Temperature(s) °C and Other Remarks: _____																																																																																																																																				

## Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-278282-1

**Login Number:** 278282

**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.	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	

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kyle Uhing  
Omaha Public Power District  
Attn: Accounts Payable, 4E/EP-5  
444 South 16th Street Mall  
Omaha, Nebraska 68102-2247

Generated 5/3/2024 4:03:07 PM

## JOB DESCRIPTION

North Omaha Station CCR

## JOB NUMBER

310-278282-2

# Eurofins Cedar Falls

## 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  
5/3/2024 4:03:07 PM

Authorized for release by  
Bob Michels, Project Manager I  
[Bob.Michels@et.eurofinsus.com](mailto:Bob.Michels@et.eurofinsus.com)  
(319)277-2401

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Case Narrative .....	4
Sample Summary .....	5
Detection Summary .....	6
Client Sample Results .....	7
Definitions .....	18
QC Sample Results .....	19
QC Association .....	20
Chronicle .....	21
Certification Summary .....	24
Method Summary .....	25
Chain of Custody .....	26
Receipt Checklists .....	32
Tracer Carrier Summary .....	34

# Case Narrative

Client: Omaha Public Power District  
Project: North Omaha Station CCR

Job ID: 310-278282-2

**Job ID: 310-278282-2**

**Eurofins Cedar Falls**

## Job Narrative 310-278282-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 4/4/2024 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.1°C, 1.6°C and 2.8°C.

### Gas Flow Proportional Counter

Method 9320\_Ra228: Radium-228 prep batch 160-656025:

The detection goal was not met for the following sample due to the reduced sample volume attributed to the presence of matrix interferences: MW9 (310-278282-5) . Analytical results are reported with the detection limit achieved.

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

### Rad

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

Eurofins Cedar Falls

## Sample Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-278282-1	MW2	Water	04/02/24 16:57	04/04/24 16:00
310-278282-2	MW5	Water	04/03/24 10:25	04/04/24 16:00
310-278282-3	MW6	Water	04/02/24 19:05	04/04/24 16:00
310-278282-4	MW8	Water	04/03/24 08:31	04/04/24 16:00
310-278282-5	MW9	Water	04/02/24 14:11	04/04/24 16:00
310-278282-6	MW13	Water	04/02/24 15:47	04/04/24 16:00
310-278282-7	MW15	Water	04/02/24 17:59	04/04/24 16:00
310-278282-8	MW17	Water	04/03/24 09:27	04/04/24 16:00
310-278282-9	MW18	Water	04/02/24 12:14	04/04/24 16:00
310-278282-10	MW19	Water	04/02/24 13:19	04/04/24 16:00
310-278282-11	DUP1	Water	04/02/24 00:00	04/04/24 16:00

## Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

### Client Sample ID: MW2

Lab Sample ID: 310-278282-1

No Detections.

### Client Sample ID: MW5

Lab Sample ID: 310-278282-2

No Detections.

### Client Sample ID: MW6

Lab Sample ID: 310-278282-3

No Detections.

### Client Sample ID: MW8

Lab Sample ID: 310-278282-4

No Detections.

### Client Sample ID: MW9

Lab Sample ID: 310-278282-5

No Detections.

### Client Sample ID: MW13

Lab Sample ID: 310-278282-6

No Detections.

### Client Sample ID: MW15

Lab Sample ID: 310-278282-7

No Detections.

### Client Sample ID: MW17

Lab Sample ID: 310-278282-8

No Detections.

### Client Sample ID: MW18

Lab Sample ID: 310-278282-9

No Detections.

### Client Sample ID: MW19

Lab Sample ID: 310-278282-10

No Detections.

### Client Sample ID: DUP1

Lab Sample ID: 310-278282-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW2**

**Lab Sample ID: 310-278282-1**

Date Collected: 04/02/24 16:57

Matrix: Water

Date Received: 04/04/24 16:00

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac										
			Uncert. (2σ+/-)	Uncert. (2σ+/-)																
Radium-226	0.367	U	0.269	0.271	1.00	0.385	pCi/L	04/09/24 10:23	05/02/24 07:45	1										
<b>Carrier</b>																				
Ba Carrier	90.1	Qualifer	<b>Limits</b>																	
			30 - 110																	
<b>Ba Carrier</b>																				
<b>Y Carrier</b>																				

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.13		0.528	0.538	1.00	0.704	pCi/L	04/09/24 10:39	05/01/24 16:14	1
<b>Carrier</b>										
Ba Carrier	90.1	Qualifer	<b>Limits</b>							
			30 - 110							
<b>Y Carrier</b>										

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.50		0.593	0.602	5.00	0.704	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW5**

**Lab Sample ID: 310-278282-2**

Date Collected: 04/03/24 10:25

Matrix: Water

Date Received: 04/04/24 16:00

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.177	U	0.161	0.162	1.00	0.238	pCi/L	04/09/24 10:23	05/02/24 07:45	1
<b>Carrier</b>										
Ba Carrier	83.2		<b>Limits</b>							
			30 - 110							

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.07		0.498	0.508	1.00	0.688	pCi/L	04/09/24 10:39	05/01/24 16:15	1
<b>Carrier</b>										
Ba Carrier	83.2		<b>Limits</b>							
			30 - 110							
Y Carrier	84.9		<b>Limits</b>							
			30 - 110							

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.25		0.523	0.533	5.00	0.688	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW6**

**Lab Sample ID: 310-278282-3**

Date Collected: 04/02/24 19:05

Matrix: Water

Date Received: 04/04/24 16:00

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.216	U	0.200	0.201	1.00	0.305	pCi/L	04/09/24 10:23	05/02/24 08:00	1
<i>Carrier</i>										
Ba Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
	76.9		30 - 110					04/09/24 10:23	05/02/24 08:00	1

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.984		0.489	0.498	1.00	0.669	pCi/L	04/09/24 10:39	05/01/24 16:15	1
<i>Carrier</i>										
Ba Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
	76.9		30 - 110					04/09/24 10:39	05/01/24 16:15	1
Y Carrier			30 - 110					04/09/24 10:39	05/01/24 16:15	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.20		0.528	0.537	5.00	0.669	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

## **Client Sample ID: MW8**

Date Collected: 04/03/24 08:31

Date Received: 04/04/24 16:00

## **Lab Sample ID: 310-278282-4**

Matrix: Water

### **Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.00607	U	0.164	0.164	1.00	0.334	pCi/L	04/09/24 10:23	05/02/24 08:00	1
<b>Carrier</b>										
Ba Carrier	86.5	Qualifer	<b>Limits</b>		30 - 110	Prepared	Analyzed	Dil Fac	05/02/24 08:00	1

### **Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.22		0.455	0.469	1.00	0.565	pCi/L	04/09/24 10:39	05/01/24 16:15	1
<b>Carrier</b>										
Ba Carrier	86.5	Qualifer	<b>Limits</b>		30 - 110	Prepared	Analyzed	Dil Fac	05/01/24 16:15	1
Y Carrier	84.5		<b>Limits</b>		30 - 110	04/09/24 10:39	05/01/24 16:15	1	04/09/24 10:39	05/01/24 16:15

### **Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.21		0.484	0.497	5.00	0.565	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

## **Client Sample ID: MW9**

Date Collected: 04/02/24 14:11

Date Received: 04/04/24 16:00

## **Lab Sample ID: 310-278282-5**

Matrix: Water

### **Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	1.42		0.750	0.761	1.00	0.961	pCi/L	04/09/24 10:23	05/02/24 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	54.3		30 - 110					04/09/24 10:23	05/02/24 08:00	1

### **Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	4.01	G	1.80	1.83	1.00	2.52	pCi/L	04/09/24 10:39	05/01/24 16:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	54.3		30 - 110					04/09/24 10:39	05/01/24 16:15	1
Y Carrier	78.5		30 - 110					04/09/24 10:39	05/01/24 16:15	1

### **Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	5.43		1.95	1.98	5.00	2.52	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW13**

**Lab Sample ID: 310-278282-6**

**Matrix: Water**

Date Collected: 04/02/24 15:47

Date Received: 04/04/24 16:00

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0981	U	0.177	0.177	1.00	0.312	pCi/L	04/09/24 10:23	05/02/24 08:00	1
<b>Carrier</b>										
Ba Carrier	87.8		Limits	30 - 110				Prepared	Analyzed	Dil Fac

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.115	U	0.304	0.304	1.00	0.539	pCi/L	04/09/24 10:39	05/01/24 16:11	1
<b>Carrier</b>										
Ba Carrier	87.8		Limits	30 - 110				Prepared	Analyzed	Dil Fac
Y Carrier	87.5		30 - 110					04/09/24 10:39	05/01/24 16:11	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.213	U	0.352	0.352	5.00	0.539	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW15**

**Lab Sample ID: 310-278282-7**

Date Collected: 04/02/24 17:59

Matrix: Water

Date Received: 04/04/24 16:00

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0722	U	0.172	0.172	1.00	0.312	pCi/L	04/09/24 10:23	05/02/24 08:01	1
<b>Carrier</b>										
Ba Carrier	94.7	Qualifer	<b>Limits</b>		30 - 110	0.584	pCi/L	Prepared	Analyzed	Dil Fac

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.790		0.411	0.417	1.00	0.584	pCi/L	04/09/24 10:39	05/01/24 16:32	1
<b>Carrier</b>										
Ba Carrier	94.7	Qualifer	<b>Limits</b>		30 - 110	0.584	pCi/L	Prepared	Analyzed	Dil Fac
Y Carrier	87.1		30 - 110					04/09/24 10:39	05/01/24 16:32	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.862		0.446	0.451	5.00	0.584	pCi/L	05/03/24 09:09		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW17**

**Lab Sample ID: 310-278282-8**

Date Collected: 04/03/24 09:27

Matrix: Water

Date Received: 04/04/24 16:00

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.178	U	0.161	0.161	1.00	0.241	pCi/L	04/09/24 10:23	05/02/24 08:01	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits		Prepared	Analyzed	Dil Fac	04/09/24 10:23	05/02/24 08:01	1
	93.4		30 - 110							

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac					
			Uncert. (2σ+/-)	Uncert. (2σ+/-)											
Radium-228	0.784		0.412	0.418	1.00	0.588	pCi/L	04/09/24 10:39	05/01/24 16:32	1					
<b>Carrier</b>															
Ba Carrier	%Yield	Qualifier	Limits		Prepared	Analyzed	Dil Fac	04/09/24 10:39	05/01/24 16:32	1					
	93.4		30 - 110												
Y Carrier	87.5		30 - 110												

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.961		0.442	0.448	5.00	0.588	pCi/L	05/03/24 09:09		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW18**

**Lab Sample ID: 310-278282-9**

Date Collected: 04/02/24 12:14

Matrix: Water

Date Received: 04/04/24 16:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.519		0.295	0.298	1.00	0.363	pCi/L	04/09/24 10:23	05/02/24 08:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.0		30 - 110					04/09/24 10:23	05/02/24 08:01	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.372	U	0.534	0.535	1.00	0.902	pCi/L	04/09/24 10:39	05/01/24 18:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.0		30 - 110					04/09/24 10:39	05/01/24 18:12	1
Y Carrier	86.4		30 - 110					04/09/24 10:39	05/01/24 18:12	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.892	U	0.610	0.612	5.00	0.902	pCi/L	05/03/24 09:09		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Client Sample ID: MW19**

**Lab Sample ID: 310-278282-10**

Date Collected: 04/02/24 13:19

Matrix: Water

Date Received: 04/04/24 16:00

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.853		0.350	0.359	1.00	0.348	pCi/L	04/09/24 10:23	05/02/24 08:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		30 - 110					04/09/24 10:23	05/02/24 08:01	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	2.16		0.814	0.838	1.00	0.995	pCi/L	04/09/24 10:39	05/01/24 18:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		30 - 110					04/09/24 10:39	05/01/24 18:12	1
Y Carrier	85.6		30 - 110					04/09/24 10:39	05/01/24 18:12	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	3.02		0.886	0.912	5.00	0.995	pCi/L	05/03/24 09:09		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

## Client Sample ID: DUP1

Date Collected: 04/02/24 00:00

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-11**

Matrix: Water

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.274	U	0.224	0.225	1.00	0.322	pCi/L	04/09/24 10:23	05/02/24 08:01	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	<b>Limits</b>		Prepared	Analyzed	Dil Fac	04/09/24 10:23	05/02/24 08:01	1
			30 - 110							

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0817	U	0.540	0.540	1.00	0.985	pCi/L	04/09/24 10:39	05/01/24 18:12	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	<b>Limits</b>		Prepared	Analyzed	Dil Fac	04/09/24 10:39	05/01/24 18:12	1
			30 - 110							
Y Carrier	%Yield	Qualifier	<b>Limits</b>		Prepared	Analyzed	Dil Fac	04/09/24 10:39	05/01/24 18:12	1
			30 - 110							

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.355	U	0.585	0.585	5.00	0.985	pCi/L	05/03/24 09:09	05/03/24 09:09	1

Eurofins Cedar Falls

## Definitions/Glossary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

### Qualifiers

#### Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

### 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

# QC Sample Results

Client: Omaha Public Power District

Job ID: 310-278282-2

Project/Site: North Omaha Station CCR

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID:** MB 160-656024/1-A

**Matrix:** Water

**Analysis Batch:** 659654

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 656024

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1308		U	0.143	0.144	1.00	0.227	pCi/L	04/09/24 10:23	05/02/24 07:42	1
<b>Carrier</b>											
Ba Carrier	90.6			<b>Limits</b>					Prepared	Analyzed	Dil Fac
				30 - 110					04/09/24 10:23	05/02/24 07:42	1

**Lab Sample ID:** LCS 160-656024/2-A

**Matrix:** Water

**Analysis Batch:** 659654

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 656024

Analyte	Spike Added	LCS Result	LCS Qual	Total			RL	MDC	Unit	%Rec	Limits
				Uncert. (2σ+/-)	RL	%Rec					
Radium-226	11.3	10.55		1.31	1.00	93	0.241	pCi/L		75 - 125	
<b>Carrier</b>											
Ba Carrier	86.8			<b>Limits</b>					Prepared	Analyzed	Dil Fac
				30 - 110					04/09/24 10:23	05/02/24 07:42	1

## Method: 9320 - Radium-228 (GFPC)

**Lab Sample ID:** MB 160-656025/1-A

**Matrix:** Water

**Analysis Batch:** 659501

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 656025

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.8017		U	0.407	0.414	1.00	0.564	pCi/L	04/09/24 10:39	05/01/24 16:11	1
<b>Carrier</b>											
Ba Carrier	90.6			<b>Limits</b>					Prepared	Analyzed	Dil Fac
				30 - 110					04/09/24 10:39	05/01/24 16:11	1
Y Carrier	80.7			30 - 110					Prepared	Analyzed	Dil Fac
				30 - 110					04/09/24 10:39	05/01/24 16:11	1

