





2022 NC2 CCR Landfill Annual Groundwater Report

Nebraska City Station NC2 Ash Disposal Area

Nebraska City, Nebraska January 31, 2023

FDR

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 duly licensed Professional Engineer under the laws of the State of Nebraska.

Print Name: Mega

Megan B. Seymour

Signature:

1-21 2023

License #:

Date:

E-15931

My license renewal date is December 31, 2024.



Table of Contents

E	cecutiv	e Summary	i
1		duction	
	1.1	Purpose	
	1.2	Facility Information	
2	Moni	toring Program Summary	2
	2.1	Summary of Monitoring Program Transitions	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	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	7
5	Refe	rences	7

List of Figures

- Figure 1 Site Location Map
- Figure 2 Monitoring Well Location Map
- Figure 3 Groundwater Contour Map April 2022
- Figure 4 Groundwater Contour Map October 2022

List of Tables

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

List of Appendices

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



Executive Summary

Omaha Public Power District (OPPD) owns and operates a two-unit fossil fuel-fired generating station (NC1 and NC2), located 5.5 miles southeast of Nebraska City, Nebraska, along the west shore of the Missouri River. This generating station (Station or Site) has two (2) existing coal combustion residual (CCR) landfills for fossil fuel combustion ash disposal: the NC1 Ash Disposal Area and the NC2 Ash Disposal Area. 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. 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 2022 for the assessment monitoring program under 40 CFR §257.95 and corrective action monitoring under 40 CFR §257.96 for the NC2 Ash Disposal Area which is a lined landfill located at the Site.

The NC2 Ash Disposal Area transitioned from detection monitoring to assessment monitoring following the fall 2019 sampling event due to calcium detected as a statistically significant increase (SSI) above the background threshold value in monitoring well NC2MW-2. An alternate source demonstration (ASD) for calcium was unsuccessful, and OPPD published a notification (dated April 24, 2020). An assessment monitoring program was initiated in accordance 40 CFR §257.95 with the first sampling event in April 2020 and subsequent event July 2020. Results of assessment monitoring indicated three statistically significant levels (SSLs) over groundwater protection standards (GWPS); arsenic and lithium in NC2MW-7 and arsenic in NC2MW-8. OPPD published a notification of the exceedances and initiation of assessment of corrective measures (ACM) on November 25, 2020. An ACM report, dated December 22, 2020, was conducted to evaluate potential remedies for constituents with detected SSLs. A public meeting was conducted on August 25, 2021 and then on November 15, 2021, OPPD published a Remedy Selection Report (HDR, 2021a). The selected remedial system includes source control of windblown CCR and long-term performance monitoring. Initiation of the selected remedy began in December 2021 with submittal of draft permit modifications to the Nebraska Department of Energy and Environment (NDEE) under NDEE Title 132 regulations.

Groundwater has continued to be monitored at the Site in 2022, in accordance with 40 CFR §257.96. For the April 2022 sampling event, results of the analysis indicated eleven SSIs above background. Five new SSIs were detected (chloride, selenium, sulfate and TDS in NC2MW-3 and cobalt in NC2MW-8). There was one continued SSL above GWPS (lithium in NC2MW-7) and no newly detected SSLs.

For the October 2022 sampling event, results of the analysis indicated eleven SSIs above background. One new SSI was detected (radium 226+228 in NC2MW-2). There was one continued SSL above GWPS (lithium in NC2MW-7) and no newly detected SSLs.



Arsenic has been shown to be naturally occurring and highly variable at the NC2 Ash Disposal Area and is therefore not treated as an SSL under the ASD granted by the NDEE correspondence dated May 5, 2020. The Site will continue to be monitored semi-annually, as specified in 40 CFR §257.96(b) and will continue implementation of corrective measures in accordance with the schedule specified in the Selection of Remedy Report (HDR, 2021a). The next sampling event is anticipated to occur in April 2023.

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 CF	R Section § 257.90(e)(6) Groundwater Monitor Specific Compliance	ing System Requir	ements and Site-			
provides groundw program	on at the beginning of the annual report that an overview of the current status of vater monitoring and corrective action s for the CCR unit. At a minimum, the y must specify all of the following:	NC2 Ash Disposal Area				
\$257.90(e)(6)(i) At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95. Assessment Monitoring Program in § 257.95.						
§257.90(e)(6)(ii)	At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95.	Assessment Monitoring Program				
		Compliance Monitoring Event				
		April 2022	October 2022			
§257.90(e)(6)(iii)	If it was determined that there was a statistically significant increase over background for one or more constituents listed in appendix III to this part pursuant to § 257.94(e):	Yes	Yes			
§257.90(e)(6)(iii)(A)	Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase.	NC2MW-2 – calcium NC2MW-3 – chloride, sulfate, TDS	NC2MW-2 – calcium NC2MW-3 – TDS			
§257.90(e)(6)(iii)(B)	Provide the date when the assessment monitoring program was initiated for the CCR unit.	April 24, 2020				
§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.	NC2MW-7 – lithium	NC2MW-7 – lithium			



Summary of 40 CF	Summary of 40 CFR Section § 257.90(e)(6) Groundwater Monitoring System Requirements and Site- Specific Compliance										
provides groundv program	on at the beginning of the annual report that an overview of the current status of vater monitoring and corrective action is for the CCR unit. At a minimum, the y must specify all of the following:	NC2 Ash Disposal Area									
§257.90(e)(6)(iv) (B)	Provide the date when the assessment of corrective measures was initiated for the CCR unit.	December 14, 2020									
§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.	August 25, 2021									
§257.90(e)(6)(iv)(D)	Provide the date when the assessment of corrective measures was completed for the CCR unit.	November 15, 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.	Remedy selected in 2021									
§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 initiated and performance monitoring ongoing									



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 residual (CCR) under Subtitle D of the Resource Conservation and Recovery Act. The CCR rule is formally promulgated in the U.S. Code of Federal Regulations (CFR), Title 40, Part 257. The rule – effective on October 19, 2015 – applies to electric utilities and independent power producers that fall within North American Industry Codes System code 221112, and facilities that produce or store CCR materials in surface impoundments or landfills (EPA, 2015). 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), Nebraska City Station.

1.1 Purpose

The CCR Rule, 40 CFR §257.90(e), specifies that an owner or operator of an existing CCR landfill prepare an annual groundwater monitoring and corrective action report to summarize 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) of the CCR rule. This report provides a summary of CCR groundwater monitoring system activities for calendar year 2022 for the assessment monitoring program under 40 CFR §257.95 and corrective action monitoring under 40 CFR §257.96 for the NC2 Ash Disposal Area which is a lined landfill located at the Site.

1.2 Facility Information

OPPD owns and operates a two-unit fossil fuel-fired generating station (NC1 and NC2), located 5.5 miles southeast of Nebraska City, Nebraska, along the west shore of the Missouri River (**Figure 1**). This Station has two existing CCR landfills: the NC1 Ash Disposal Area and NC2 Ash Disposal Area. The CCR landfills are permitted under the current Nebraska Department of Environment and Energy (NDEE) Title 132 Chapter 7 (Groundwater Monitoring and Remedial Action) regulations for fossil fuel combustion ash disposal areas. This annual report covers the NC2 Ash Disposal Area (NDEE Permit No. NE0204421, Facility ID 58343).

The NC2 Ash Disposal Area is an existing CCR lined landfill permitted for 40.7 acres of disposal; Cell 1 (14.5 acres) and the East Leachate Pond were constructed in 2008/2009 and Cells 2 & 3 (26.2 acres), along with the West Leachate Pond, were completed January 23, 2020. Base liners for Cells 1 through 3 were constructed with 24 inches of re-compacted clay overlain by a 60-mil high-density polyethylene geomembrane and geotextile fabric layer. The leachate collection system for Cell 1 collects leachate at the sump and is then pumped to the East Leachate Pond. The leachate collection system for Cells 2 & 3 collects leachate at two sumps, one sump in Cell 2 and one sump in Cell 3, which is then pumped to the West Leachate Pond. Figure 2 identifies the relevant CCR unit for this report and the supporting groundwater monitoring network.