**Lab Sample ID:** LCS 160-656025/2-A

**Matrix:** Water

**Analysis Batch:** 659501

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 656025

Analyte	Spike Added	LCS Result	LCS Qual	Total			RL	MDC	Unit	%Rec	Limits
				Uncert. (2σ+/-)	RL	%Rec					
Radium-228	8.98	10.27		1.42	1.00	114	0.574	pCi/L		75 - 125	
<b>Carrier</b>											
Ba Carrier	86.8			<b>Limits</b>					Prepared	Analyzed	Dil Fac
				30 - 110					04/09/24 10:39	05/01/24 16:11	1
Y Carrier	83.4			30 - 110					Prepared	Analyzed	Dil Fac
				30 - 110					04/09/24 10:39	05/01/24 16:11	1

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
 Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

**Rad**

**Prep Batch: 656024**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	PrecSep-21	
310-278282-2	MW5	Total/NA	Water	PrecSep-21	
310-278282-3	MW6	Total/NA	Water	PrecSep-21	
310-278282-4	MW8	Total/NA	Water	PrecSep-21	
310-278282-5	MW9	Total/NA	Water	PrecSep-21	
310-278282-6	MW13	Total/NA	Water	PrecSep-21	
310-278282-7	MW15	Total/NA	Water	PrecSep-21	
310-278282-8	MW17	Total/NA	Water	PrecSep-21	
310-278282-9	MW18	Total/NA	Water	PrecSep-21	
310-278282-10	MW19	Total/NA	Water	PrecSep-21	
310-278282-11	DUP1	Total/NA	Water	PrecSep-21	
MB 160-656024/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-656024/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

**Prep Batch: 656025**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278282-1	MW2	Total/NA	Water	PrecSep_0	
310-278282-2	MW5	Total/NA	Water	PrecSep_0	
310-278282-3	MW6	Total/NA	Water	PrecSep_0	
310-278282-4	MW8	Total/NA	Water	PrecSep_0	
310-278282-5	MW9	Total/NA	Water	PrecSep_0	
310-278282-6	MW13	Total/NA	Water	PrecSep_0	
310-278282-7	MW15	Total/NA	Water	PrecSep_0	
310-278282-8	MW17	Total/NA	Water	PrecSep_0	
310-278282-9	MW18	Total/NA	Water	PrecSep_0	
310-278282-10	MW19	Total/NA	Water	PrecSep_0	
310-278282-11	DUP1	Total/NA	Water	PrecSep_0	
MB 160-656025/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-656025/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

## **Client Sample ID: MW2**

Date Collected: 04/02/24 16:57

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659654	SCB	EET SL	05/02/24 07:45
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:14
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

## **Client Sample ID: MW5**

Date Collected: 04/03/24 10:25

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659654	SCB	EET SL	05/02/24 07:45
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:15
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

## **Client Sample ID: MW6**

Date Collected: 04/02/24 19:05

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:00
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:15
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

## **Client Sample ID: MW8**

Date Collected: 04/03/24 08:31

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:00
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:15
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

Eurofins Cedar Falls

## Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

### **Client Sample ID: MW9**

Date Collected: 04/02/24 14:11

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:00
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:15
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

### **Client Sample ID: MW13**

Date Collected: 04/02/24 15:47

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:00
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659502	SCB	EET SL	05/01/24 16:11
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

### **Client Sample ID: MW15**

Date Collected: 04/02/24 17:59

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:01
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:32
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

### **Client Sample ID: MW17**

Date Collected: 04/03/24 09:27

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:01
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659501	SCB	EET SL	05/01/24 16:32
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

Eurofins Cedar Falls

## Lab Chronicle

Client: Omaha Public Power District  
 Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

### **Client Sample ID: MW18**

Date Collected: 04/02/24 12:14

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:01
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659455	SCB	EET SL	05/01/24 18:12
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

### **Client Sample ID: MW19**

Date Collected: 04/02/24 13:19

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:01
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659455	SCB	EET SL	05/01/24 18:12
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

### **Client Sample ID: DUP1**

Date Collected: 04/02/24 00:00

Date Received: 04/04/24 16:00

**Lab Sample ID: 310-278282-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			656024	KAK	EET SL	04/09/24 10:23
Total/NA	Analysis	9315		1	659818	SCB	EET SL	05/02/24 08:01
Total/NA	Prep	PrecSep_0			656025	KAK	EET SL	04/09/24 10:39
Total/NA	Analysis	9320		1	659455	SCB	EET SL	05/01/24 18:12
Total/NA	Analysis	Ra226_Ra228		1	659961	FLC	EET SL	05/03/24 09:09

#### Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins Cedar Falls

## Accreditation/Certification Summary

Client: Omaha Public Power District  
 Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

### Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

## Method Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

### Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

### Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Environment Testing  
America



310-278282 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: OPPD			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE 4/4/24	TIME 1600	Received By: GM
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # 1 of 3
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ _____
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> 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):	0.1	Corrected Temp (°C):	0.1
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			
_____			
_____			
_____			



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: OPPD			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE 4/4/24	TIME 1600	Received By: GM
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
	<input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # 2 of 3
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> 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): 1.6	Corrected Temp (°C): 1.6		
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



## Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: OPPD			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE 4/4/24	TIME 1600	Received By: GM
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <u>3</u> of <u>3</u>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ _____
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> 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):	2.8	Corrected Temp (°C): 2.8	
<b>• Sample Container Temperature</b>			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			
_____			
_____			
_____			

## Chain of Custody Record

704 Enterprise Drive  
Cedar Falls IA 50613  
Phone (319) 277-2401 Fax (319) 277-2425

Client Information		Sampler Kyle K. Uhng		Lab PM Hayes Shawn M		Carrier Tracking No(s)		COC No.	
Client Contact: Kyle Uhng	Phone (531) 226-2515	E-Mail shawn.hayes@testamericainc.com						Page	
Company: Omaha Public Power District	Address: 444 South 16th Street Mall 9E/EP1	Due Date Requested	TAT Requested (days)					Job#	
City Omaha	State Zip NE 68102-2247	PO #	WO #						
Phone (531) 226-2515	Email. kkuhng@oppd.com	Project Name North Omaha Station CCR	TestAmerica Project # 31007560	SSOW#:					
Site North Omaha Station									
Analysis Requested									
Total Number of containers <input checked="" type="checkbox"/> <input type="checkbox"/>									
Preservation Codes									
A HCl	B NaOH	C -Zn Acetate	D Nitric Acid	E NaHSO4	F MeOH	G Anchors	H Ascorbic Acid	I Ice	J DI Water
M Hexane	N None	O AsNaO2	P Na2Ods	Q Na2S03	R -Na2S04	S H2S04	T TSP Dodecylbenzene Sulfonate	U Acetone	W pH 4-5
Z other (specify) Other	K -EDTA	L EDA							
Special Instructions/Note									
X 2540C TDS, 9056A Chloride, Fluoride, Sulfate									
Total 6020A CCR Appendix III and IV, 7470A Mercury									
9315 Ra226, 9320 Ra228, Combined Ra226 and Ra228									
Performance MSDS (Yes or No)									
Field Filtered Sample (Yes or No)									
Preservation Code: <input checked="" type="checkbox"/> D <input type="checkbox"/> D <input type="checkbox"/> N									
Matrix ( <sup>a</sup> water <sup>b</sup> -solid, <sup>c</sup> -water, <sup>d</sup> -tissue, A-Air)									
Sample Date									
Sample Time									
Sample Type (C=comp, G=grab)									
Sample (C=comp, G=grab)									
Sample Identification									
M/W2	4/3/24	16:51	G	W	N	X	X	X	
M/W5	4/3/24	10:35	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W6	4/2/24	19:05	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W8	4/3/24	8:31	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W9	4/3/24	15:11	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W13	4/7/24	15:11	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W15	4/2/24	17:59	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W17	4/3/24	9:27	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W18	4/2/24	10:14	G	W	N	X	X		4 CCR Appendix III and IV Constituents
M/W19	4/3/24	15:19	G	W	N	X	X		4 CCR Appendix III and IV Constituents
DUP1	4/7/24	--	G	W	N	X	X		4 CCR Appendix III and IV Constituents
Possible Hazard Identification									
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I II III IV Other (specify)									
Empty Kit Relinquished by <input type="checkbox"/>									
Relinquished by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Received by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Method of Shipment: <input type="checkbox"/>				
Relinquished by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Received by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Method of Shipment: <input type="checkbox"/>				
Relinquished by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Received by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Method of Shipment: <input type="checkbox"/>				
Relinquished by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Received by <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Method of Shipment: <input type="checkbox"/>				
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No									
Cooler Temperature(s): °C and Other Remarks:									

## Chain of Custody Record



Environment Testing

## **Client Information (Sub Contract 1 ah)**

Cedar Falls, IA 50613  
Phone: 319-277-2401 Fax: 319-277-2425

Client Information (Sub Contract Lab)				Sampler:		Lab PM		Carrier Tracking No(s):		COC No:	
				Phone:		E-Mail:		State of Origin:		310-71017.1	
Shipping/Receiving				Bob Michels		Bob Michels@eurofinsus.com		Nebraska		Page 1 of 2	
Company								Accreditations Required (See note):		Job #:	
TestAmerica Laboratories, Inc.								NIELAP - Oregon		310-278282-2	
Address:		13715 Rider Trail North,		Due Date Requested:		5/6/2024		TAT Requested (days):		Preservation Codes:	
City:		Earth City								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 Other:	
State, Zip:		MO. 63045		PO #:						M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Decadecahydrate U - Acetone V - MCAA W - H4-5 Y - Thizma Z - other (specify)	
Phone:		314-298-8566(Tel) 314-298-8757(Fax)		W/O #:							
Email:				Project #:		31007560		SSOW#:			
Project Name:		North Omaha Station CCR									
Site:											
Sample Identification = Client ID (Lab ID)				Sample Date		Sample Time		Sample Type (C=grab, G=grab, B=tissue Askt)		Matrix (Waters, Speciol, Oil, Organotin, Tissue Askt)	
										Preservation Code:	
MW2 (310-278282-1)		4/2/24		16:57		Central		Water		X X X X	
MW5 (310-278282-2)		4/3/24		10:25		Central		Water		X X X X	
MW6 (310-278282-3)		4/2/24		19:05		Central		Water		X X X X	
MW8 (310-278282-4)		4/3/24		08:31		Central		Water		X X X X	
MW9 (310-278282-5)		4/2/24		14:11		Central		Water		X X X X	
MW13 (310-278282-6)		4/2/24		15:47		Central		Water		X X X X	
MW15 (310-278282-7)		4/2/24		17:59		Central		Water		X X X X	
MW17 (310-278282-8)		4/3/24		09:27		Central		Water		X X X X	
MW18 (310-278282-9)		4/2/24		12:14		Central		Water		X X X X	
Primary Deliverable Rank: 2											
Deliverable Requested: I, II, III, IV, Other (specify)											
Possible Hazard Identification											
Unconfirmed											
Empty Kit Relinquished by:				Date/Time: 4/5/24 11:42		Company		Received by: Richard Thornley		Method of Shipment:	
Relinquished by										Date/Time: APR. 8 2024 08:50	
Relinquished by				Date/Time:		Company		Received by		Company	
Relinquished by				Date/Time:		Company		Received by		Date/Time:	
Custody Seals Intact:		Custody Seal No:								Cooler Temperature(s), Case and Other Remarks:	
A - Yes		B - No									

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyze & 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/test(s)/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.

Possibility Hazard Index

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

EMRKit Published by

Digitized by srujanika@gmail.com

✓ ✓ ✓

Published by

Relinquished by:

卷之三

Custody Seals Intact:  Custody Seal No.:

Δ Yes Δ No



## Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-278282-2

**Login Number: 278282**

**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		1
The cooler's custody seal, if present, is intact.	N/A		2
Sample custody seals, if present, are intact.	N/A		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
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: Omaha Public Power District

Job Number: 310-278282-2

**Login Number:** 278282

**List Source:** Eurofins St. Louis

**List Number:** 2

**List Creation:** 04/08/24 01:11 PM

**Creator:** Thornley, Richard W

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	N/A		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	N/A		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
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		

# Tracer/Carrier Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-278282-2

## Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
310-278282-1	MW2	90.1
310-278282-2	MW5	83.2
310-278282-3	MW6	76.9
310-278282-4	MW8	86.5
310-278282-5	MW9	54.3
310-278282-6	MW13	87.8
310-278282-7	MW15	94.7
310-278282-8	MW17	93.4
310-278282-9	MW18	81.0
310-278282-10	MW19	76.9
310-278282-11	DUP1	90.4
LCS 160-656024/2-A	Lab Control Sample	86.8
MB 160-656024/1-A	Method Blank	90.6

#### Tracer/Carrier Legend

Ba = Ba Carrier

## Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
310-278282-1	MW2	90.1	85.2
310-278282-2	MW5	83.2	84.9
310-278282-3	MW6	76.9	80.4
310-278282-4	MW8	86.5	84.5
310-278282-5	MW9	54.3	78.5
310-278282-6	MW13	87.8	87.5
310-278282-7	MW15	94.7	87.1
310-278282-8	MW17	93.4	87.5
310-278282-9	MW18	81.0	86.4
310-278282-10	MW19	76.9	85.6
310-278282-11	DUP1	90.4	83.4
LCS 160-656025/2-A	Lab Control Sample	86.8	83.4
MB 160-656025/1-A	Method Blank	90.6	80.7

#### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Eurofins Cedar Falls

This page intentionally left blank.

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kyle Uhing  
Omaha Public Power District  
Attn: Accounts Payable, 4E/EP-5  
444 South 16th Street Mall  
Omaha, Nebraska 68102-2247

Generated 11/5/2024 4:10:16 PM Revision 2

## JOB DESCRIPTION

North Omaha Station CCR

## JOB NUMBER

310-292010-1

# Eurofins Cedar Falls

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Generated  
11/5/2024 4:10:16 PM  
Revision 2

Authorized for release by  
Bob Michels, Project Manager I  
[Bob.Michels@et.eurofinsus.com](mailto:Bob.Michels@et.eurofinsus.com)  
(319)277-2401

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Case Narrative .....	4
Sample Summary .....	5
Detection Summary .....	6
Client Sample Results .....	9
Definitions .....	20
QC Sample Results .....	21
QC Association .....	25
Chronicle .....	28
Certification Summary .....	32
Method Summary .....	33
Chain of Custody .....	34
Receipt Checklists .....	38

# Case Narrative

Client: Omaha Public Power District  
Project: North Omaha Station CCR

Job ID: 310-292010-1

**Job ID: 310-292010-1**

**Eurofins Cedar Falls**

**Job Narrative  
310-292010-1**

## REVISION

The report being provided is a revision of the original report sent on 10/16/2024. The report (revision 2) is being revised due to Revised to remove results for iron.

### Report revision history

Revision 1 - 11/5/2024 - Reason - Revised to update project name.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 10/4/2024 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.4°C, 2.7°C and 3.4°C.

### HPLC/IC

Method 9056A\_ORGFM\_28D: The following sample was diluted due to the nature of the sample matrix: DUP1 (310-292010-11). Elevated reporting limits (RLs) are provided.

Method 9056A\_ORGFM\_28D: The following samples were diluted due to the nature of the sample matrix: MW2 (310-292010-1), MW5 (310-292010-2), MW6 (310-292010-3), MW8 (310-292010-4), MW13 (310-292010-6), MW15 (310-292010-7), MW17 (310-292010-8) and MW19 (310-292010-10). Elevated reporting limits (RLs) are provided.

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

### Metals

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

### General Chemistry

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

# Sample Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-292010-1	MW2	Water	10/01/24 16:01	10/04/24 16:30
310-292010-2	MW5	Water	10/03/24 13:12	10/04/24 16:30
310-292010-3	MW6	Water	10/01/24 17:44	10/04/24 16:30
310-292010-4	MW8	Water	10/03/24 10:48	10/04/24 16:30
310-292010-5	MW9	Water	10/01/24 13:27	10/04/24 16:30
310-292010-6	MW13	Water	10/01/24 14:30	10/04/24 16:30
310-292010-7	MW15	Water	10/01/24 16:48	10/04/24 16:30
310-292010-8	MW17	Water	10/03/24 11:55	10/04/24 16:30
310-292010-9	MW18	Water	10/01/24 12:04	10/04/24 16:30
310-292010-10	MW19	Water	10/01/24 12:39	10/04/24 16:30
310-292010-11	DUP1	Water	10/03/24 00:00	10/04/24 16:30

# Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Client Sample ID: MW2

## Lab Sample ID: 310-292010-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22.4		5.00	2.25	mg/L	5	9056A	Total/NA	
Sulfate	731		50.0	21.0	mg/L	50	9056A	Total/NA	
Arsenic	0.177		0.00200	0.000530	mg/L	1	6020B	Total/NA	
Barium	0.132		0.00200	0.000660	mg/L	1	6020B	Total/NA	
Boron	1.19		0.100	0.0760	mg/L	1	6020B	Total/NA	
Calcium	333		0.500	0.190	mg/L	1	6020B	Total/NA	
Cobalt	0.000932			0.000500	0.000170 mg/L	1	6020B	Total/NA	
Lithium	0.0511		0.0100	0.00250	mg/L	1	6020B	Total/NA	
Thallium	0.00105		0.00100	0.000570	mg/L	1	6020B	Total/NA	
Total Dissolved Solids	1720		50.0	42.0	mg/L	1	SM 2540C	Total/NA	

## Client Sample ID: MW5

## Lab Sample ID: 310-292010-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	38.3		5.00	2.25	mg/L	5	9056A	Total/NA	
Sulfate	1060		50.0	21.0	mg/L	50	9056A	Total/NA	
Arsenic	0.0414		0.00200	0.000530	mg/L	1	6020B	Total/NA	
Barium	0.0517		0.00200	0.000660	mg/L	1	6020B	Total/NA	
Boron	0.603		0.100	0.0760	mg/L	1	6020B	Total/NA	
Calcium	412		0.500	0.190	mg/L	1	6020B	Total/NA	
Cobalt	0.00104			0.000500	0.000170 mg/L	1	6020B	Total/NA	
Lithium	0.0781		0.0100	0.00250	mg/L	1	6020B	Total/NA	
Molybdenum	0.00222		0.00200	0.00130	mg/L	1	6020B	Total/NA	
Thallium	0.000650 J		0.00100	0.000570	mg/L	1	6020B	Total/NA	
Total Dissolved Solids	2010		250	210	mg/L	1	SM 2540C	Total/NA	

## Client Sample ID: MW6

## Lab Sample ID: 310-292010-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	326		5.00	2.25	mg/L	5	9056A	Total/NA	
Sulfate	248		5.00	2.10	mg/L	5	9056A	Total/NA	
Arsenic	0.0116		0.00200	0.000530	mg/L	1	6020B	Total/NA	
Barium	0.160		0.00200	0.000660	mg/L	1	6020B	Total/NA	
Boron	0.654		0.100	0.0760	mg/L	1	6020B	Total/NA	
Calcium	294		0.500	0.190	mg/L	1	6020B	Total/NA	
Cobalt	0.00530			0.000500	0.000170 mg/L	1	6020B	Total/NA	
Lead	0.000265 J		0.000500	0.000260	mg/L	1	6020B	Total/NA	
Lithium	0.0506		0.0100	0.00250	mg/L	1	6020B	Total/NA	
Molybdenum	0.0582		0.00200	0.00130	mg/L	1	6020B	Total/NA	
Thallium	0.00154		0.00100	0.000570	mg/L	1	6020B	Total/NA	
Total Dissolved Solids	1360		250	210	mg/L	1	SM 2540C	Total/NA	

## Client Sample ID: MW8

## Lab Sample ID: 310-292010-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14.6		5.00	2.25	mg/L	5	9056A	Total/NA	
Sulfate	633		50.0	21.0	mg/L	50	9056A	Total/NA	
Arsenic	0.0137		0.00200	0.000530	mg/L	1	6020B	Total/NA	
Barium	0.0975		0.00200	0.000660	mg/L	1	6020B	Total/NA	
Boron	2.66		0.100	0.0760	mg/L	1	6020B	Total/NA	
Calcium	172		0.500	0.190	mg/L	1	6020B	Total/NA	
Cobalt	0.000387 J		0.000500	0.000170	mg/L	1	6020B	Total/NA	

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## **Client Sample ID: MW8 (Continued)**

## **Lab Sample ID: 310-292010-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.0147		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.0843		0.00200	0.00130	mg/L	1		6020B	Total/NA
Total Dissolved Solids	978		50.0	42.0	mg/L	1		SM 2540C	Total/NA

## **Client Sample ID: MW9**

## **Lab Sample ID: 310-292010-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	144		5.00	2.25	mg/L	5		9056A	Total/NA
Fluoride	0.399	J	1.00	0.375	mg/L	5		9056A	Total/NA
Sulfate	13.4		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.00113	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.596		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	0.116		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	155		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.000976		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.00222		0.000500	0.000260	mg/L	1		6020B	Total/NA
Lithium	0.0519		0.0100	0.00250	mg/L	1		6020B	Total/NA
Thallium	0.00135		0.00100	0.000570	mg/L	1		6020B	Total/NA
Total Dissolved Solids	706		50.0	42.0	mg/L	1		SM 2540C	Total/NA

## **Client Sample ID: MW13**

## **Lab Sample ID: 310-292010-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.65		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	740		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0439		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0613		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	1.40		0.100	0.0760	mg/L	1		6020B	Total/NA
Cadmium	0.000489		0.000200	0.000100	mg/L	1		6020B	Total/NA
Calcium	146		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.000321	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lithium	0.0311		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	1.07		0.00200	0.00130	mg/L	1		6020B	Total/NA
Selenium	0.00148	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Thallium	0.000696	J	0.00100	0.000570	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1330		250	210	mg/L	1		SM 2540C	Total/NA

## **Client Sample ID: MW15**

## **Lab Sample ID: 310-292010-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.37		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	519		50.0	21.0	mg/L	50		9056A	Total/NA
Antimony	0.00200		0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.00230		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0608		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	3.46		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	211		0.500	0.190	mg/L	1		6020B	Total/NA
Chromium	0.0121		0.00500	0.00120	mg/L	1		6020B	Total/NA
Lithium	0.00993	J	0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.199		0.00200	0.00130	mg/L	1		6020B	Total/NA
Selenium	0.0537		0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Dissolved Solids	952		50.0	42.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Client Sample ID: MW17

## Lab Sample ID: 310-292010-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	43.4		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	897		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0234		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0430		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	0.733		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	391		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.0116		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lithium	0.117		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.00239		0.00200	0.00130	mg/L	1		6020B	Total/NA
Thallium	0.00166		0.00100	0.000570	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1910		250	210	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW18

## Lab Sample ID: 310-292010-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.44	J	5.00	2.25	mg/L	5		9056A	Total/NA
Fluoride	0.493	J	1.00	0.375	mg/L	5		9056A	Total/NA
Arsenic	0.00137	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.278		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	0.0828	J	0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	95.0		0.500	0.190	mg/L	1		6020B	Total/NA
Lead	0.000498	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Lithium	0.0294		0.0100	0.00250	mg/L	1		6020B	Total/NA
Total Dissolved Solids	416		50.0	42.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW19

## Lab Sample ID: 310-292010-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17.3		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	37.6		5.00	2.10	mg/L	5		9056A	Total/NA
Barium	0.524		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	0.101		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	119		0.500	0.190	mg/L	1		6020B	Total/NA
Lithium	0.0397		0.0100	0.00250	mg/L	1		6020B	Total/NA
Total Dissolved Solids	482		50.0	42.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: DUP1

## Lab Sample ID: 310-292010-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	44.1		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	927		20.0	8.40	mg/L	20		9056A	Total/NA
Arsenic	0.0210		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0430		0.00200	0.000660	mg/L	1		6020B	Total/NA
Boron	0.691		0.100	0.0760	mg/L	1		6020B	Total/NA
Calcium	383		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.0119		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lithium	0.116		0.0100	0.00250	mg/L	1		6020B	Total/NA
Molybdenum	0.00190	J	0.00200	0.00130	mg/L	1		6020B	Total/NA
Thallium	0.00131		0.00100	0.000570	mg/L	1		6020B	Total/NA
Total Dissolved Solids	1890		250	210	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW2**

**Lab Sample ID: 310-292010-1**

**Matrix: Water**

Date Collected: 10/01/24 16:01

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		5.00	2.25	mg/L			10/12/24 11:16	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 11:16	5
Sulfate	731		50.0	21.0	mg/L			10/12/24 19:51	50

## 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			10/08/24 09:30	10/09/24 13:48
Arsenic	0.177		0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 13:48
Barium	0.132		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 13:48
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 13:48
Boron	1.19		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 13:48
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 13:48
Calcium	333		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 13:48
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 13:48
Cobalt	0.000932		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 13:48
Lead	<0.000260		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 13:48
Lithium	0.0511		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 13:48
Molybdenum	<0.00130		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 13:48
Selenium	<0.00140		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 13:48
Thallium	0.00105		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 15:57

## 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			10/12/24 10:55	10/14/24 11:56

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1720		50.0	42.0	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW5**

**Lab Sample ID: 310-292010-2**

**Matrix: Water**

Date Collected: 10/03/24 13:12

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.3		5.00	2.25	mg/L			10/12/24 11:32	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 11:32	5
Sulfate	1060		50.0	21.0	mg/L			10/12/24 11:47	50

## 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			10/08/24 09:30	10/09/24 13:50
Arsenic	0.0414		0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 13:50
Barium	0.0517		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 13:50
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 13:50
Boron	0.603		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 13:50
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 13:50
Calcium	412		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 13:50
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 13:50
Cobalt	0.00104		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 13:50
Lead	<0.000260		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 13:50
Lithium	0.0781		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 13:50
Molybdenum	0.00222		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 13:50
Selenium	<0.00140		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 13:50
Thallium	0.000650 J		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 15:59

## 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			10/12/24 10:55	10/14/24 11:58

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2010		250	210	mg/L			10/08/24 16:50	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW6**

**Lab Sample ID: 310-292010-3**

**Matrix: Water**

Date Collected: 10/01/24 17:44  
Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	326		5.00	2.25	mg/L			10/12/24 12:34	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 12:34	5
Sulfate	248		5.00	2.10	mg/L			10/12/24 12:34	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			10/09/24 13:53	1
Arsenic	0.0116		0.00200	0.000530	mg/L			10/09/24 13:53	1
Barium	0.160		0.00200	0.000660	mg/L			10/09/24 13:53	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/09/24 13:53	1
Boron	0.654		0.100	0.0760	mg/L			10/09/24 13:53	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/09/24 13:53	1
Calcium	294		0.500	0.190	mg/L			10/09/24 13:53	1
Chromium	<0.00120		0.00500	0.00120	mg/L			10/09/24 13:53	1
Cobalt	0.00530		0.000500	0.000170	mg/L			10/09/24 13:53	1
Lead	0.000265 J		0.000500	0.000260	mg/L			10/09/24 13:53	1
Lithium	0.0506		0.0100	0.00250	mg/L			10/09/24 13:53	1
Molybdenum	0.0582		0.00200	0.00130	mg/L			10/09/24 13:53	1
Selenium	<0.00140		0.00500	0.00140	mg/L			10/09/24 13:53	1
Thallium	0.00154		0.00100	0.000570	mg/L			10/14/24 16:10	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			10/12/24 10:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1360		250	210	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW8**

Date Collected: 10/03/24 10:48

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-4**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.6		5.00	2.25	mg/L			10/12/24 12:50	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 12:50	5
Sulfate	633		50.0	21.0	mg/L			10/12/24 13:05	50

## 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			10/08/24 09:30	10/09/24 13:57
Arsenic	0.0137		0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 13:57
Barium	0.0975		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 13:57
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 13:57
Boron	2.66		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 13:57
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 13:57
Calcium	172		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 13:57
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 13:57
Cobalt	0.000387 J		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 13:57
Lead	<0.000260		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 13:57
Lithium	0.0147		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 13:57
Molybdenum	0.0843		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 13:57
Selenium	<0.00140		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 13:57
Thallium	<0.000570		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 16:15

## 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			10/12/24 10:55	10/14/24 12:22

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	978		50.0	42.0	mg/L			10/08/24 16:50	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW9**

**Lab Sample ID: 310-292010-5**

**Matrix: Water**

Date Collected: 10/01/24 13:27

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	144		5.00	2.25	mg/L			10/12/24 13:21	5
Fluoride	0.399	J	1.00	0.375	mg/L			10/12/24 13:21	5
Sulfate	13.4		5.00	2.10	mg/L			10/12/24 13:21	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			10/08/24 09:30	10/09/24 13:59
Arsenic	0.00113	J	0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 13:59
Barium	0.596		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 13:59
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 13:59
Boron	0.116		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 13:59
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 13:59
Calcium	155		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 13:59
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 13:59
Cobalt	0.000976		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 13:59
Lead	0.00222		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 13:59
Lithium	0.0519		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 13:59
Molybdenum	<0.00130		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 13:59
Selenium	<0.00140		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 13:59
Thallium	0.00135		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 16:17

## 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			10/12/24 10:55	10/14/24 12:25

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	706		50.0	42.0	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW13**

**Lab Sample ID: 310-292010-6**

**Matrix: Water**

Date Collected: 10/01/24 14:30

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.65		5.00	2.25	mg/L			10/12/24 13:36	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 13:36	5
Sulfate	740		50.0	21.0	mg/L			10/12/24 13:52	50

## 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			10/08/24 09:30	10/09/24 14:01
Arsenic	0.0439		0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 14:01
Barium	0.0613		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 14:01
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 14:01
Boron	1.40		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 14:01
Cadmium	0.000489		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 14:01
Calcium	146		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 14:01
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 14:01
Cobalt	0.000321 J		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 14:01
Lead	<0.000260		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 14:01
Lithium	0.0311		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 14:01
Molybdenum	1.07		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 14:01
Selenium	0.00148 J		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 14:01
Thallium	0.000696 J		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 16:19

## 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			10/12/24 10:55	10/14/24 12:27

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1330		250	210	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW15**