2 Monitoring Program Summary

The groundwater monitoring network currently consists of three upgradient/background monitoring wells (NC2MW-4, NC2MW-5, and MW-13), four downgradient monitoring wells (NC2MW-2, NC2MW-3, NC2MW-7, and NC2MW-8), and one cross-gradient monitoring well (NC2MW-6). 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 CCR unit, NC2 Ash Disposal Area, are shown in **Figure 2**.

2.1 Summary of Monitoring Program Transitions

OPPD complies with Nebraska State regulations (NDEE Title 132) and the EPA's regulations for the disposal of CCR, as specified in 40 CFR Part 257 (CCR Rule). As part of these regulatory programs, the NC2 Ash Disposal Area is monitored semi-annually under detection or assessment monitoring programs. Under the detection monitoring program, constituents listed in Appendix III of 40 CFR part 257 are evaluated for statistically significant increases (SSIs) above background. Under the assessment monitoring program, constituents listed in Appendix IV of 40 CFR Part 257 are evaluated for SSIs above background and for statistically significant levels (SSLs) over groundwater protection standards (GWPS). The following table outlines the transition of groundwater monitoring programs and subsequent actions and reports.

Date	Groundwater Compliance Monitoring Milestones
01/30/2018	Semi-annual detection monitoring. Potential SSIs during fall 2017 sampling event in downgradient monitoring wells for calcium and pH. A successful alternate source demonstration (ASD) indicated the SSIs resulted from an error in statistical evaluation.
06/06/2018	Semi-annual detection monitoring. A potential SSI during spring 2018 sampling event in one downgradient monitoring well for pH. A successful ASD indicated the SSI was a result of sampling error.
01/31/2019	Semi-annual detection monitoring. There were no SSIs during the fall 2018 sampling event.
04/08/2019	Semi-annual detection monitoring. Potential SSI detected for calcium. Verification sampling on 6/26/2019 indicated the SSI was not confirmed and the network continued with detection monitoring.
10/15/2019	Semi-annual detection monitoring. Potential SSI detected for calcium. Verification sampling on 01/08/2020 indicated the SSI was confirmed.
4/24/2020	Notification published for unsuccessful alternate source demonstration (ASD) for calcium within 90-day deadline. Initiation of assessment monitoring program in accordance with 40 CFR §257.95.
4/27/2020	Initial round of sampling for initiation of assessment monitoring. Background threshold values (BTVs) and GWPS were established for assessment monitoring constituents following the first round of sampling.
07/15/2020	Second round of sampling for initiation of assessment monitoring. SSIs detected for downgradient wells for calcium, antimony, arsenic, barium, cadmium, cobalt, and lithium. There were two SSLs detected (arsenic and lithium at NC2MW-7).

Date	Groundwater Compliance Monitoring Milestones
10/05/2020	Semi-annual assessment monitoring. SSIs detected for downgradient wells for calcium, antimony, arsenic, barium, cadmium, and lithium. There were three SSLs detected (arsenic and lithium at NC2MW-7 & arsenic in NC2MW-8).
11/25/2020	Notification published for detected SSLs.
12/14/2020	Initiation of assessment of corrective measures program in accordance with 40 CFR §257.96.
12/22/2020	Assessment of Corrective Measures Report (HDR, 2020b) to evaluate potential remedies for constituents with detected SSLs.
4/12/2021	Semi-annual assessment monitoring. SSIs detected for downgradient wells for antimony, arsenic, barium, fluoride, and lithium. There were two SSLs detected (arsenic and lithium at NC2MW-7).
8/25/2021	Public meeting conducted to discuss corrective measures (HDR, 2021a).
10/4/2021	Semi-annual assessment monitoring. SSIs detected for downgradient wells for arsenic, barium, cadmium, cobalt, radium 226 + 228, and lithium. There were two SSLs detected (arsenic and lithium at NC2MW-7).
11/15/2021	Remedy Selection Report (HDR, 2021a) to select a remedial system for constituents with detected SSLs.
4/4/2022	Semi-annual assessment monitoring. SSIs detected for downgradient wells for antimony, arsenic, barium, calcium, chloride, cobalt, lithium, selenium, sulfate, and TDS. There was one SSL detected (lithium at NC2MW-7).
10/3/2022	Semi-annual assessment monitoring. SSIs detected for downgradient wells for antimony, arsenic, barium, calcium, cobalt, lithium, molybdenum, radium 226+228, and TDS. There was one SSL detected (lithium at NC2MW-7).

2.2 Groundwater Monitoring Network Condition Assessment

OPPD personnel evaluated the condition of each monitoring well in the groundwater monitoring system during the sampling events in April 2022 and October 2022. No repairs were required at the monitoring wells. All wells were noted in good working condition, concrete pads were intact, and no damage was observed to the protective well casings.

3 Data Evaluation and Summary

3.1 Summary of Sampling Activities

Groundwater sampling events were conducted by OPPD personnel in April 2022 and October 2022 as continuation of the semi-annual assessment monitoring program while implementation of corrective measures was conducted. Samples were collected in general 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 sample event, whether the sample was collected during detection or assessment monitoring programs, and the date of each event are summarized in **Table 2**.



Groundwater sampling completed by OPPD personnel was conducted in general accordance with the facility's NDEE Title 132 Groundwater Sampling and Analysis Plan (HDR, 2019c) and the Groundwater Monitoring System Certification (HDR, 2019a). Samples were collected from all background and downgradient network wells. Field sampling forms from the 2022 sampling events are provided in **Appendix A**. The collected groundwater samples were analyzed by Eurofins. The 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 of both monitoring network wells and groundwater elevation only wells, as defined in the CCR Groundwater Monitoring System Certification (HDR, 2019a), were used to determine groundwater contours. Monitoring well static groundwater elevations are provided in **Table 3**. Groundwater measurements collected during the April 2022 sampling event indicated a flow direction to the southeast and an average flow velocity of 0.0127 feet per day (ft/day) to 0.0719 ft/day. Groundwater measurements collected during the October 2022 sampling event indicated a flow direction to the south-southeast and an average flow velocity of 0.0092 ft/day to 0.0519 ft/day. The April 2022 and October 2022 flow velocities are based on a range of hydraulic conductivity at the Site of 6.96 ft/day to 39.4 ft/day (HDR, 2019a). Estimated groundwater flow direction is consistent with historical observations.

3.3 Assessment Monitoring Groundwater Sampling

Groundwater sampling events were conducted by OPPD personnel in April 2022 and October 2022 as continuation of the semi-annual assessment monitoring program in accordance with 40 CFR §257.96(b). As specified in 40 CFR §257.95(b), monitoring network wells should be resampled at least annually for the full Appendix IV constituent list. In accordance with 40 CFR §257.95(d), monitoring network wells should be resampled at least semi-annually for the full Appendix III constituents and those Appendix IV constituents detected in response to 40 CFR §257.95(b). However, to be conservative, all Appendix III and Appendix IV constituents were analyzed for both the April and October 2022 sampling events. The results of the sampling events conducted in 2022 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 BTVs, and Appendix IV constituents are statistically analyzed to evaluate for SSLs above the GWPS. Statistical analysis was performed using SanitasTM Statistical Software in accordance with the methods described in the Groundwater Monitoring Statistical Methods (HDR, 2021b). BTVs are updated every two years in accordance with Chapter 21 of the EPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance (EPA, 2009) or during a monitoring program transition. BTVs and GWPS were updated following the spring 2022 sampling event. The next update is planned for the spring 2024 sampling event. Statistically derived BTVs for Appendix III and IV



constituents for detection monitoring are provided in **Table 6**. The established GWPS for all Appendix IV constituents are provided in **Table 7**. Results of the statistical analysis of designated in-network downgradient monitoring wells from the April 2022 and October 2022 sampling events are provided in **Appendix C**.