**Lab Sample ID: 310-292010-7**

**Matrix: Water**

Date Collected: 10/01/24 16:48

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.37		5.00	2.25	mg/L			10/12/24 14:08	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 14:08	5
Sulfate	519		50.0	21.0	mg/L			10/12/24 14:23	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00200		0.00200	0.00100	mg/L			10/09/24 14:12	1
Arsenic	0.00230		0.00200	0.000530	mg/L			10/09/24 14:12	1
Barium	0.0608		0.00200	0.000660	mg/L			10/09/24 14:12	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/09/24 14:12	1
Boron	3.46		0.100	0.0760	mg/L			10/09/24 14:12	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/09/24 14:12	1
Calcium	211		0.500	0.190	mg/L			10/09/24 14:12	1
Chromium	0.0121		0.00500	0.00120	mg/L			10/09/24 14:12	1
Cobalt	<0.000170		0.000500	0.000170	mg/L			10/09/24 14:12	1
Lead	<0.000260		0.000500	0.000260	mg/L			10/09/24 14:12	1
Lithium	0.00993 J		0.0100	0.00250	mg/L			10/09/24 14:12	1
Molybdenum	0.199		0.00200	0.00130	mg/L			10/09/24 14:12	1
Selenium	0.0537		0.00500	0.00140	mg/L			10/09/24 14:12	1
Thallium	<0.000570		0.00100	0.000570	mg/L			10/14/24 16:21	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			10/14/24 12:29	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	952		50.0	42.0	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW17**

**Lab Sample ID: 310-292010-8**

**Matrix: Water**

Date Collected: 10/03/24 11:55

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.4		5.00	2.25	mg/L			10/12/24 14:39	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 14:39	5
Sulfate	897		50.0	21.0	mg/L			10/12/24 14:54	50

## 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			10/08/24 09:30	10/09/24 14:14
Arsenic	0.0234		0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 14:14
Barium	0.0430		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 14:14
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 14:14
Boron	0.733		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 14:14
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 14:14
Calcium	391		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 14:14
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 14:14
Cobalt	0.0116		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 14:14
Lead	<0.000260		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 14:14
Lithium	0.117		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 14:14
Molybdenum	0.00239		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 14:14
Selenium	<0.00140		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 14:14
Thallium	0.00166		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 16:24

## 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			10/12/24 10:55	10/14/24 12:31

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1910		250	210	mg/L			10/08/24 16:50	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW18**

**Lab Sample ID: 310-292010-9**

**Matrix: Water**

Date Collected: 10/01/24 12:04

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.44	J	5.00	2.25	mg/L			10/12/24 15:41	5
Fluoride	0.493	J	1.00	0.375	mg/L			10/12/24 15:41	5
Sulfate	<2.10		5.00	2.10	mg/L			10/12/24 15:41	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		10/08/24 09:30	10/09/24 14:16	1
Arsenic	0.00137	J	0.00200	0.000530	mg/L		10/08/24 09:30	10/09/24 14:16	1
Barium	0.278		0.00200	0.000660	mg/L		10/08/24 09:30	10/09/24 14:16	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		10/08/24 09:30	10/09/24 14:16	1
Boron	0.0828	J	0.100	0.0760	mg/L		10/08/24 09:30	10/09/24 14:16	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		10/08/24 09:30	10/09/24 14:16	1
Calcium	95.0		0.500	0.190	mg/L		10/08/24 09:30	10/09/24 14:16	1
Chromium	<0.00120		0.00500	0.00120	mg/L		10/08/24 09:30	10/09/24 14:16	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		10/08/24 09:30	10/09/24 14:16	1
Lead	0.000498	J	0.000500	0.000260	mg/L		10/08/24 09:30	10/09/24 14:16	1
Lithium	0.0294		0.0100	0.00250	mg/L		10/08/24 09:30	10/09/24 14:16	1
Molybdenum	<0.00130		0.00200	0.00130	mg/L		10/08/24 09:30	10/09/24 14:16	1
Selenium	<0.00140		0.00500	0.00140	mg/L		10/08/24 09:30	10/09/24 14:16	1
Thallium	<0.000570		0.00100	0.000570	mg/L		10/08/24 09:30	10/14/24 16:26	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		10/12/24 10:55	10/14/24 12:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	416		50.0	42.0	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: MW19**

**Lab Sample ID: 310-292010-10**

Date Collected: 10/01/24 12:39

Matrix: Water

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		5.00	2.25	mg/L			10/12/24 15:57	5
Fluoride	<0.375		1.00	0.375	mg/L			10/12/24 15:57	5
Sulfate	37.6		5.00	2.10	mg/L			10/12/24 15:57	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			10/08/24 09:30	10/09/24 14:19
Arsenic	<0.000530		0.00200	0.000530	mg/L			10/08/24 09:30	10/09/24 14:19
Barium	0.524		0.00200	0.000660	mg/L			10/08/24 09:30	10/09/24 14:19
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/08/24 09:30	10/09/24 14:19
Boron	0.101		0.100	0.0760	mg/L			10/08/24 09:30	10/09/24 14:19
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/08/24 09:30	10/09/24 14:19
Calcium	119		0.500	0.190	mg/L			10/08/24 09:30	10/09/24 14:19
Chromium	<0.00120		0.00500	0.00120	mg/L			10/08/24 09:30	10/09/24 14:19
Cobalt	<0.000170		0.000500	0.000170	mg/L			10/08/24 09:30	10/09/24 14:19
Lead	<0.000260		0.000500	0.000260	mg/L			10/08/24 09:30	10/09/24 14:19
Lithium	0.0397		0.0100	0.00250	mg/L			10/08/24 09:30	10/09/24 14:19
Molybdenum	<0.00130		0.00200	0.00130	mg/L			10/08/24 09:30	10/09/24 14:19
Selenium	<0.00140		0.00500	0.00140	mg/L			10/08/24 09:30	10/09/24 14:19
Thallium	<0.000570		0.00100	0.000570	mg/L			10/08/24 09:30	10/14/24 16:28

## 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			10/12/24 10:55	10/14/24 12:35

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	482		50.0	42.0	mg/L			10/07/24 20:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

**Client Sample ID: DUP1**

**Lab Sample ID: 310-292010-11**

Date Collected: 10/03/24 00:00

Matrix: Water

Date Received: 10/04/24 16:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.1		5.00	2.25	mg/L			10/11/24 11:20	5
Fluoride	<0.375		1.00	0.375	mg/L			10/11/24 11:20	5
Sulfate	927		20.0	8.40	mg/L			10/12/24 10:29	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L			10/09/24 14:21	1
Arsenic	0.0210		0.00200	0.000530	mg/L			10/09/24 14:21	1
Barium	0.0430		0.00200	0.000660	mg/L			10/09/24 14:21	1
Beryllium	<0.000330		0.00100	0.000330	mg/L			10/09/24 14:21	1
Boron	0.691		0.100	0.0760	mg/L			10/09/24 14:21	1
Cadmium	<0.000100		0.000200	0.000100	mg/L			10/09/24 14:21	1
Calcium	383		0.500	0.190	mg/L			10/09/24 14:21	1
Chromium	<0.00120		0.00500	0.00120	mg/L			10/09/24 14:21	1
Cobalt	0.0119		0.000500	0.000170	mg/L			10/09/24 14:21	1
Lead	<0.000260		0.000500	0.000260	mg/L			10/09/24 14:21	1
Lithium	0.116		0.0100	0.00250	mg/L			10/09/24 14:21	1
Molybdenum	0.00190 J		0.00200	0.00130	mg/L			10/09/24 14:21	1
Selenium	<0.00140		0.00500	0.00140	mg/L			10/09/24 14:21	1
Thallium	0.00131		0.00100	0.000570	mg/L			10/14/24 16:30	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			10/14/24 12:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1890		250	210	mg/L			10/08/24 16:50	1

# Definitions/Glossary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Qualifiers

### HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## 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

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID:** MB 310-436062/3

**Matrix:** Water

**Analysis Batch:** 436062

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.450		1.00	0.450	mg/L			10/11/24 09:41	1
Fluoride	<0.0750		0.200	0.0750	mg/L			10/11/24 09:41	1
Sulfate	<0.420		1.00	0.420	mg/L			10/11/24 09:41	1

**Lab Sample ID:** LCS 310-436062/4

**Matrix:** Water

**Analysis Batch:** 436062

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride		10.0	9.686		mg/L		97	90 - 110
Fluoride		2.00	1.994		mg/L		100	90 - 110
Sulfate		10.0	10.07		mg/L		101	90 - 110

**Lab Sample ID:** MB 310-436259/3

**Matrix:** Water

**Analysis Batch:** 436259

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.450		1.00	0.450	mg/L			10/12/24 10:45	1
Fluoride	<0.0750		0.200	0.0750	mg/L			10/12/24 10:45	1
Sulfate	<0.420		1.00	0.420	mg/L			10/12/24 10:45	1

**Lab Sample ID:** LCS 310-436259/4

**Matrix:** Water

**Analysis Batch:** 436259

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride		10.0	9.513		mg/L		95	90 - 110
Fluoride		2.00	1.993		mg/L		100	90 - 110
Sulfate		10.0	9.929		mg/L		99	90 - 110

**Lab Sample ID:** 310-292010-10 MS

**Matrix:** Water

**Analysis Batch:** 436259

**Client Sample ID:** MW19  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	17.3		25.0	41.29		mg/L		96	80 - 120
Fluoride	<0.375		5.00	5.317		mg/L		106	80 - 120
Sulfate	37.6		25.0	62.41		mg/L		99	80 - 120

**Lab Sample ID:** 310-292010-10 MSD

**Matrix:** Water

**Analysis Batch:** 436259

**Client Sample ID:** MW19  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	17.3		25.0	40.86		mg/L		94	80 - 120	1	15
Fluoride	<0.375		5.00	5.369		mg/L		107	80 - 120	1	15
Sulfate	37.6		25.0	62.07		mg/L		98	80 - 120	1	15

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

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

**Lab Sample ID:** MB 310-435458/1-A

**Matrix:** Water

**Analysis Batch:** 435770

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 435458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		10/08/24 09:30	10/09/24 13:11	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		10/08/24 09:30	10/09/24 13:11	1
Barium	<0.000660		0.00200	0.000660	mg/L		10/08/24 09:30	10/09/24 13:11	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		10/08/24 09:30	10/09/24 13:11	1
Boron	<0.0760		0.100	0.0760	mg/L		10/08/24 09:30	10/09/24 13:11	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		10/08/24 09:30	10/09/24 13:11	1
Calcium	<0.190		0.500	0.190	mg/L		10/08/24 09:30	10/09/24 13:11	1
Chromium	<0.00120		0.00500	0.00120	mg/L		10/08/24 09:30	10/09/24 13:11	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		10/08/24 09:30	10/09/24 13:11	1
Lead	<0.000260		0.000500	0.000260	mg/L		10/08/24 09:30	10/09/24 13:11	1
Lithium	<0.00250		0.0100	0.00250	mg/L		10/08/24 09:30	10/09/24 13:11	1
Molybdenum	<0.00130		0.00200	0.00130	mg/L		10/08/24 09:30	10/09/24 13:11	1
Selenium	<0.00140		0.00500	0.00140	mg/L		10/08/24 09:30	10/09/24 13:11	1

**Lab Sample ID:** MB 310-435458/1-A

**Matrix:** Water

**Analysis Batch:** 436234

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 435458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.000570		0.00100	0.000570	mg/L		10/08/24 09:30	10/14/24 15:23	1

**Lab Sample ID:** LCS 310-435458/2-A

**Matrix:** Water

**Analysis Batch:** 435770

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 435458

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limts
Antimony	0.200	0.2319		mg/L		116	80 - 120
Arsenic	0.200	0.2123		mg/L		106	80 - 120
Barium	0.100	0.1055		mg/L		106	80 - 120
Beryllium	0.100	0.09815		mg/L		98	80 - 120
Boron	0.200	0.1999		mg/L		100	80 - 120
Cadmium	0.100	0.09947		mg/L		99	80 - 120
Calcium	2.00	2.016		mg/L		101	80 - 120
Chromium	0.100	0.09564		mg/L		96	80 - 120
Cobalt	0.100	0.1103		mg/L		110	80 - 120
Iron	0.200	0.2359		mg/L		118	80 - 120
Lead	0.200	0.2107		mg/L		105	80 - 120
Lithium	0.200	0.2036		mg/L		102	80 - 120
Molybdenum	0.200	0.2002		mg/L		100	80 - 120
Selenium	0.400	0.3953		mg/L		99	80 - 120

**Lab Sample ID:** LCS 310-435458/2-A

**Matrix:** Water

**Analysis Batch:** 436234

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 435458

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limts
Thallium	0.100	0.08151		mg/L		82	80 - 120

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

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

**Lab Sample ID:** 310-292010-3 DU

**Matrix:** Water

**Analysis Batch:** 435770

**Client Sample ID:** MW6

**Prep Type:** Total/NA

**Prep Batch:** 435458

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.00100		<0.00100		mg/L		NC	20
Arsenic	0.0116		0.01169		mg/L		0.6	20
Barium	0.160		0.1655		mg/L		3	20
Beryllium	<0.000330		<0.000330		mg/L		NC	20
Boron	0.654		0.6516		mg/L		0.4	20
Cadmium	<0.000100		<0.000100		mg/L		NC	20
Calcium	294		306.7		mg/L		4	20
Chromium	<0.00120		<0.00120		mg/L		NC	20
Cobalt	0.00530		0.005264		mg/L		0.7	20
Lead	0.000265 J		0.0002660 J		mg/L		0.4	20
Lithium	0.0506		0.04993		mg/L		1	20
Molybdenum	0.0582		0.05954		mg/L		2	20
Selenium	<0.00140		<0.00140		mg/L		NC	20

**Lab Sample ID:** 310-292010-3 DU

**Matrix:** Water

**Analysis Batch:** 436234

**Client Sample ID:** MW6

**Prep Type:** Total/NA

**Prep Batch:** 435458

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Thallium	0.00154		0.001652		mg/L		7	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID:** MB 310-436040/1-A

**Matrix:** Water

**Analysis Batch:** 436171

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 436040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		10/12/24 10:55	10/14/24 11:35	1

**Lab Sample ID:** LCS 310-436040/2-A

**Matrix:** Water

**Analysis Batch:** 436171

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 436040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001803		mg/L		108	80 - 120

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID:** MB 310-435463/1

**Matrix:** Water

**Analysis Batch:** 435463

**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	<42.0		50.0	42.0	mg/L		10/07/24 20:05		1

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

**Lab Sample ID: LCS 310-435463/2**

**Matrix: Water**

**Analysis Batch: 435463**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	5
Total Dissolved Solids	1000	1050		mg/L	105		88 - 110	6

**Lab Sample ID: 310-292010-1 DU**

**Matrix: Water**

**Analysis Batch: 435463**

**Client Sample ID: MW2**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	8
Total Dissolved Solids	1720		1728		mg/L		0.7	9

**Lab Sample ID: MB 310-435588/1**

**Matrix: Water**

**Analysis Batch: 435588**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	12
Total Dissolved Solids	<42.0		50.0	42.0	mg/L			10/08/24 16:50		1

**Lab Sample ID: LCS 310-435588/2**

**Matrix: Water**

**Analysis Batch: 435588**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	13
Total Dissolved Solids	1000	1030		mg/L	103		88 - 110	14

**Lab Sample ID: 310-292010-2 DU**

**Matrix: Water**

**Analysis Batch: 435588**

**Client Sample ID: MW5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit	15
Total Dissolved Solids	2010		1990		mg/L		1	16	16