For the April 2022 sampling event, results of the analysis indicated four SSIs above background for detection monitoring constituents and seven SSIs for assessment monitoring constituents:

- NC2MW-2: Antimony and Calcium
- NC2MW-3: Chloride, Selenium, Sulfate and TDS
- NC2MW-7: Arsenic, Barium and Lithium
- NC2MW-8: Barium and Cobalt

Five new SSIs were detected (chloride, selenium, sulfate and TDS in NC2MW-3 and cobalt in NC2MW-8). Analysis of the assessment monitoring constituents indicated there were no new SSLs and there was one continued SSL detected above the GWPS:

• NC2MW-7: Lithium

A subsequent semi-annual sampling event was conducted in October 2022. Results of the analysis indicated two SSIs above background for detection monitoring constituents and nine SSIs for assessment monitoring constituents:

- NC2MW-2: Antimony, Calcium, Molybdenum, and Radium 226+228
- NC2MW-3: Cobalt and TDS
- NC2MW-6: Radium 226+228
- NC2MW-7: Arsenic, Barium, and Lithium
- NC2MW-8: Barium

One new SSI was detected (radium 226+228 in NC2MW-2). Analysis of the assessment monitoring constituents indicated there were no new SSLs, and there was one continued SSL detected above the GWPS:

NC2MW-7: Lithium

The site will continue implementation of corrective measures for lithium in accordance with the schedule specified in the Selection of Remedy Report (HDR, 2021a).

3.5 Other Information Required under 40 CFR §257.90-98

In response to previously detected SSIs for arsenic in 2018 and 2019 under NDEE required monitoring, a Groundwater Assessment Report (GAR) was conducted by HDR Engineering, Inc. (HDR) on behalf of OPPD in 2019 to characterize the alternate sources of arsenic at the NC2 Ash Disposal Area (HDR, 2019b). As part of the GAR, upwind/upgradient and downwind/downgradient surface and subsurface soil samples were collected near the NC2 Ash Disposal Area. Additionally, groundwater samples from temporary piezometers and monitoring wells along the downgradient side of the NC2 Ash Disposal Area and ash samples from within the NC2 Ash Disposal Area were collected and analyzed. Surface soil samples, subsurface soil



samples, ash samples, leachate samples, and groundwater samples were evaluated to characterize the NC2 Ash Disposal Area and the nature of the surrounding groundwater. The GAR served as an ASD for arsenic at monitoring well NC2MW-7 and was submitted to NDEE on November 6, 2019. NDEE responded in a May 5, 2020 correspondence stating the ASD for arsenic in NC2MW-7 had been accepted and that arsenic was due to naturally occurring arsenic in the soil and not a result of a release from the NC2 Ash Disposal Area.

Similarly, in response to the previously detected SSI for calcium in 2019 under CCR and NDEE required groundwater monitoring, a Site Assessment Report (SAR) was conducted in February and March 2020 in advance of the initiation of assessment monitoring (HDR, 2020a). HDR, on behalf of OPPD, conducted this additional investigation into two Appendix IV constituents (arsenic and lithium) at the NC2 Ash Disposal Area to evaluate and refine the source(s) of inorganic impacts to groundwater downgradient of the NC2 Ash Disposal Area. The information provided in the SAR was based on a combination of field data obtained during the GAR and field data obtained specifically for the SAR. Data evaluated as part of the SAR included: surface and subsurface soil samples, fly and bottom ash samples, limestone samples, leachate pond and leachate sump samples, clarifier sediment disposal area sediment samples, surface water samples, temporary piezometer groundwater samples, and groundwater samples from permanent monitoring wells and two delineation wells installed as part of the GAR.

Following the July 2020 SSLs for arsenic and lithium, both in NC2MW-7, OPPD was required to characterize the extent of the release and initiate an ACM within 90 days of identifying SSLs in accordance with 40 CFR §257.95(g). Following the October 2020 SSL for arsenic in NC2MW-8, a notification of SSL was prepared and placed in the facility's operating record on November 25, 2020 pursuant to 40 CFR §257.95(g) for all SSLs detected. A Nature and Extent Study (NES) was submitted to NDEE on December 17, 2020 (HDR, 2020b), and an ACM Report (HDR, 2020c) was placed in the facility's operating record on December 22, 2020, both of which were developed by implementing site information obtained through the GAR and SAR.

Results of the site investigations and ACM Report were presented at a public meeting with interested and affected parties on August 25, 2021. The public meeting was held online using WebexTM. No comments were received during the meeting or submitted in writing. OPPD published a Remedy Selection Report in November 2021. The selected remedy has been implemented in stages as proposed in the Remedy Selection Report. Draft permit revisions were provided to NDEE during the 2021 reporting period to revise the NDEE Title 132 permit for implementation of the use of a surface binder for dust control as part of the selected remedy. In a letter dated January 14, 2022, the NDEE approved the permit modifications to control fugitive dust. During the 2022 reporting period, a revised fill plan was implemented, and applications of a surface binder to inactive areas of the landfill were conducted on June 16th and October 27th.

No other information is required under 40 CFR §257.90-98 at this time.

4 Key Activities for Upcoming Year

OPPD has selected a remedy for corrective action (HDR, 2021a) and will continue to implement corrective actions. Ongoing remedial activities will occur in 2023 by continuing to implement the revised fill plan to reduce active areas of the landfill and annual applications of a surface binder to inactive areas of the landfill. The next application of the surface binder is tentatively planned for fall 2023. The Site will continue to be monitored in accordance with the corrective action monitoring program as specified in 40 CFR §257.96(b), and the next semi-annual sampling event is anticipated to occur in April 2023.