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## HPLC/IC

### Analysis Batch: 436062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-11	DUP1	Total/NA	Water	9056A	
310-292010-11	DUP1	Total/NA	Water	9056A	
MB 310-436062/3	Method Blank	Total/NA	Water	9056A	
LCS 310-436062/4	Lab Control Sample	Total/NA	Water	9056A	

### Analysis Batch: 436259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	9056A	
310-292010-1	MW2	Total/NA	Water	9056A	
310-292010-2	MW5	Total/NA	Water	9056A	
310-292010-2	MW5	Total/NA	Water	9056A	
310-292010-3	MW6	Total/NA	Water	9056A	
310-292010-4	MW8	Total/NA	Water	9056A	
310-292010-4	MW8	Total/NA	Water	9056A	
310-292010-5	MW9	Total/NA	Water	9056A	
310-292010-6	MW13	Total/NA	Water	9056A	
310-292010-6	MW13	Total/NA	Water	9056A	
310-292010-7	MW15	Total/NA	Water	9056A	
310-292010-7	MW15	Total/NA	Water	9056A	
310-292010-8	MW17	Total/NA	Water	9056A	
310-292010-8	MW17	Total/NA	Water	9056A	
310-292010-9	MW18	Total/NA	Water	9056A	
310-292010-10	MW19	Total/NA	Water	9056A	
MB 310-436259/3	Method Blank	Total/NA	Water	9056A	
LCS 310-436259/4	Lab Control Sample	Total/NA	Water	9056A	
310-292010-10 MS	MW19	Total/NA	Water	9056A	
310-292010-10 MSD	MW19	Total/NA	Water	9056A	

## Metals

### Prep Batch: 435458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	3005A	
310-292010-2	MW5	Total/NA	Water	3005A	
310-292010-3	MW6	Total/NA	Water	3005A	
310-292010-4	MW8	Total/NA	Water	3005A	
310-292010-5	MW9	Total/NA	Water	3005A	
310-292010-6	MW13	Total/NA	Water	3005A	
310-292010-7	MW15	Total/NA	Water	3005A	
310-292010-8	MW17	Total/NA	Water	3005A	
310-292010-9	MW18	Total/NA	Water	3005A	
310-292010-10	MW19	Total/NA	Water	3005A	
310-292010-11	DUP1	Total/NA	Water	3005A	
MB 310-435458/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-435458/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-292010-3 DU	MW6	Total/NA	Water	3005A	

### Analysis Batch: 435770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	6020B	435458
310-292010-2	MW5	Total/NA	Water	6020B	435458

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Metals (Continued)

### Analysis Batch: 435770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-3	MW6	Total/NA	Water	6020B	435458
310-292010-4	MW8	Total/NA	Water	6020B	435458
310-292010-5	MW9	Total/NA	Water	6020B	435458
310-292010-6	MW13	Total/NA	Water	6020B	435458
310-292010-7	MW15	Total/NA	Water	6020B	435458
310-292010-8	MW17	Total/NA	Water	6020B	435458
310-292010-9	MW18	Total/NA	Water	6020B	435458
310-292010-10	MW19	Total/NA	Water	6020B	435458
310-292010-11	DUP1	Total/NA	Water	6020B	435458
MB 310-435458/1-A	Method Blank	Total/NA	Water	6020B	435458
LCS 310-435458/2-A	Lab Control Sample	Total/NA	Water	6020B	435458
310-292010-3 DU	MW6	Total/NA	Water	6020B	435458

### Prep Batch: 436040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	7470A	11
310-292010-2	MW5	Total/NA	Water	7470A	12
310-292010-3	MW6	Total/NA	Water	7470A	13
310-292010-4	MW8	Total/NA	Water	7470A	14
310-292010-5	MW9	Total/NA	Water	7470A	
310-292010-6	MW13	Total/NA	Water	7470A	
310-292010-7	MW15	Total/NA	Water	7470A	
310-292010-8	MW17	Total/NA	Water	7470A	
310-292010-9	MW18	Total/NA	Water	7470A	
310-292010-10	MW19	Total/NA	Water	7470A	
310-292010-11	DUP1	Total/NA	Water	7470A	
MB 310-436040/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-436040/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Analysis Batch: 436171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	7470A	436040
310-292010-2	MW5	Total/NA	Water	7470A	436040
310-292010-3	MW6	Total/NA	Water	7470A	436040
310-292010-4	MW8	Total/NA	Water	7470A	436040
310-292010-5	MW9	Total/NA	Water	7470A	436040
310-292010-6	MW13	Total/NA	Water	7470A	436040
310-292010-7	MW15	Total/NA	Water	7470A	436040
310-292010-8	MW17	Total/NA	Water	7470A	436040
310-292010-9	MW18	Total/NA	Water	7470A	436040
310-292010-10	MW19	Total/NA	Water	7470A	436040
310-292010-11	DUP1	Total/NA	Water	7470A	436040
MB 310-436040/1-A	Method Blank	Total/NA	Water	7470A	436040
LCS 310-436040/2-A	Lab Control Sample	Total/NA	Water	7470A	436040

### Analysis Batch: 436234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	6020B	435458
310-292010-2	MW5	Total/NA	Water	6020B	435458
310-292010-3	MW6	Total/NA	Water	6020B	435458
310-292010-4	MW8	Total/NA	Water	6020B	435458

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## Metals (Continued)

### Analysis Batch: 436234 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-5	MW9	Total/NA	Water	6020B	435458
310-292010-6	MW13	Total/NA	Water	6020B	435458
310-292010-7	MW15	Total/NA	Water	6020B	435458
310-292010-8	MW17	Total/NA	Water	6020B	435458
310-292010-9	MW18	Total/NA	Water	6020B	435458
310-292010-10	MW19	Total/NA	Water	6020B	435458
310-292010-11	DUP1	Total/NA	Water	6020B	435458
MB 310-435458/1-A	Method Blank	Total/NA	Water	6020B	435458
LCS 310-435458/2-A	Lab Control Sample	Total/NA	Water	6020B	435458
310-292010-3 DU	MW6	Total/NA	Water	6020B	435458

## General Chemistry

### Analysis Batch: 435463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	SM 2540C	11
310-292010-3	MW6	Total/NA	Water	SM 2540C	12
310-292010-5	MW9	Total/NA	Water	SM 2540C	13
310-292010-6	MW13	Total/NA	Water	SM 2540C	14
310-292010-7	MW15	Total/NA	Water	SM 2540C	
310-292010-9	MW18	Total/NA	Water	SM 2540C	
310-292010-10	MW19	Total/NA	Water	SM 2540C	
MB 310-435463/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-435463/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-292010-1 DU	MW2	Total/NA	Water	SM 2540C	

### Analysis Batch: 435588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-2	MW5	Total/NA	Water	SM 2540C	
310-292010-4	MW8	Total/NA	Water	SM 2540C	
310-292010-8	MW17	Total/NA	Water	SM 2540C	
310-292010-11	DUP1	Total/NA	Water	SM 2540C	
MB 310-435588/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-435588/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-292010-2 DU	MW5	Total/NA	Water	SM 2540C	

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## **Client Sample ID: MW2**

Date Collected: 10/01/24 16:01

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 11:16
Total/NA	Analysis	9056A		50	436259	HE7K	EET CF	10/12/24 19:51
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 13:48
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 15:57
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 11:56
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

## **Client Sample ID: MW5**

Date Collected: 10/03/24 13:12

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 11:32
Total/NA	Analysis	9056A		50	436259	HE7K	EET CF	10/12/24 11:47
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 13:50
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 15:59
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 11:58
Total/NA	Analysis	SM 2540C		1	435588	MDU9	EET CF	10/08/24 16:50

## **Client Sample ID: MW6**

Date Collected: 10/01/24 17:44

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 12:34
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 13:53
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:10
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:00
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## **Client Sample ID: MW8**

**Date Collected: 10/03/24 10:48**

**Date Received: 10/04/24 16:30**

## **Lab Sample ID: 310-292010-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 12:50
Total/NA	Analysis	9056A		50	436259	HE7K	EET CF	10/12/24 13:05
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 13:57
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:15
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:22
Total/NA	Analysis	SM 2540C		1	435588	MDU9	EET CF	10/08/24 16:50

## **Client Sample ID: MW9**

**Date Collected: 10/01/24 13:27**

**Date Received: 10/04/24 16:30**

## **Lab Sample ID: 310-292010-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 13:21
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 13:59
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:17
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:25
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

## **Client Sample ID: MW13**

**Date Collected: 10/01/24 14:30**

**Date Received: 10/04/24 16:30**

## **Lab Sample ID: 310-292010-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 13:36
Total/NA	Analysis	9056A		50	436259	HE7K	EET CF	10/12/24 13:52
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 14:01
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:19
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:27
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## **Client Sample ID: MW15**

Date Collected: 10/01/24 16:48

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 14:08
Total/NA	Analysis	9056A		50	436259	HE7K	EET CF	10/12/24 14:23
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 14:12
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:21
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:29
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

## **Client Sample ID: MW17**

Date Collected: 10/03/24 11:55

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 14:39
Total/NA	Analysis	9056A		50	436259	HE7K	EET CF	10/12/24 14:54
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 14:14
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:24
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:31
Total/NA	Analysis	SM 2540C		1	435588	MDU9	EET CF	10/08/24 16:50

## **Client Sample ID: MW18**

Date Collected: 10/01/24 12:04

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 15:41
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 14:16
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:26
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:33
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

## **Client Sample ID: MW19**

Date Collected: 10/01/24 12:39

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436259	HE7K	EET CF	10/12/24 15:57
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 14:19
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:28
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:35
Total/NA	Analysis	SM 2540C		1	435463	MDU9	EET CF	10/07/24 20:05

## **Client Sample ID: DUP1**

Date Collected: 10/03/24 00:00

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	436062	HE7K	EET CF	10/11/24 11:20
Total/NA	Analysis	9056A		20	436062	HE7K	EET CF	10/12/24 10:29
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	435770	NFT2	EET CF	10/09/24 14:21
Total/NA	Prep	3005A			435458	F5MW	EET CF	10/08/24 09:30
Total/NA	Analysis	6020B		1	436234	NFT2	EET CF	10/14/24 16:30
Total/NA	Prep	7470A			436040	QTZ5	EET CF	10/12/24 10:55
Total/NA	Analysis	7470A		1	436171	QTZ5	EET CF	10/14/24 12:37
Total/NA	Analysis	SM 2540C		1	435588	MDU9	EET CF	10/08/24 16:50

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Accreditation/Certification Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

### Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	09-29-25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Method Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF

### Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing  
America



310-292010 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

#### Client Information

Client: Omaha Public Power District

City/State: CITY STATE Project:

#### Receipt Information

Date/Time Received: 10-4-24 1630 Received By: CAC

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: 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): 27 Corrected Temp (°C): 27

#### 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 log in.

#### Additional Comments



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <b>Omaha Public Power District</b>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <b>10.4.24</b>	TIME <b>1630</b>	Received By: <b>CGC</b>
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input checked="" type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
<input type="checkbox"/> Other:			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <b>2</b> of <b>3</b>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
<input type="checkbox"/> Other:	<input type="checkbox"/> NONE		
Thermometer ID:	P		
Correction Factor (°C): <b>0</b>			
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<b>3.4</b>	Corrected Temp (°C):	<b>3.4</b>
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with log in.			
Additional Comments			



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <b>Omaha Public Power District</b>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <b>10.4.24</b>	TIME <b>1630</b>	Received By: CGc
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input checked="" type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
<input type="checkbox"/> Other:			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <b>3</b> of <b>3</b>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other:	<input type="checkbox"/> NONE		
Thermometer ID:	P	Correction Factor (°C): C	
Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<b>1.4</b>	Corrected Temp (°C):	<b>1.4</b>
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<p>Document: CED-P-SAM-FRM45521        Revision: 26        Date 27 Jan 2022</p>			
<p>Page 36 of 38        Eurofins Clean Labs</p>			
<p>General temperature criteria is 0 to 6°C        Bacteria temperature criteria is 0 to 10°C/2024 (Rev. 2)</p>			

## **Chain of Custody Record**

704 Enterprise Drive  
Cedar Falls IA 50613  
Phone (319) 277-2401 Fax (319) 277-2425

**Client Information**

## Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-292010-1

**Login Number:** 292010

**List Source:** Eurofins Cedar Falls

**List Number:** 1

**Creator:** Michels, Bob C

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	

This page intentionally left blank.

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kyle Uhing  
Omaha Public Power District  
Attn: Accounts Payable, 4E/EP-5  
444 South 16th Street Mall  
Omaha, Nebraska 68102-2247

Generated 11/4/2024 1:13:54 PM

## JOB DESCRIPTION

North Omaha Station CCR

## JOB NUMBER

310-292010-2

# Eurofins Cedar Falls

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

## Authorization



Generated  
11/4/2024 1:13:54 PM

Authorized for release by  
Bob Michels, Project Manager I  
[Bob.Michels@et.eurofinsus.com](mailto:Bob.Michels@et.eurofinsus.com)  
(319)277-2401

# Table of Contents

Cover Page .....	1
Table of Contents .....	3
Case Narrative .....	4
Sample Summary .....	5
Detection Summary .....	6
Client Sample Results .....	7
Definitions .....	18
QC Sample Results .....	19
QC Association .....	21
Chronicle .....	22
Certification Summary .....	25
Method Summary .....	26
Chain of Custody .....	27
Receipt Checklists .....	33
Tracer Carrier Summary .....	35

# Case Narrative

Client: Omaha Public Power District  
Project: North Omaha Station CCR

Job ID: 310-292010-2

**Job ID: 310-292010-2**

**Eurofins Cedar Falls**

## Job Narrative 310-292010-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 10/4/2024 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.4°C, 2.7°C and 3.4°C.

### Gas Flow Proportional Counter

Method 9320\_Ra228: Radium 228 batch 682846

The detection goal was not met for the following sample due to the reduced sample volume attributed to the presence of matrix interferences: MW19 (310-292010-10). Analytical results are reported with the detection limit achieved.

Method 9320\_Ra228: Radium 228 batch 682848

The detection goal was not met for the following sample due to the reduced sample volume used in prep attributed to the presence of matrix interferences: MW9 (310-292010-5). Analytical results are reported with the detection limit achieved.

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

### Rad

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

## Sample Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-292010-1	MW2	Water	10/01/24 16:01	10/04/24 16:30
310-292010-2	MW5	Water	10/03/24 13:12	10/04/24 16:30
310-292010-3	MW6	Water	10/01/24 17:44	10/04/24 16:30
310-292010-4	MW8	Water	10/03/24 10:48	10/04/24 16:30
310-292010-5	MW9	Water	10/01/24 13:27	10/04/24 16:30
310-292010-6	MW13	Water	10/01/24 14:30	10/04/24 16:30
310-292010-7	MW15	Water	10/01/24 16:48	10/04/24 16:30
310-292010-8	MW17	Water	10/03/24 11:55	10/04/24 16:30
310-292010-9	MW18	Water	10/01/24 12:04	10/04/24 16:30
310-292010-10	MW19	Water	10/01/24 12:39	10/04/24 16:30
310-292010-11	DUP1	Water	10/03/24 00:00	10/04/24 16:30

## Detection Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

### Client Sample ID: MW2

Lab Sample ID: 310-292010-1

No Detections.