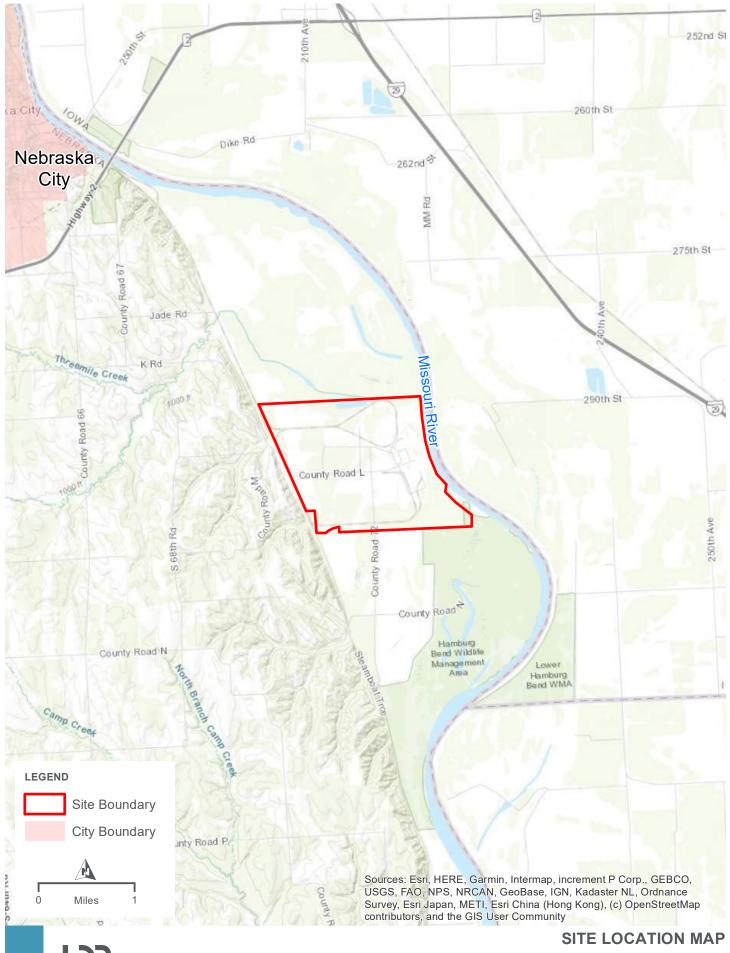
5 References

- 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 parts 257; Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, Federal Register Vol. 80, No. 74. Environmental Protection Agency. April 17, 2015.
- HDR, 2019a. *Groundwater Monitoring System Certification*. Nebraska City Station NC2 Combustion Ash Landfill. Revised June 2019.
- HDR, 2019b. *Title 132: Groundwater Assessment Report.* Nebraska City Station NC2 Combustion Ash Landfill. November 6, 2019.
- HDR, 2019c. *Groundwater Sampling and Analysis Plan.* Nebraska City Station NC2 Combustion Ash Landfill. Revised March 2019.
- HDR, 2020a. *Site Assessment Report.* Nebraska City Station NC2 Combustion Ash Landfill. June 18, 2020.
- HDR, 2020b. *Title 132: Nature and Extent Study.* Nebraska City Station NC2 Combustion Ash Landfill. December 17, 2020.
- HDR, 2020c. Assessment of Corrective Measures Report. Nebraska City Station NC2 Combustion Ash Landfill. December 22, 2020.
- HDR, 2021a. *Remedy Selection Report.* Nebraska City Station NC2 Combustion Ash Landfill. November 15, 2021.
- HDR, 2021b. *Groundwater Monitoring Statistical Methods*. Nebraska City Station NC2 Combustion Ash Landfill. Revised December 2021.

Figures

This page intentionally left blank.

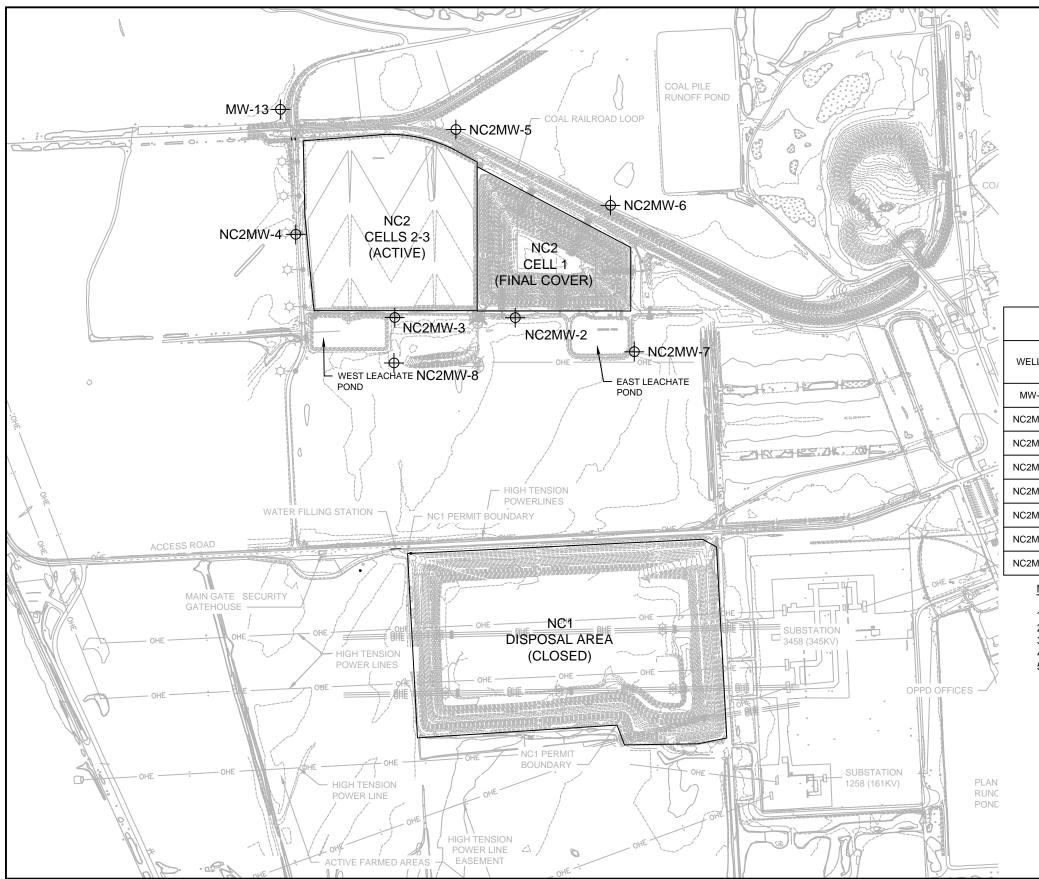
.

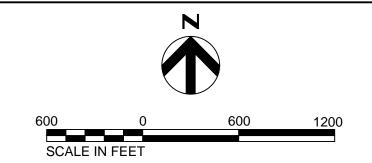


OPPD - NEBRASKA CITY STATION

FIGURE 1







	MONITORING WELL NETWORK													
WELL ID	NORTHING	EASTING	ELEVATION (TOC)	WELL DEPTH (BGS)	LOCATION WITH RESPECT TO NC2 ASH DISPOSAL AREA									
MW-13	318186.64	2808434.68	918.05	13.0	BACKGROUND / UPGRADIENT									
NC2MW-	2 316884.69	2809902.40	922.55	17.0	DOWNGRADIENT									
NC2MW-	3 316885.96	2809149.54	916.22	12.0	DOWNGRADIENT									
NC2MW-	4 317405.90	2808530.80	919.62	14.0	BACKGROUND / UPGRADIENT									
NC2MW-	5 318060.54	2809531.90	922.76	15.2	BACKGROUND / UPGRADIENT									
NC2MW-	6 317587.46	2810497.97	919.72	11.0	CROSSGRADIENT									
NC2MW-	7 316671.78	2810647.12	918.37	21.0	DOWNGRADIENT									
NC2MW-	8 316601.90	2809145.16	918.18	15.0	DOWNGRADIENT									

NOTES:

- 1. TOC TOP OF CASING
- 2. TOP OF CASING ELEVATION DETERMINED BY SURVEY DATA OBTAINED JUNE 2019.
- 3. BGS BELOW GROUND SURFACE
- 4. WELL DEPTH MEASUREMENTS REPRESENT DEPTH BELOW GROUND SURFACE.
- 5. NORTHING AND EASTING COORDINATES ARE NEBRASKA STATE PLANE WHICH HAVE BEEN TRANSLATED BY THE SURVEYOR.



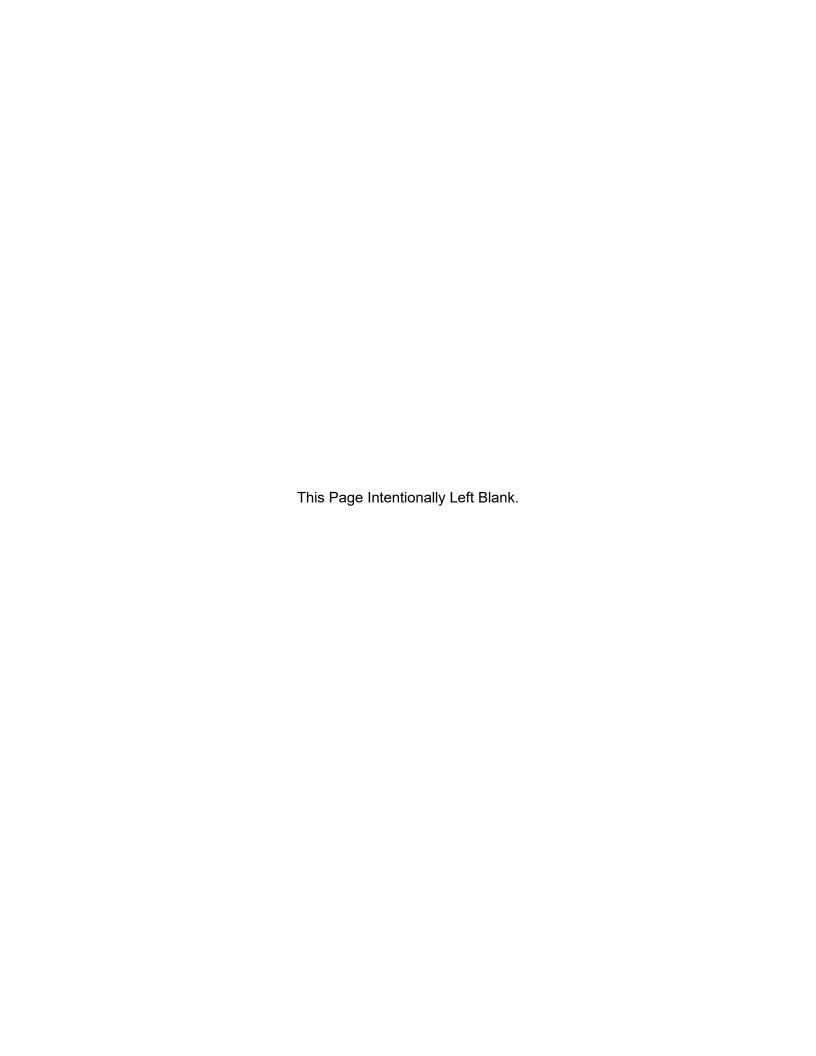


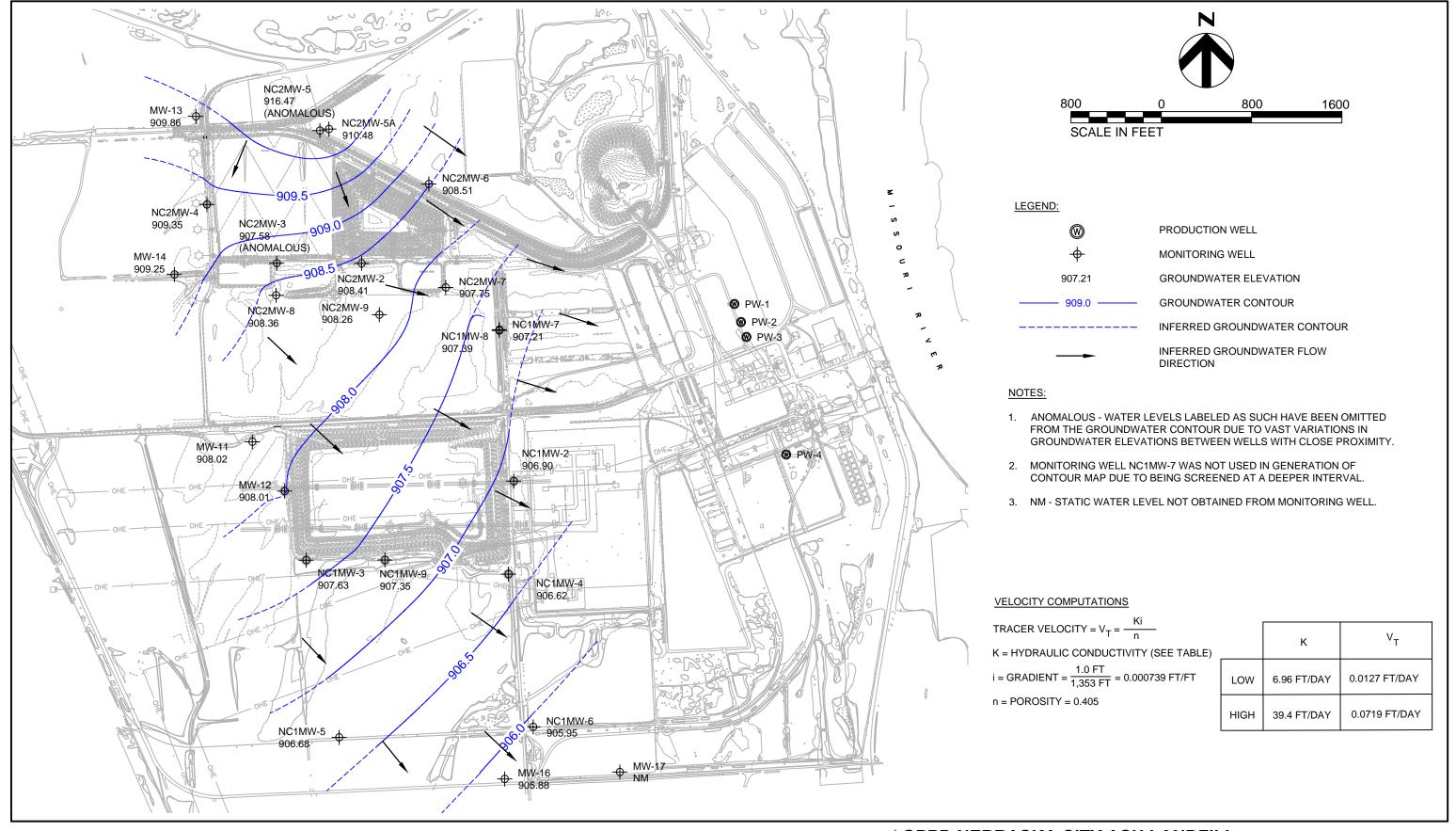
OPPD NEBRASKA CITY ASH LANDFILL NEBRASKA CITY UNIT 2 - NC2 MONITORING WELL LOCATION MAP