### Client Sample ID: MW5

Lab Sample ID: 310-292010-2

No Detections.

### Client Sample ID: MW6

Lab Sample ID: 310-292010-3

No Detections.

### Client Sample ID: MW8

Lab Sample ID: 310-292010-4

No Detections.

### Client Sample ID: MW9

Lab Sample ID: 310-292010-5

No Detections.

### Client Sample ID: MW13

Lab Sample ID: 310-292010-6

No Detections.

### Client Sample ID: MW15

Lab Sample ID: 310-292010-7

No Detections.

### Client Sample ID: MW17

Lab Sample ID: 310-292010-8

No Detections.

### Client Sample ID: MW18

Lab Sample ID: 310-292010-9

No Detections.

### Client Sample ID: MW19

Lab Sample ID: 310-292010-10

No Detections.

### Client Sample ID: DUP1

Lab Sample ID: 310-292010-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## **Client Sample ID: MW2**

Date Collected: 10/01/24 16:01

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-1**

Matrix: Water

### **Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.206		0.104	0.105	1.00	0.125	pCi/L	10/09/24 08:27	11/01/24 07:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/09/24 08:27	11/01/24 07:45	1

### **Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.04		0.554	0.562	1.00	0.812	pCi/L	10/09/24 08:31	10/25/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		30 - 110					10/09/24 08:31	10/25/24 11:57	1
Y Carrier	76.3		30 - 110					10/09/24 08:31	10/25/24 11:57	1

### **Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.24		0.564	0.572	5.00	0.812	pCi/L	11/04/24 13:00		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## **Client Sample ID: MW5**

Date Collected: 10/03/24 13:12

Date Received: 10/04/24 16:30

## **Lab Sample ID: 310-292010-2**

Matrix: Water

### **Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.167		0.100	0.101	1.00	0.134	pCi/L	10/09/24 08:27	11/01/24 07:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110					10/09/24 08:27	11/01/24 07:45	1

### **Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.392	U	0.433	0.435	1.00	0.709	pCi/L	10/09/24 08:31	10/25/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110					10/09/24 08:31	10/25/24 11:57	1
Y Carrier	72.5		30 - 110					10/09/24 08:31	10/25/24 11:57	1

### **Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.559	U	0.444	0.447	5.00	0.709	pCi/L	11/04/24 13:00		1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW6**

**Lab Sample ID: 310-292010-3**

Date Collected: 10/01/24 17:44

Matrix: Water

Date Received: 10/04/24 16:30

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.160		0.106	0.107	1.00	0.151	pCi/L	10/09/24 08:27	11/01/24 07:45	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		30 - 110					10/09/24 08:27	11/01/24 07:45	1

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.453	U	0.373	0.375	1.00	0.583	pCi/L	10/09/24 08:31	10/25/24 11:57	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		30 - 110					10/09/24 08:31	10/25/24 11:57	1
Y Carrier	78.1		30 - 110					10/09/24 08:31	10/25/24 11:57	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.613		0.388	0.390	5.00	0.583	pCi/L		11/04/24 13:00	1

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW8**

**Lab Sample ID: 310-292010-4**

Matrix: Water

Date Collected: 10/03/24 10:48  
Date Received: 10/04/24 16:30

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.144		0.0924	0.0933	1.00	0.128	pCi/L	10/09/24 08:27	11/01/24 07:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.1		30 - 110					10/09/24 08:27	11/01/24 07:45	1

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.708		0.384	0.390	1.00	0.544	pCi/L	10/09/24 08:31	10/25/24 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.1		30 - 110					10/09/24 08:31	10/25/24 11:57	1
Y Carrier	76.6		30 - 110					10/09/24 08:31	10/25/24 11:57	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.852		0.395	0.401	5.00	0.544	pCi/L	11/04/24 13:00		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW9**

**Lab Sample ID: 310-292010-5**

Date Collected: 10/01/24 13:27

Matrix: Water

Date Received: 10/04/24 16:30

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.563		0.243	0.248	1.00	0.286	pCi/L	10/09/24 08:27	11/01/24 07:45	1
<b>Carrier</b>										
Ba Carrier	80.4		<b>Limits</b>		10/09/24 08:27	11/01/24 07:45	1	Prepared	Analyzed	Dil Fac
			30 - 110							

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.34	G	0.819	0.829	1.00	1.19	pCi/L	10/09/24 08:31	10/25/24 11:57	1
<b>Carrier</b>										
Ba Carrier	80.4		<b>Limits</b>		10/09/24 08:31	10/25/24 11:57	1	Prepared	Analyzed	Dil Fac
Y Carrier	78.9		30 - 110					10/09/24 08:31	10/25/24 11:57	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.91		0.854	0.865	5.00	1.19	pCi/L	11/04/24 13:00		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW13**

**Lab Sample ID: 310-292010-6**

Date Collected: 10/01/24 14:30

Matrix: Water

Date Received: 10/04/24 16:30

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.156	U	0.118	0.118	1.00	0.166	pCi/L	10/09/24 08:27	11/01/24 07:45	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits		10/09/24 08:27	11/01/24 07:45	1	Prepared	Analyzed	Dil Fac
	80.2		30 - 110							

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.539	U	0.535	0.537	1.00	0.859	pCi/L	10/09/24 08:31	10/25/24 11:57	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits		10/09/24 08:31	10/25/24 11:57	1	Prepared	Analyzed	Dil Fac
	80.2		30 - 110							
Y Carrier	%Yield	Qualifier	Limits		10/09/24 08:31	10/25/24 11:57	1	Prepared	Analyzed	Dil Fac
	80.4		30 - 110							

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.695	U	0.548	0.550	5.00	0.859	pCi/L	11/04/24 13:00	11/04/24 13:00	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW15**

**Lab Sample ID: 310-292010-7**

**Matrix: Water**

Date Collected: 10/01/24 16:48

Date Received: 10/04/24 16:30

## Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.207		0.0970	0.0988	1.00	0.110	pCi/L	10/09/24 08:27	11/01/24 07:45	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					10/09/24 08:27	11/01/24 07:45	1

## Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.156	U	0.333	0.333	1.00	0.578	pCi/L	10/09/24 08:31	10/25/24 11:57	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		30 - 110					10/09/24 08:31	10/25/24 11:57	1
Y Carrier	80.0		30 - 110					10/09/24 08:31	10/25/24 11:57	1

## Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.364	U	0.347	0.347	5.00	0.578	pCi/L		11/04/24 13:00	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW17**

**Lab Sample ID: 310-292010-8**

Date Collected: 10/03/24 11:55

Matrix: Water

Date Received: 10/04/24 16:30

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.179		0.0930	0.0943	1.00	0.112	pCi/L	10/09/24 08:27	11/01/24 07:46	1
<i>Carrier</i>	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/09/24 08:27	11/01/24 07:46	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.371	U	0.321	0.323	1.00	0.502	pCi/L	10/09/24 08:31	10/25/24 11:57	1
<i>Carrier</i>	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		30 - 110					10/09/24 08:31	10/25/24 11:57	1
Y Carrier	86.4		30 - 110					10/09/24 08:31	10/25/24 11:57	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.550		0.334	0.336	5.00	0.502	pCi/L		11/04/24 13:00	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW18**

**Lab Sample ID: 310-292010-9**

Date Collected: 10/01/24 12:04

Matrix: Water

Date Received: 10/04/24 16:30

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.383		0.176	0.179	1.00	0.210	pCi/L	10/09/24 08:16	11/01/24 07:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		30 - 110					10/09/24 08:16	11/01/24 07:48	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.07		0.625	0.633	1.00	0.896	pCi/L	10/09/24 08:23	10/25/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		30 - 110					10/09/24 08:23	10/25/24 11:52	1
Y Carrier	74.0		30 - 110					10/09/24 08:23	10/25/24 11:52	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.45		0.649	0.658	5.00	0.896	pCi/L	11/04/24 13:00		1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Client Sample ID: MW19**

**Lab Sample ID: 310-292010-10**

Date Collected: 10/01/24 12:39

Matrix: Water

Date Received: 10/04/24 16:30

**Method: SW846 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	1.01		0.229	0.247	1.00	0.157	pCi/L	10/09/24 08:16	11/01/24 07:48	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		30 - 110					10/09/24 08:16	11/01/24 07:48	1

**Method: SW846 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.937	U G	0.674	0.680	1.00	1.03	pCi/L	10/09/24 08:23	10/25/24 11:52	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		30 - 110					10/09/24 08:23	10/25/24 11:52	1
Y Carrier	67.3		30 - 110					10/09/24 08:23	10/25/24 11:52	1

**Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.95		0.712	0.723	5.00	1.03	pCi/L		11/04/24 13:00	1

Eurofins Cedar Falls

# Client Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## Client Sample ID: DUP1

Date Collected: 10/03/24 00:00

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-11**

Matrix: Water

### Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	1.55		0.245	0.282	1.00	0.139	pCi/L	10/09/24 08:16	11/01/24 07:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		30 - 110					10/09/24 08:16	11/01/24 07:48	1

### Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.730	U	0.531	0.535	1.00	0.815	pCi/L	10/09/24 08:23	10/25/24 11:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		30 - 110					10/09/24 08:23	10/25/24 11:52	1
Y Carrier	71.0		30 - 110					10/09/24 08:23	10/25/24 11:52	1

### Method: TAL-STL Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	2.28		0.585	0.605	5.00	0.815	pCi/L	11/04/24 13:00		1

Eurofins Cedar Falls

## Definitions/Glossary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

### Qualifiers

#### Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

### 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

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID:** MB 160-682845/1-A

**Matrix:** Water

**Analysis Batch:** 686242

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 682845

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04956			0.0718	0.0719	1.00	0.122	pCi/L	10/09/24 08:16	11/01/24 07:48	1
<b>Carrier</b>				<b>MB %Yield</b>	<b>MB Qualifier</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier		84.8			Limits				10/09/24 08:16	11/01/24 07:48	1
					30 - 110						

**Lab Sample ID:** LCS 160-682845/2-A

**Matrix:** Water

**Analysis Batch:** 686242

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 682845

Analyte	Result	MB Added	Spike LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	Limits	%Rec
					Uncert. (2σ+/-)						
Radium-226		9.58		9.438	1.04	1.00	0.154	pCi/L	99	75 - 125	
<b>Carrier</b>				<b>LCS %Yield</b>	<b>LCS Qualifier</b>						
Ba Carrier		86.3			Limits						
					30 - 110						

**Lab Sample ID:** MB 160-682847/1-A

**Matrix:** Water

**Analysis Batch:** 686236

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 682847

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04433			0.0645	0.0646	1.00	0.110	pCi/L	10/09/24 08:27	11/01/24 07:38	1
<b>Carrier</b>				<b>MB %Yield</b>	<b>MB Qualifier</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier		86.6			Limits				10/09/24 08:27	11/01/24 07:38	1
					30 - 110						

**Lab Sample ID:** LCS 160-682847/2-A

**Matrix:** Water

**Analysis Batch:** 686236

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 682847

Analyte	Result	MB Added	Spike LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	Limits	%Rec
					Uncert. (2σ+/-)						
Radium-226		9.58		9.401	1.01	1.00	0.0997	pCi/L	98	75 - 125	
<b>Carrier</b>				<b>LCS %Yield</b>	<b>LCS Qualifier</b>						
Ba Carrier		90.7			Limits						
					30 - 110						

## Method: 9320 - Radium-228 (GFPC)

**Lab Sample ID:** MB 160-682846/1-A

**Matrix:** Water

**Analysis Batch:** 685112

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 682846

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.8104			0.398	0.405	1.00	0.550	pCi/L	10/09/24 08:23	10/25/24 11:52	1

Eurofins Cedar Falls

# QC Sample Results

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## Method: 9320 - Radium-228 (GFPC) (Continued)

<i>Carrier</i>	<i>MB</i>	<i>MB</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier			84.8		30 - 110	10/09/24 08:23	10/25/24 11:52	1
Y Carrier			89.3		30 - 110	10/09/24 08:23	10/25/24 11:52	1

**Lab Sample ID: LCS 160-682846/2-A**

**Matrix: Water**

**Analysis Batch: 685112**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 682846**

<i>Analyte</i>			<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qual</i>	<i>Total</i>		<i>%Rec</i>	<i>Limits</i>
	<i>LCS</i>	<i>LCS</i>				<i>Uncert.</i>	<i>(2σ+/-)</i>		
Radium-228			8.40	9.467		1.35	1.00	0.591	pCi/L

*LCS LCS*

<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>
Ba Carrier	86.3		30 - 110
Y Carrier	76.3		30 - 110

**Lab Sample ID: MB 160-682848/1-A**

**Matrix: Water**

**Analysis Batch: 685116**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 682848**

<i>Analyte</i>			<i>Result</i>	<i>MB</i>	<i>MB</i>	<i>Count</i>	<i>Uncert.</i>	<i>Total</i>		<i>Dil Fac</i>
	<i>Result</i>	<i>Qualifier</i>						<i>(2σ+/-)</i>	<i>(2σ+/-)</i>	
Radium-228	0.9024			0.469		0.476	0.469	1.00	0.663	pCi/L

*MB MB*

<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	86.6		30 - 110	10/09/24 08:31	10/25/24 11:58	1
Y Carrier	77.0		30 - 110	10/09/24 08:31	10/25/24 11:58	1

**Lab Sample ID: LCS 160-682848/2-A**

**Matrix: Water**

**Analysis Batch: 685116**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 682848**

<i>Analyte</i>			<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qual</i>	<i>Total</i>		<i>%Rec</i>	<i>Limits</i>
	<i>LCS</i>	<i>LCS</i>				<i>Uncert.</i>	<i>(2σ+/-)</i>		
Radium-228			8.40	10.00		1.38	1.00	0.586	pCi/L

*LCS LCS*

<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>
Ba Carrier	90.7		30 - 110
Y Carrier	78.5		30 - 110

Eurofins Cedar Falls

# QC Association Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

**Rad**

**Prep Batch: 682845**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-9	MW18	Total/NA	Water	PrecSep-21	
310-292010-10	MW19	Total/NA	Water	PrecSep-21	
310-292010-11	DUP1	Total/NA	Water	PrecSep-21	
MB 160-682845/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-682845/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

**Prep Batch: 682846**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-9	MW18	Total/NA	Water	PrecSep_0	
310-292010-10	MW19	Total/NA	Water	PrecSep_0	
310-292010-11	DUP1	Total/NA	Water	PrecSep_0	
MB 160-682846/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-682846/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

**Prep Batch: 682847**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	PrecSep-21	
310-292010-2	MW5	Total/NA	Water	PrecSep-21	
310-292010-3	MW6	Total/NA	Water	PrecSep-21	
310-292010-4	MW8	Total/NA	Water	PrecSep-21	
310-292010-5	MW9	Total/NA	Water	PrecSep-21	
310-292010-6	MW13	Total/NA	Water	PrecSep-21	
310-292010-7	MW15	Total/NA	Water	PrecSep-21	
310-292010-8	MW17	Total/NA	Water	PrecSep-21	
MB 160-682847/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-682847/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