NOVEMBER 2022

FIGURE

02





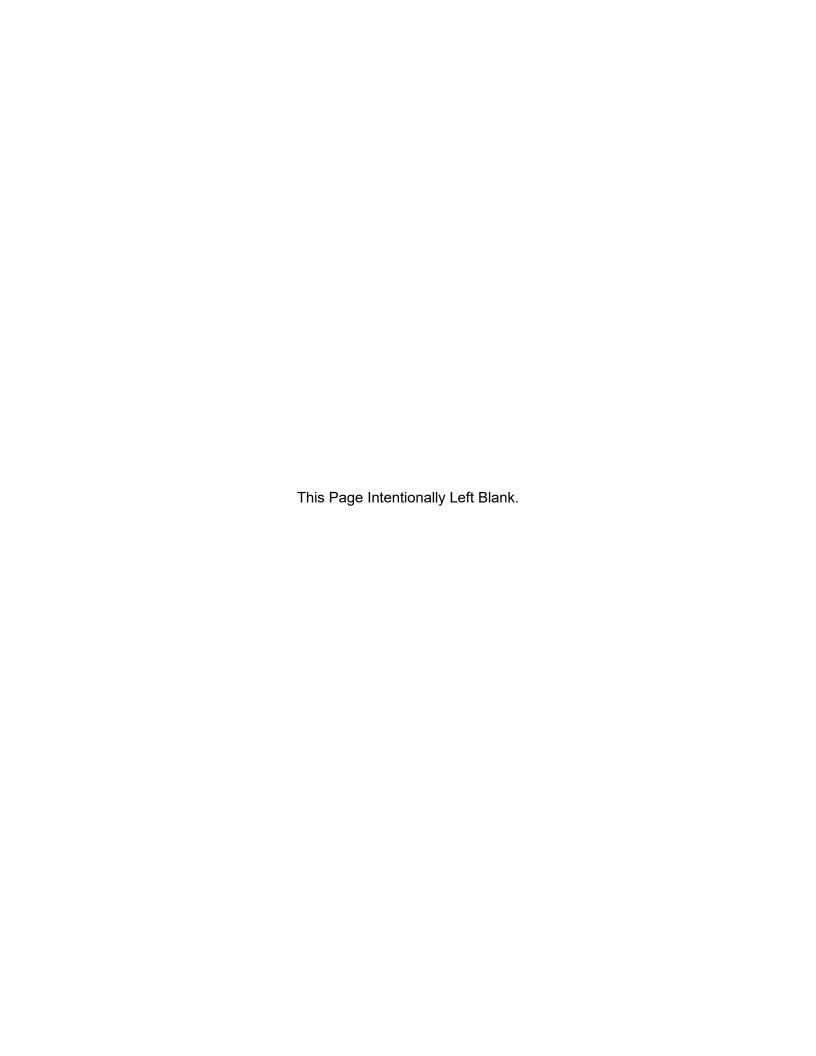


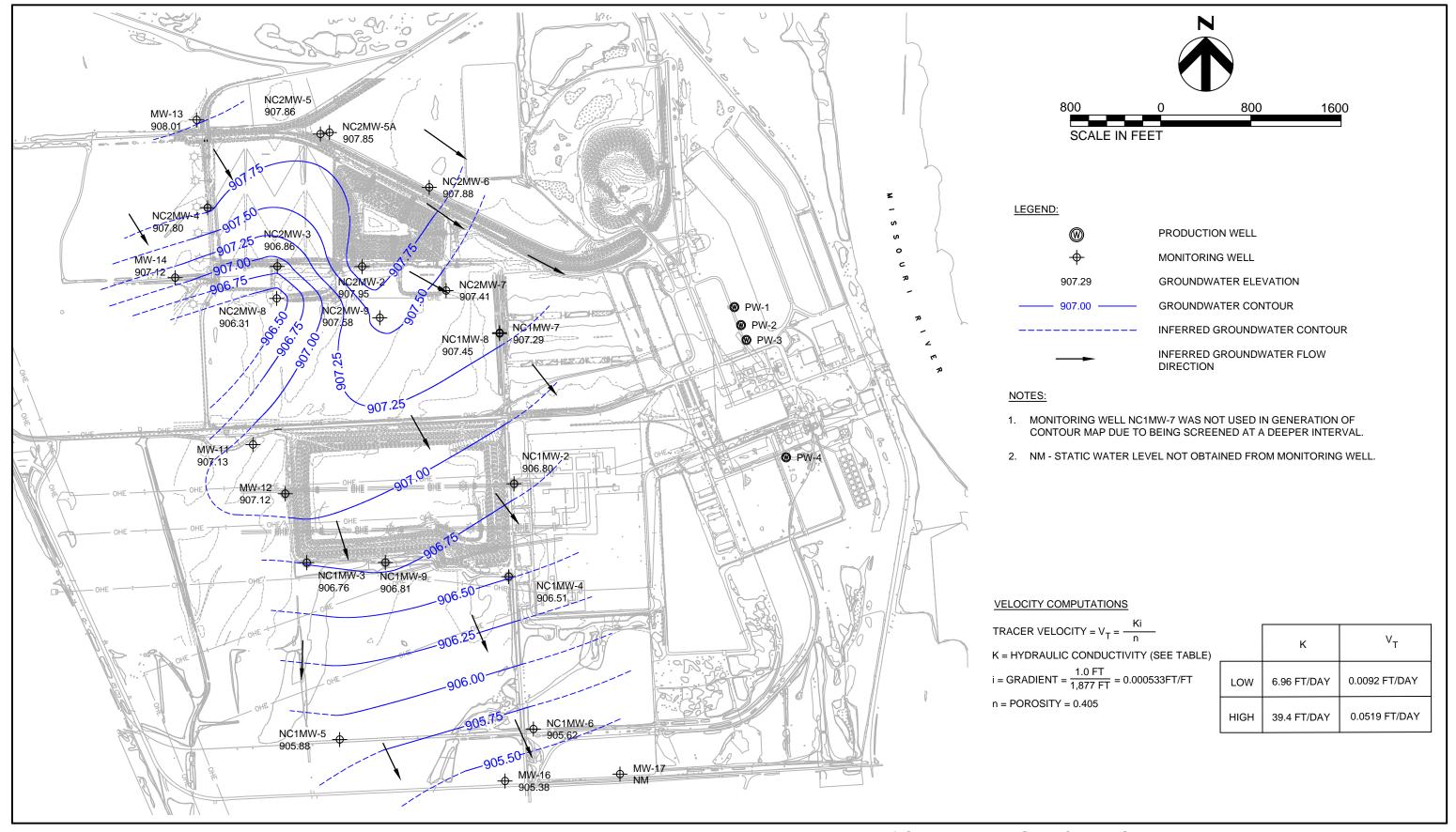


OPPD NEBRASKA CITY ASH LANDFILL GROUNDWATER CONTOUR MAP APRIL 2022

JUNE 2022
FIGURE
03

2022 GROUNDWATER MONITORING









OPPD NEBRASKA CITY ASH LANDFILL GROUNDWATER CONTOUR MAP OCTOBER 2022

FIGURE

2022 GROUNDWATER MONITORING

NOVEMBER 2022

Tables



Table 1 - Groundwater Monitoring System

- I Data Installed I		Well Depth (feet bgs)	Location w/ respect to NC2 Ash Disposal Area	Ground Surface Elevation (feet AMSL)	Top of Well Casing Elevation (feet AMSL)
			CCR Monitoring Network We	ells	
NC2MW-2	9/8/2004	17	Downgradient	919.80	922.55
NC2MW-3	9/8/2004	16	Downgradient	913.30	919.58
NC2MW-4	9/8/2004	14	Background/Upgradient	917.07	919.62
NC2MW-5	9/16/2004	16	Background/Upgradient	919.34	922.76
NC2MW-6	9/7/2004	14	Crossgradient	916.30	919.72
NC2MW-7	11/6/2013	24	Downgradient	915.11	918.20
NC2MW-8	7/9/2018	15	Downgradient	915.20	917.97
MW-13	1/26/2016	13.0	Background/Upgradient	915.97	918.05
			Water Level Only Wells		
NC1MW-2	3/14/1995	17.8	Downgradient	917.23	919.42
NC1MW-3	3/13/1995	19.5	Downgradient	917.10	919.85
NC1MW-4	3/13/1995	20.3	Downgradient	916.79	919.63
NC1MW-5	3/17/1995	16.6	Downgradient	917.61	920.70
NC1MW-6	3/13/1995	16.5	Downgradient	914.01	916.67
NC1MW-7	1/20/1999	40.5	Downgradient	917.12	919.20
NC1MW-8	1/21/1999	20.0	Downgradient	917.19	919.68
NC1MW-9	1/21/1999	20.0	Downgradient	917.52	920.09
NC2MW-5A	9/16/2019	17.2	Upgradient	919.13	922.05
NC2MW-9	9/17/2019	18.0	Downgradient	917.49	920.35
MW-11	1/16/2004	20.0	Downgradient	911.90	918.44
MW-12	3/26/2004	18.1	Downgradient	917.91	920.36
MW-14	7/12/2018	18.0	Crossgradient	917.99	920.99

Notes:

bgs - below ground surface AMSL - above mean sea level



Table 2 - Groundwater Sampling Event Summary

Monitoring Well ID	# of Initial Background Samples	Initial Background Sample Dates	# of Detection Monitoring Samples ^{[1], [6]}	Detection Monitoring Sample Dates	# of Assessment Monitoring Samples	Assessment Monitoring Sample Dates		
Current Backgro	ound Monitoring W	/ells						
NC2MW-4 ^[5]	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	7	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 4/8/2019, 10/15/2019, 1/30/2020	7	4/27/2020, 7/14/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
NC2MW-5	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	7	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 4/8/2019, 10/15/2019, 1/30/2020	7	4/27/2020, 7/14/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
MW-13 ^{[2], [3], [5]}	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	5	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 1/30/2020	7	4/27/2020, 7/14/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
Downgradient N	Ionitoring Wells							
NC2MW-2	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	8	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 4/8/2019, 9/23/2019, 10/15/2019, 1/31/2020	7	4/27/2020, 7/14/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
NC2MW-3 ^[2]	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	7	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 9/23/2019, 10/15/2019, 1/31/2020	7	4/27/2020, 7/14/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
NC2MW-6	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	7	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 4/8/2019, 10/15/2019, 1/31/2020	7	4/27/2020, 7/14/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
NC2MW-7	8	3/14/2016, 6/3/2016, 8/31/2016, 11/17/2016, 2/15/2017, 4/24/2017, 6/15/2017, 7/12/2017	8	11/9/2017, 3/12/2018, 6/6/2018, 10/3/2018, 4/8/2019, 9/23/2019, 10/15/2019, 2/3/2020	7	4/27/2020, 7/15/2020, 10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		
NC2MW-8 ^[2]	8 ^[4]	10/3/2018, 1/15/2019, 3/5/2019, 9/23/2019, 10/16/2019, 1/31/2020, 4/27/2020, 7/14/2020	0	N/A	5	10/5/2020, 4/12/2021, 10/4/2021, 4/4/2022, 10/3/2022		

^[1] The number of detection monitoring samples includes the 3/12/2018 event, which occurred as part of an Alternative Source Demonstration.