**Prep Batch: 682848**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-292010-1	MW2	Total/NA	Water	PrecSep_0	
310-292010-2	MW5	Total/NA	Water	PrecSep_0	
310-292010-3	MW6	Total/NA	Water	PrecSep_0	
310-292010-4	MW8	Total/NA	Water	PrecSep_0	
310-292010-5	MW9	Total/NA	Water	PrecSep_0	
310-292010-6	MW13	Total/NA	Water	PrecSep_0	
310-292010-7	MW15	Total/NA	Water	PrecSep_0	
310-292010-8	MW17	Total/NA	Water	PrecSep_0	
MB 160-682848/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-682848/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## **Client Sample ID: MW2**

Date Collected: 10/01/24 16:01

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685116	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

## **Client Sample ID: MW5**

Date Collected: 10/03/24 13:12

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

## **Client Sample ID: MW6**

Date Collected: 10/01/24 17:44

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

## **Client Sample ID: MW8**

Date Collected: 10/03/24 10:48

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

Eurofins Cedar Falls

# Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

## **Client Sample ID: MW9**

Date Collected: 10/01/24 13:27

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

## **Client Sample ID: MW13**

Date Collected: 10/01/24 14:30

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

## **Client Sample ID: MW15**

Date Collected: 10/01/24 16:48

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:45
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

## **Client Sample ID: MW17**

Date Collected: 10/03/24 11:55

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682847	BCE	EET SL	10/09/24 08:27
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:46
Total/NA	Prep	PrecSep_0			682848	BCE	EET SL	10/09/24 08:31
Total/NA	Analysis	9320		1	685117	FLC	EET SL	10/25/24 11:57
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

Eurofins Cedar Falls

## Lab Chronicle

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

### **Client Sample ID: MW18**

Date Collected: 10/01/24 12:04

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682845	BCE	EET SL	10/09/24 08:16
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:48
Total/NA	Prep	PrecSep_0			682846	BCE	EET SL	10/09/24 08:23
Total/NA	Analysis	9320		1	685112	SWS	EET SL	10/25/24 11:52
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

### **Client Sample ID: MW19**

Date Collected: 10/01/24 12:39

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682845	BCE	EET SL	10/09/24 08:16
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:48
Total/NA	Prep	PrecSep_0			682846	BCE	EET SL	10/09/24 08:23
Total/NA	Analysis	9320		1	685112	SWS	EET SL	10/25/24 11:52
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

### **Client Sample ID: DUP1**

Date Collected: 10/03/24 00:00

Date Received: 10/04/24 16:30

**Lab Sample ID: 310-292010-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			682845	BCE	EET SL	10/09/24 08:16
Total/NA	Analysis	9315		1	686242	SWS	EET SL	11/01/24 07:48
Total/NA	Prep	PrecSep_0			682846	BCE	EET SL	10/09/24 08:23
Total/NA	Analysis	9320		1	685112	SWS	EET SL	10/25/24 11:52
Total/NA	Analysis	Ra226_Ra228		1	686788	FLC	EET SL	11/04/24 13:00

#### Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins Cedar Falls

## Accreditation/Certification Summary

Client: Omaha Public Power District  
 Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

### Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	12-31-24
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

## Method Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

### Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

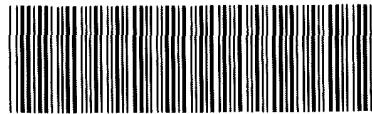
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

### Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Environment Testing  
America



310-292010 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>Omaha Public Power District</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>10-4-24</u>	TIME <u>1630</u>	Received By: <u>CAC</u>
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>3</u>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ _____
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE
Thermometer ID:	<u>P</u>	Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>27</u>	Corrected Temp (°C): <u>27</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with log in			
Additional Comments			
_____			
_____			
_____			
_____			



Environment Testing  
America

Place COC scanning label  
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <b>Omaha Public Power District</b>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <b>10.4.24</b>	TIME <b>1630</b>	Received By: <b>CGC</b>
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <b>2</b> of <b>3</b>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ _____
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> 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):	<b>3.4</b>	Corrected Temp (°C):	<b>3.4</b>
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with log in.			
Additional Comments			
_____ _____ _____ _____			



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <b>Omaha Public Power District</b>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <b>10.4.24</b>	TIME <b>1630</b>	Received By: CGc
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input checked="" type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
<input type="checkbox"/> Other:			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <b>3</b> of <b>3</b>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other:			
<input type="checkbox"/> NONE			
Thermometer ID:	<b>P</b>	Correction Factor (°C): <b>C</b>	
Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<b>1.4</b>	Corrected Temp (°C):	<b>1.4</b>
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<p>Document: CED-P-SAM-FRM45521        Revision: 26        Date 27 Jan 2022</p>			
<p>Page 29 of 35        Eurofins Clean Labs</p>			
<p>General temperature criteria is 0 to 6°C        Bacteria temperature criteria is 0 to 10°C</p>			

## **Chain of Custody Record**

704 Enterprise Drive  
Cedar Falls IA 50613  
Phone (319) 277-2401 Fax (319) 277-2425

Client Information		Sampler Kyle K. Uhing		Lab PM Hayes		Carrier Tracking No(s):	
Client Contact: Kyle Uhing	Phone: (531) 226-2515	E-Mail: shawn.hayes@testamericainc.com				COC No:  Page:	
Company: Omaha Public Power District	Address: 444 South 16th Street Mall 9E/EP1	Due Date Requested:	TAT Requested (days):				
City: Omaha	State, Zip: NE, 68102-2247	PO #:	VO #:				
Phone: (531) 226-2515	Email: kkuhing@oppd.com	Project Name: North Omaha Station CCR	TestAmerica Project #: 31007560				
Site: North Omaha Station	SSOW#:	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste oil, B=tissue, A=air)	Field Filtered Sample (yes or No)	Perform MSD/MSD (yes or No)
Sample Identification				Preservation Code:	D	D	N
MW2	10/1/24	16:01	G	W	N	X	X
MW5	10/3/24	13:12	G	W	N	X	X
MW6	10/1/24	17:44	G	W	N	X	X
MW8	10/3/24	16:48	G	W	N	X	X
MW9	10/1/24	13:27	G	W	N	X	X
MW13	10/1/24	14:30	G	W	N	X	X
MW15	10/1/24	16:48	G	W	N	X	X
MW17	10/3/24	11:55	G	W	N	X	X
MW18	10/1/24	12:04	G	W	N	X	X
MW19	10/1/24	12:39	G	W	N	X	X
DUP1	10/3/24	-	G	W	N	X	X
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological							
Deliverable Requested I, II, III IV Other (specify)							
Empty Kit Relinquished by: Relinquished by: _____ Date/Time: 10/3/2024 14:25 Company Received by: _____ Date/Time: 10/3/2024 14:25 Company Relinquished by: _____ Date/Time: 10/2/2024 07:21 Company Received by: _____ Date/Time: 10/2/2024 07:21 Company Relinquished by: _____ Date/Time: _____ Company Received by: _____ Date/Time: _____ Company Relinquished by: _____ Date/Time: _____ Company Received by: _____ Date/Time: _____ Company							
Carrier Tracking No(s): _____							
Special Instructions/QC Requirements							
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Special Instructions/Note: Total Number of Containers: _____ X							
Preservation Codes: A - HCl    M - Hexane B - NaOH    N - None C - Zn Acetate    O - AsNaO2 D - Nitric Acid    P - NaO4S E - NaHSO4    Q - Na2SO3 F - MeOH    R - Na2S2O3 G - Amchlor    S - H2SO4 H - Ascorbic Acid    T - TSP Decahydrate I - Ice    U - Acetone J - DI Water    V - MCAA K - EDTA    W - pH 4-5 L - EDA    Z - other (specify) Other: _____							
Cooler Temperature(s), °C and Other Remarks: △ Yes    □ No    Custody Seal No: _____							



Eurofins Cedar Falls

3019 Venture Way  
Cedar Falls, IA 50613  
Phone: 319-277-2401 Fax: 319-277-2425

## Chain of Custody Record

Environment Testing

Ver: 05/06/2024

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
**13**  
14  
15



## Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-292010-2

**Login Number: 292010**

**List Source: Eurofins Cedar Falls**

**List Number: 1**

**Creator: Michels, Bob C**

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A		1
The cooler's custody seal, if present, is intact.	N/A		2
Sample custody seals, if present, are intact.	N/A		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
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: Omaha Public Power District

Job Number: 310-292010-2

**Login Number:** 292010

**List Source:** Eurofins St. Louis

**List Number:** 2

**List Creation:** 10/08/24 01:22 PM

**Creator:** Pinette, Meadow L

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	N/A		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	N/A		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
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		

## Tracer/Carrier Summary

Client: Omaha Public Power District  
Project/Site: North Omaha Station CCR

Job ID: 310-292010-2

### Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

#### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)
310-292010-1	MW2	86.3
310-292010-2	MW5	86.9
310-292010-3	MW6	92.0
310-292010-4	MW8	96.1
310-292010-5	MW9	80.4
310-292010-6	MW13	80.2
310-292010-7	MW15	94.3
310-292010-8	MW17	89.9
310-292010-9	MW18	77.8
310-292010-10	MW19	81.7
310-292010-11	DUP1	80.9
LCS 160-682845/2-A	Lab Control Sample	86.3
LCS 160-682847/2-A	Lab Control Sample	90.7
MB 160-682845/1-A	Method Blank	84.8
MB 160-682847/1-A	Method Blank	86.6

#### Tracer/Carrier Legend

Ba = Ba Carrier

### Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

#### Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
310-292010-1	MW2	86.3	76.3
310-292010-2	MW5	86.9	72.5
310-292010-3	MW6	92.0	78.1
310-292010-4	MW8	96.1	76.6
310-292010-5	MW9	80.4	78.9
310-292010-6	MW13	80.2	80.4
310-292010-7	MW15	94.3	80.0
310-292010-8	MW17	89.9	86.4
310-292010-9	MW18	77.8	74.0
310-292010-10	MW19	81.7	67.3
310-292010-11	DUP1	80.9	71.0
LCS 160-682846/2-A	Lab Control Sample	86.3	76.3
LCS 160-682848/2-A	Lab Control Sample	90.7	78.5
MB 160-682846/1-A	Method Blank	84.8	89.3
MB 160-682848/1-A	Method Blank	86.6	77.0

#### Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Eurofins Cedar Falls

This page intentionally left blank.

# Appendix C

Semi-Annual Statistical  
Analysis Memos

This page intentionally left blank.

# Technical Memorandum

Date: Friday, July 26, 2024

---

To: Omaha Public Power District (OPPD)

---

From: HDR Engineering, Inc.

---

Subject: Summary of Statistical Analysis and Evaluation for SSLs  
North Omaha Station Ash Landfill  
Spring 2024 Statistical Analysis

Omaha Public Power District owns and operates a five-unit fuel-fired generating plant at the North Omaha Station (NOS), herein referenced as “Station” or “Site”, in Omaha, Nebraska. Units 1, 2, and 3 were retired from coal operation (converted to natural gas), while Units 4 and 5 are operating as coal-burning units. This Station has one active coal combustion residual (CCR) landfill, known as the NOS Ash Landfill, which is subject to the United States Environmental Protection Agency’s (EPA’s) final CCR rule promulgated under U.S. Code of Federal Regulations (CFR), Title 40, Part 257 and Nebraska Department of Environment and Energy’s (NDEE) Title 132 regulations for fossil fuel combustion ash disposal areas. This memorandum provides a discussion and evaluation of the statistical analysis conducted for the NOS Ash Landfill which consists of an ash disposal area of approximately 18.503 acres, currently undergoing closure activities to be completed in August 2024.

Groundwater sampling was completed as part of an assessment monitoring program for the NOS Ash Landfill in April 2024, as specified in 40 CFR §257.95(d) and NDEE Title 132 Chapter 7 Section 005.06. The statistical analysis of groundwater data was performed in accordance with the methods described in the *Groundwater Monitoring Statistical Certification* for the North Omaha Station – NOS Ash Landfill, amended December 13, 2021, and the facility’s Groundwater Sampling and Analysis Plan (dated September 2023) as permitted under Title 132. Sampling results used to calculate the background threshold values (BTVs) were updated during the fall 2023 statistical evaluation. The background ranges should be evaluated every two years, in accordance with Chapter 21 of the EPA’s Statistical Analysis of Groundwater Monitoring Data – Unified Guidance (EPA, 2009). The current BTVs were updated in October 2023 with monitoring results obtained during monitoring events conducted between March 2016 and October 2023.

Downgradient sampling results from the April 2024 assessment monitoring were used to evaluate for statistically significant increases (SSIs) over background and statistically significant levels (SSLs) over the groundwater protection standard (GWPS). The calculated BTVs and the evaluation for SSIs over background for the Appendix III (detection monitoring) constituents and Appendix IV (assessment monitoring) constituents are provided in **Table C-1**. The calculated lower confidence levels and the evaluation for SSLs above the GWPS for the Appendix IV (assessment monitoring) constituents are provided in **Table C-2**.

Table C-1. Summary of Evaluation for SSIs over Background (April 2024)

Well ID:		MW-2	MW-5	MW-6	MW-8	MW-13	MW-15	MW-17
	BTV (UPL):	Unit	Assessment Monitoring Results - April 2024					
Detection Monitoring Constituents								
Boron	0.200	mg/L	<b><u>0.823</u></b>	<b><u>0.647</u></b>	<b><u>0.647</u></b>	<b><u>2.76</u></b>	<b><u>2.16</u></b>	<b><u>2.80</u></b>
Calcium	190	mg/L	<b><u>219</u></b>	<b><u>413</u></b>	<b><u>300</u></b>	165	<b><u>263</u></b>	169
Chloride	275	mg/L	39.6	44.4	<b><u>351</u></b>	14.6	9.99	12.6
Fluoride**	0.944	mg/L	<0.375	<0.375	<0.375	<0.375	0.387J	<0.375
pH	6.03-7.68*	SU	6.31	7.24	6.16	7.64	6.21	6.74
Sulfate	57.5	mg/L	<b><u>405</u></b>	<b><u>1,300</u></b>	<b><u>279</u></b>	<b><u>647</u></b>	<b><u>1,080</u></b>	<b><u>420</u></b>
Total Dissolved Solids	1,190	mg/L	1,190	<b><u>2,490</u></b>	<b><u>1,320</u></b>	964	<b><u>1,630</u></b>	820
Assessment Monitoring Constituents								
Antimony	0.002	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	0.00175J	<0.00100
Arsenic	0.0143	mg/L	<b><u>0.240</u></b>	<b><u>0.0371</u></b>	0.00990	0.0125	<b><u>0.0188</u></b>	0.00222
Barium	0.726	mg/L	0.115	0.0463	0.143	0.0893	0.0867	0.0747
Beryllium	0.001	mg/L	<0.000330	<0.000330	<0.000330	<0.000330	<0.000330	<0.000330
Cadmium	0.000662	mg/L	<0.000100	<0.000100	0.000118J	<0.000100	0.000129J	<0.000100
Chromium	0.00590	mg/L	<0.00110	<0.00110	0.00334J	<0.00110	<0.00110	<b><u>0.00902</u></b>
Cobalt	0.00346	mg/L	0.000306J	0.00105	<b><u>0.00636</u></b>	0.000503	0.000419J	<0.000170
Fluoride**	0.944	mg/L	<0.375	<0.375	<0.375	<0.375	0.387J	<0.375
Lead	0.00885	mg/L	<0.000240	<0.000240	0.000599	0.000273J	0.000279J	<0.000240
Lithium	0.0624	mg/L	0.0432	<b><u>0.0813</u></b>	0.0465	0.0131	0.0462	0.00767J
Mercury	0.000214	mg/L	<0.000140	<0.000140	<0.000140	<0.000140	<0.000140	<0.000140
Molybdenum	0.00234	mg/L	0.00104J	<b><u>0.00324</u></b>	<b><u>0.0610</u></b>	<b><u>0.0923</u></b>	<b><u>0.760</u></b>	<b><u>0.200</u></b>
Radium 226+228	4.13	pCi/L	1.50	1.25	1.20	1.21	0.213U	0.862
Selenium	0.005	mg/L	<0.00140	<0.00140	<0.00140	<0.00140	<0.00140	<b><u>0.0822</u></b>
Thallium	0.001	mg/L	<0.000260	0.000412J	<0.000260	<0.000260	<0.000260	<0.000260

**Bold and underlined** concentration indicates an SSI over background.

\* Indicates the lower bound of the range is the lower prediction limit (LPL). The upper bound is the upper prediction limit (UPL).