^[2] MW-13, NC2MW-3, and NC2MW-8 were submerged under water during April 2019 sampling event and were not sampled.

^[3] MW-13 was surrounded by ponding water during October 2019 sampling event and was not sampled.

^[4] NC2MW-8 was installed July 9, 2018 and was added to the Groundwater Monitoring System Certification in June 2019. The 9/23/2019 sampling event was part of an Alternative Source Demonstration for the Title 132 Groundwater Assessment Report.

^[5] Background wells have been sampled on more dates than are listed for the initial background and detection monitoring sample dates. This is due to two background wells (NC2MW-4 and MW-13) being sampled for both NC1 and NC2 Ash Disposal Areas. Sampling dates for the NC1 Ash Disposal Area have not been included in the sampling event summary, but are included within the dataset used for statistical analysis.

^[6] Four wells, NC2MW-2, NC2MW-3, NC2MW-7, and NC2MW-8, were sampled during the 9/23/2019 fieldwork as part of an Alternative Source Demonstration for the Title 132 Groundwater Assessment Report.



Table 3 - Groundwater Elevations

		CCR Monitoring Network Wells														
	NC2	MW-4	NC2I	MW-5	MW	<i>l</i> -13	NC2I	MW-2	NC2	MW-3	NC2	MW-6	NC2	MW-7	NC2	NW-8
	TOC E	levation	TOC EI	evation	TOC EI	evation	TOC EI	levation	TOC E	levation	TOC EI	evation	TOC EI	evation	TOC EI	evation
	919	9.62	922.76		918	3.05	922	2.55	919.58		919).72	918.20		917.97	
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)
3/14/2016	6.91	912.71	6.98	915.78	4.75	913.30	10.80	911.75	4.05	915.53	7.95	911.77	7.04	911.16		
6/3/2016	5.62	914.00	7.67	915.09	3.51	914.54	8.96	913.59	2.55	917.03	6.02	913.70	4.80	913.40		
8/31/2016	5.05	914.57	5.30	917.46	2.85	915.20	8.91	913.64	2.31	917.27	5.95	913.77	5.40	912.80		
11/17/2016	6.80	912.82	9.25	913.51	4.40	913.65	10.90	911.65	4.10	915.48	8.10	911.62	7.20	911.00		
2/15/2017	7.50	912.12	10.20	912.56	5.21	912.84	11.70	910.85	4.95	914.63	9.00	910.72	8.15	910.05		
4/24/2017	6.11	913.51	8.48	914.28	4.00	914.05	9.85	912.70	3.21	916.37	7.00	912.72	5.96	912.24	Well Installe	ed 7/9/2018
6/15/2017	6.75	912.87	9.82	912.94	4.70	913.35	10.30	912.25	3.42	916.16	7.35	912.37	6.35	911.85		
7/12/2017	7.11	912.51	10.15	912.61	5.02	913.03	10.76	911.79	4.25	915.33	7.90	911.82	6.80	911.40	1	
11/9/2017	12.20	907.42	14.20	908.56	8.25	909.80	15.10	907.45	12.10	907.48	11.20	908.52	10.50	907.70		
3/12/2018	10.18	909.44	12.95	909.81	8.10	909.95	13.90	908.65	7.15	912.43	10.88	908.84	10.00	908.20		
6/6/2018	6.80	912.82	9.70	913.06	4.65	913.40	10.35	912.20	3.70	915.88	7.25	912.47	6.35	911.85		
10/3/2018	4.14	915.48	4.95	917.81	1.63	916.42	7.39	915.16	0.80	918.78	4.30	915.42	3.20	915.00	3.15	914.82
3/5/2019	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	6.67	911.30
4/8/2019 ^[1]	3.53	916.09	4.56	918.20	N.M.	N.M.	6.70	915.85	N.M.	N.M.	4.18	915.54	2.74	915.46	N.M.	N.M.
10/14/2019 ^[2]	3.47	916.15	4.48	918.28	N.M.	N.M.	6.34	916.21	0.21	919.37	3.75	915.97	2.27	915.93	2.38	915.59
1/30/2020	5.44	914.18	5.81	916.95	3.39	914.66	9.09	913.46	2.56	917.02	6.11	913.61	5.37	912.83	4.75	913.22
4/20/2020	5.24	914.38	6.37	916.39	2.94	915.11	8.83	913.72	2.36	917.22	5.97	913.75	4.99	913.21	4.59	913.38
7/14/2020	7.19	912.43	10.02	912.74	5.23	912.82	10.44	912.11	7.89	911.69	7.45	912.27	6.32	911.88	6.28	911.69
10/5/2020	9.65	909.97	12.63	910.13	7.76	910.29	12.92	909.63	10.34	909.24	9.90	909.82	8.81	909.39	8.68	909.29
4/6/2021	6.76	912.86	5.87	916.89	4.73	913.32	10.57	911.98	7.72	911.86	7.62	912.10	6.76	911.44	6.03	911.94
10/1/2021	10.17	909.45	13.15	909.61	8.32	908.01	13.48	909.07	11.55	908.03	10.38	909.34	9.37	908.83	9.16	908.81
4/1/2022	10.27	909.35	6.29	916.47	8.19	909.86	14.14	908.41	12.00	907.58	11.21	908.51	10.45	907.75	9.61	908.36
10/1/2022	11.82	907.80	14.90	907.86	10.04	908.01	14.60	907.95	12.72	906.86	11.84	907.88	10.79	907.41	11.66	906.31

TOC = Top of PVC well casing

N.M. = not measured

AMSL = above mean sea level

^[1] MW-13, NC2-MW-3, and NC2-MW-8 were surrounded by ponding water during April 2019 sampling event and were not measured.

^[2] MW-13 was surrounded by ponding water during October 2019 sampling event and was not measured.