\*\* Fluoride is listed in both Appendix III and Appendix IV of the CCR Rule (40 CFR Part 257).

"U" data qualifier (radium) indicates parameter was analyzed for but not detected above limiting criteria (such as, but not limited to minimum detectable concentration, total uncertainty, reporting limit) as defined in the analytical laboratory data package.

"J" data qualifier indicates that value is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

Table C-2. Summary of Evaluation for SSLs over GWPS (April 2024)

	Well ID:	MW-2	MW-5	MW-6	MW-8	MW-13	MW-15	MW-17	
	GWPS <sup>[1]</sup>	Unit	Lower Confidence Levels (LCLs) - Assessment Monitoring Constituents						
Antimony	0.006	mg/L	0.00069	0.001	0.00069	0.00069	0.00069	0.001282	0.00069
Arsenic	0.0143 <sup>[2]</sup>	mg/L	<b><u>0.2061</u></b>	<b><u>0.05229</u></b>	0.007539	0.0101	0.0111	0.00187	0.0103
Barium	2	mg/L	0.09509	0.04309	0.1384	0.07826	0.06301	0.04701	0.0341
Beryllium	0.004	mg/L	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027
Cadmium	0.005	mg/L	0.000051	0.00003561	0.0001228	0.00005545	0.0001347	0.00005208	0.000051
Chromium	0.1	mg/L	0.0011	0.0011	0.0011	0.0011	0.0011	0.001673	0.0011
Cobalt	0.006	mg/L	0.0003368	0.00035	0.00555	0.0004584	0.00045	0.000091	<b><u>0.009155</u></b>
Radium 226+228	5	pCi/L	0.3283	0.1428	0.48	0.2627	0.03786	-0.00003881	0.3832
Fluoride	4	mg/L	0.1745	0.3609	0.2206	0.2142	0.2264	0.22	0.1403
Lead	0.015	mg/L	0.0001873	0.00021	0.0003216	0.000146	0.00021	0.00021	0.00021
Lithium	0.0624 <sup>[2]</sup>	mg/L	0.03982	<b><u>0.06899</u></b>	0.04412	0.01178	0.02333	0.007977	<b><u>0.0924</u></b>
Mercury	0.002	mg/L	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
Molybdenum	0.1	mg/L	0.00104	0.001236	0.05638	0.08844	<b><u>0.8376</u></b>	<b><u>0.2011</u></b>	0.001836
Selenium	0.05	mg/L	0.00096	0.0006282	0.00096	0.00096	0.003039	<b><u>0.05427</u></b>	0.00096
Thallium	0.002	mg/L	0.00026	0.0001844	0.00026	0.00026	0.00026	0.00026	0.00026

**Bold and underlined** concentration indicates an SSL over the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2).

[2] GWPS is established as the UPL when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

This page intentionally left blank.

# Technical Memorandum

Date: Tuesday, December 10, 2024

---

To: Omaha Public Power District (OPPD)

---

From: HDR Engineering, Inc.

---

Subject: Summary of Statistical Analysis and Evaluation for SSLs  
North Omaha Station Ash Landfill  
Fall 2024 Statistical Analysis

Omaha Public Power District owns and operates a five-unit fuel-fired generating plant at the North Omaha Station (NOS), herein referenced as “Station” or “Site”, in Omaha, Nebraska. Units 1, 2, and 3 were retired from coal operation (converted to natural gas), while Units 4 and 5 are operating as coal-burning units. This Station has one closed coal combustion residual (CCR) landfill, known as the NOS Ash Landfill, which is subject to the United States Environmental Protection Agency’s (EPA’s) final CCR rule promulgated under U.S. Code of Federal Regulations (CFR), Title 40, Part 257 and Nebraska Department of Environment and Energy’s (NDEE) Title 132 regulations for fossil fuel combustion ash disposal areas. This memorandum provides a discussion and evaluation of the statistical analysis conducted for the closed NOS Ash Landfill which consists of an ash disposal area of approximately 18.503 acres. The NOS Ash Landfill was certified closed in September 2024.

Groundwater sampling was completed as part of an assessment monitoring program for the NOS Ash Landfill in October 2024, as specified in 40 CFR §257.95(d) and NDEE Title 132 Chapter 7 Section 005.06. The statistical analysis of groundwater data was performed in accordance with the methods described in the *Groundwater Monitoring Statistical Certification* for the North Omaha Station – NOS Ash Landfill, amended November 10, 2022, and the facility’s Groundwater Sampling and Analysis Plan (dated September 2023) as permitted under Title 132. Sampling results used to calculate the background threshold values (BTVs) were updated during the fall 2023 statistical evaluation. The background ranges should be evaluated every two years, in accordance with Chapter 21 of the EPA’s Statistical Analysis of Groundwater Monitoring Data – Unified Guidance (EPA, 2009). The current BTVs were updated in October 2023 with monitoring results obtained during monitoring events conducted between March 2016 and October 2023.

Downgradient sampling results from the October 2024 assessment monitoring were used to evaluate for statistically significant increases (SSIs) over background and statistically significant levels (SSLs) over the groundwater protection standard (GWPS). The calculated BTVs and the evaluation for SSIs over background for the Appendix III (detection monitoring) constituents and Appendix IV (assessment monitoring) constituents are provided in **Table C-1**. The calculated lower confidence levels and the evaluation for SSLs above the GWPS for the Appendix IV (assessment monitoring) constituents are provided in **Table C-2**. The calculated upper confidence levels and the evaluation for SSLs over the GWPS for the corrective action monitoring constituents are provided in **Table C-3**.

Table C-1. Summary of Evaluation for SSIs over Background (October 2024)

Well ID:		MW-2	MW-5	MW-6	MW-8	MW-13	MW-15	MW-17
	BTV (UPL):	Unit	Assessment Monitoring Results – October 2024					
Detection Monitoring Constituents***								
Boron	0.200	mg/L	<b>1.19</b>	<b>0.603</b>	<b>0.654</b>	<b>2.66</b>	<b>1.40</b>	<b>3.46</b>
Calcium	190	mg/L	<b>333</b>	<b>412</b>	<b>294</b>	172	146	<b>211</b>
Chloride	275	mg/L	22.4	38.3	<b>326</b>	14.6	8.65	9.37
Fluoride	0.944	mg/L	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
pH	6.03-7.68*	SU	7.15	7.07	7.00	<b>8.03</b>	7.34	<b>7.74</b>
Sulfate	57.5	mg/L	<b>731</b>	<b>1060</b>	<b>248</b>	<b>633</b>	<b>740</b>	<b>519</b>
Total Dissolved Solids	1,190	mg/L	<b>1720</b>	<b>2010</b>	<b>1360</b>	978	<b>1330</b>	952
Assessment Monitoring Constituents								
Antimony	0.002	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	0.00200	<0.00100
Arsenic	0.0143	mg/L	<b>0.177</b>	<b>0.0414</b>	0.0116	0.0137	<b>0.0439</b>	0.00230
Barium	0.726	mg/L	0.132	0.0517	0.160	0.0975	0.0613	0.0608
Beryllium	0.001	mg/L	<0.000330	<0.000330	<0.000330	<0.000330	<0.000330	<0.000330
Cadmium	0.000662	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	0.000489	<0.000100
Chromium	0.00590	mg/L	<0.00120	<0.00120	<0.00120	<0.00120	<0.00120	0.0121
Cobalt	0.00346	mg/L	0.000932	0.00104	<b>0.00530</b>	0.000387 J	0.000321 J	<0.000170
Fluoride**	0.944	mg/L	<0.375	<0.375	<0.375	<0.375	<0.375	<0.375
Lead	0.00885	mg/L	<0.000260	<0.000260	0.000265 J	<0.000260	<0.000260	<0.000260
Lithium	0.0624	mg/L	0.0511	<b>0.0781</b>	0.0506	0.0147	0.0311	0.00993 J
Mercury	0.000214	mg/L	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110
Molybdenum	0.00234	mg/L	<0.00130	0.00222	<b>0.0582</b>	<b>0.0843</b>	<b>1.07</b>	<b>0.199</b>
Radium 226+228	4.13	pCi/L	1.24	0.559 U	0.613	0.852	0.695 U	0.364 U
Selenium	0.005	mg/L	<0.00140	<0.00140	<0.00140	<0.00140	0.00148 J	<b>0.0537</b>
Thallium	0.001	mg/L	<b>0.00105</b>	0.000650 J	<b>0.00154</b>	<0.000570	0.000696 J	<0.000570

**Bold and underlined** concentration indicates an SSI over background.

\* Indicates the lower bound of the range is the lower prediction limit (LPL). The upper bound is the upper prediction limit (UPL).

\*\* Fluoride is listed in both Appendix III and Appendix IV of the CCR Rule (40 CFR Part 257).

"U" data qualifier (radium) indicates parameter was analyzed for but not detected above limiting criteria (such as, but not limited to minimum detectable concentration, total uncertainty, reporting limit) as defined in the analytical laboratory data package.

"J" data qualifier indicates that value is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

Table C-2. Summary of Evaluation for SSLs over GWPS (October 2024)

	Well ID:	Unit	MW-2	MW-5	MW-6	MW-8	MW-13	MW-15	MW-17
	GWPS <sup>[1]</sup>		Lower Confidence Levels (LCLs) - Assessment Monitoring Constituents						
Antimony	0.006	mg/L	0.001	0.001	0.000693	0.001	0.001	0.001279	0.001
Arsenic	0.0143 <sup>[2]</sup>	mg/L	<b>0.1925</b>	<b>0.04573</b>	0.00771	0.01022	<b>0.01704</b>	0.00187	0.01061
Barium	2	mg/L	0.09511	0.04321	0.1417	0.07702	0.05842	0.04699	0.03575
Beryllium	0.004	mg/L	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
Cadmium	0.005	mg/L	0.0001	0.000054	0.000104	0.000078	0.0001353	0.00005956	0.0001
Chromium	0.1	mg/L	0.0012	0.0012	0.0012	0.0012	0.0012	0.001548	0.0012
Cobalt	0.006	mg/L	0.0002985	0.00035	0.005393	0.0004204	0.0003796	0.00017	<b>0.009553</b>
Radium 226+228	5	pCi/L	0.3678	0.1693	0.3582	0.2919	0.05202	0.1883	0.3578
Fluoride	4	mg/L	0.232	0.375	0.2072	0.266	0.34	0.375	0.375
Lead	0.015	mg/L	0.00026	0.00026	0.0002814	0.00026	0.00026	0.00026	0.00026
Lithium	0.0624 <sup>[2]</sup>	mg/L	0.0404	<b>0.06846</b>	0.04442	0.01177	0.02445	0.00799	<b>0.09447</b>
Mercury	0.002	mg/L	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
Molybdenum	0.1	mg/L	0.00104	0.001413	0.05573	0.08586	<b>0.815</b>	<b>0.197</b>	0.001901
Selenium	0.05	mg/L	0.0014	0.0014	0.0014	0.0014	0	<b>0.05424</b>	0.0014
Thallium	0.002	mg/L	0.00026	0.0002335	0.00026	0.00057	0.00026	0.00057	0.00026

**Bold and underlined** concentration indicates an SSL over the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2).

[2] GWPS is established as the UPL when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

Table C-3. Summary of Ongoing and Newly Identified SSLs (October 2024)

Well	Constituent	Unit	Most Recent Result		Consecutive Compliance Dates			
			(Fall 2024)	Upper Confidence Levels	GWPS <sup>[1]</sup>	1 <sup>st</sup> Occurrence	Most Recent	Duration (Years)
MW-2	Arsenic	mg/L	<u>0.177</u>	<u>0.241</u>	0.0143 <sup>[2]</sup>	N/A	N/A	N/A
MW-5	Arsenic	mg/L	<u>0.0414</u>	<u>0.06865</u>	0.0143 <sup>[2]</sup>	N/A	N/A	N/A
MW-5	Lithium	mg/L	<u>0.0781</u>	<u>0.08799</u>	0.0624 <sup>[2]</sup>	N/A	N/A	N/A
MW-6	Arsenic	mg/L	<u>0.0116</u>	<u>0.02233</u>	0.0143 <sup>[2]</sup>	N/A	N/A	N/A
MW-6	Cobalt	mg/L	<u>0.00530</u>	<u>0.006749</u>	0.006	N/A	N/A	N/A
MW-8	Arsenic	mg/L	0.0137	0.01268	0.0143 <sup>[2]</sup>	10/2023	10/2024	1
MW-13	Arsenic	mg/L	<u>0.0439</u>	<u>0.1167</u>	0.0143 <sup>[2]</sup>	N/A	N/A	N/A
MW-13	Molybdenum	mg/L	<u>1.07</u>	<u>1.401</u>	0.1	N/A	N/A	N/A
MW-15	Molybdenum	mg/L	<u>0.199</u>	<u>0.2625</u>	0.1	N/A	N/A	N/A
MW-15	Selenium	mg/L	<u>0.0537</u>	<u>0.08182</u>	0.05	N/A	N/A	N/A
MW-17	Arsenic	mg/L	<u>0.0234</u>	<u>0.05007</u>	0.0143 <sup>[2]</sup>	N/A	N/A	N/A
MW-17	Cobalt	mg/L	<u>0.0116</u>	<u>0.01173</u>	0.006	N/A	N/A	N/A
MW-17	Lithium	mg/L	<u>0.117</u>	<u>0.116</u>	0.0624 <sup>[2]</sup>	N/A	N/A	N/A

**Bold and underlined** concentration indicate value exceeds the GWPS.

[1] GWPS is established as the U.S. EPA Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2).

[2] GWPS is established as the UPL when the background level is higher than the U.S. EPA MCL or the GWPS specified in 40 CFR §257.95(h)(2).

This page intentionally left blank.