Table 3 - Groundwater Elevations

								٧	Vater Level	Only Wells	5							
	NC1	MW-2	NC1I	MW-3	NC1N	/IW-4	NC1I	MW-5	NC1	MW-6	NC1I	MW-7	NC1	MW-8	NC1N	/W-9	NC2N	IW-5A
	TOC Elevation		TOC EI	evation	TOC El	evation	TOC EI	evation	TOC E	levation	TOC EI	evation	TOC E	evation	TOC El	evation	TOC EI	evation
	919.42		919	9.85	919	.63	920).70	910	6.67	919	9.20	919	9.68	920.09		922.05	
Date	Measured Depth to Water (ft.)	GW Elevation (AMSL)																
3/9/2016	8.90	910.52	8.95	910.90	9.50	910.13	10.82	909.88	7.55	909.12	8.25	910.95	8.60	911.08	9.30	910.79		
6/7/2016	7.04	912.38	7.75	912.10	7.41	912.22	9.67	911.03	6.31	910.36	6.43	912.77	6.80	912.88	7.88	912.21		
10/3/2016	8.45	910.97	8.35	911.50	9.10	910.53	12.99	907.71	6.86	909.81	7.94	911.26	8.53	911.15	8.76	911.33		
11/18/2016	9.30	910.12	9.36	910.49	10.10	909.53	11.25	909.45	8.20	908.47	8.72	910.48	9.10	910.58	7.75	912.34		
2/14/2017	10.10	909.32	9.91	909.94	10.85	908.78	11.70	909.00	8.80	907.87	9.60	909.60	10.00	909.68	10.41	909.68		
4/25/2017	8.10	911.32	8.25	911.60	8.84	910.79	10.30	910.40	7.02	909.65	7.41	911.79	7.75	911.93	8.65	911.44		
6/20/2017	7.60	911.82	7.95	911.90	8.20	911.43	10.72	909.98	7.42	909.25	7.85	911.35	8.04	911.64	8.15	911.94		
7/13/2017	8.40	911.02	8.75	911.10	9.10	910.53	10.50	910.20	8.10	908.57	8.32	910.88	8.89	910.79	9.10	910.99	Well Installe	d 9/16/2019
11/8/2017	11.55	907.87	11.90	907.95	11.60	908.03	10.90	909.80	8.70	907.97	9.05	910.15	9.18	910.50	12.10	907.99		
3/13/2018	11.50	907.92	11.85	908.00	12.16	907.47	NM	NM	NM	NM	NM	NM	NM	NM	12.22	907.87		
6/6/2018	5.30	914.12	7.15	912.70	7.10	912.53	NM	NM	NM	NM	NM	NM	NM	NM	8.90	911.19		
10/4/2018	5.78	913.64	6.60	913.25	6.66	912.97	8.85	911.85	5.41	911.26	4.48	914.72	5.14	914.54	6.87	913.22		
1/15/2019	NM	NM	NM	NM	NM	NM	10.06	910.64	6.56	910.11	NM	NM	NM	NM	NM	NM		
3/5/2019	NM	NM	NM	NM	NM	NM	NM	NM	8.08	908.59	NM	NM	NM	NM	NM	NM		
4/8/2019 ^[1]	4.17	915.25	4.69	915.16	4.58	915.05	NM	NM	NM	NM	3.68	915.52	3.98	915.70	4.85	915.24		
10/14/2019 [2]	3.64	915.78	4.56	915.29	4.33	915.30	NM	NM	NM	NM	3.01	916.19	3.33	916.35	4.65	915.44	4.38	917.67
4/20/2020	6.82	912.60	7.42	912.43	7.60	912.03	9.70	911.00	6.16	907.85	6.05	913.15	6.36	913.32	7.69	912.40	7.49	914.56
10/5/2020	10.52	908.90	11.13	908.72	11.17	908.46	12.90	907.80	9.11	907.56	10.06	909.14	10.36	909.32	11.35	908.74	11.88	910.17
4/6/2021	8.91	910.51	8.90	910.95	9.53	910.10	10.95	909.75	7.58	909.09	8.20	911.00	8.54	911.14	9.34	910.75	8.70	913.35
10/1/2021	11.27	908.15	11.74	908.11	11.84	907.79	13.54	907.16	9.66	907.01	10.69	908.51	11.02	908.66	12.00	908.09	12.39	909.66
4/1/2022	12.52	906.90	12.22	907.63	13.01	906.62	14.02	906.68	10.72	905.95	11.99	907.21	12.29	907.39	12.74	907.35	11.57	910.48
10/1/2022	12.62	906.80	13.09	906.76	13.12	906.51	14.82	905.88	11.05	905.62	11.91	907.29	12.23	907.45	13.28	906.81	14.20	907.85

Notes:

TOC = Top of PVC well casing

N.M. = not measured

AMSL = above mean sea level

^[1] MW-13, NC2-MW-3, and NC2-MW-8 were surrounded by ponding water during April 2019 sampling event and were not measured.

^[2] MW-13 was surrounded by ponding water during October 2019 sampling event and was not measured.

Table 3 - Groundwater Elevations

				Water Leve	l Only Wells						
	NC2I	MW-9	MW	<i>l</i> -11	MW	<i>l</i> -12	MW	<i>I</i> -14			
	TOC EI	evation	TOC EI	evation	TOC EI	evation	TOC Elevation				
	920	0.35	918	3.44	920	.36	920).99			
Date	Measured GW Depth to Elevation Water (ft.) (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)			
3/9/2016			6.90	911.54	9.00	911.36	•				
6/7/2016			5.85	912.59	7.80	912.56					
10/3/2016			6.34	912.10	8.40	911.96					
11/18/2016			7.37	911.07	9.35	911.01					
2/14/2017			7.95	910.49	9.95	910.41					
4/25/2017			6.24	912.20	8.20	912.16	Well installe	d 7/12/2018			
6/20/2017			7.85	910.59	8.40	911.96					
7/13/2017	Well Installe	ed 9/17/2019	6.25	912.19	8.52	911.84					
11/8/2017			10.95	907.49	12.55	907.81					
3/13/2018			9.85	908.59	NM	NM					
6/6/2018			6.80	911.64	NM	NM					
10/4/2018			4.45	913.99	6.55	913.81	7.35	913.64			
1/15/2019			NM	NM	NM	NM	8.15	912.84			
3/5/2019			NM	NM	NM	NM	8.75	912.24			
4/8/2019 ^[1]			3.04	915.40	4.89	915.47	5.73	915.26			
10/14/2019 ^[2]	4.19	916.16	2.90	915.54	4.77	915.59	5.75	915.24			
4/20/2020	6.76	913.59	5.48	912.96	7.41	912.95	7.59	913.40			
10/5/2020	10.81	909.54	9.37	909.07	11.29	909.07	11.47	909.52			
4/6/2021	8.56	911.79	7.01	911.43	8.97	911.39	8.51	912.48			
10/1/2021	11.42	908.93	9.88	908.56	11.86	908.50	11.98	909.01			
4/1/2022	12.09	908.26	10.42	908.02	12.35	908.01	11.74	909.25			
10/1/2022	12.77	907.58	11.31	907.13	13.24	907.12	13.87	907.12			

Notes:

TOC =Top of PVC well casing

N.M. = not measured

AMSL = above mean sea level

Table 3 Page 3 of 3

^[1] MW-13, NC2-MW-3, and NC2-MW-8 were surrounded by ponding water during April 2019 sampling event and were not measured.

^[2] MW-13 was surrounded by ponding water during October 2019 sampling event and was not measured.



Table 4 - Appendix III (Detection Monitoring) Constituents in Groundwater

				Appendix III (De	tection Monito	ring) Constituents		
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
	3/9/2016	< 0.2	131	<5	< 0.5	6.94	46.2	546
	3/14/2016	< 0.2	126	6.27	0.213	6.84	48.3	536
	6/3/2016	<0.2	130	<5	< 0.5	6.90	46.8	668
	6/7/2016	<0.2	129	<5	< 0.5	6.95	45.6	660
	8/31/2016	<0.2	91.1	7.13	0.646	7.20	29.7	574
	11/17/2016	<0.2	130	<5	1.28	7.19	34.0	548
	11/18/2016	<0.2	132	<5	1.1	7.30	33.6	574
	2/14/2017	<0.2	148	<5	<0.5	7.72	39.3	544
	2/15/2017	<0.2	142	10.8	2.43	7.63	39.7	526
	4/24/2017	<0.2	126	<5	1.08	7.08	38.6	574
	4/25/2017	<0.2	122	<5	< 0.5	7.28	38.3	594
	6/15/2017	<0.2	122	<5	<0.5	7.09	32.2	552
	6/20/2017	<0.2	119	<5	<0.5	7.13	33.1	558
	7/12/2017	<0.2	104	<5	<0.5	7.13	32.7	580
	7/13/2017	<0.2	112	<5 <5	<0.5	7.98	32.7	664
NC2MW-4	11/8/2017	<0.2	133	<5 <5	<0.5	7.15		556.0
NCZIVIVV-4	11/9/2017		134		ł	+	43.50	
	-	<0.2		<5	<0.5	7.18 6.32 / 7.28 ^[1]	42.8	568
	3/12/2018	<0.2	141	<5	<0.5		42.6	562
	6/6/2018	<0.2	140	<5	<0.5	7.15	44.1	542
	10/3/2018	<0.2	117	<5	<0.5	6.81	42.4	520
	4/8/2019	<0.2	137	<5	<0.5	6.71	40.9	560
	10/15/2019	<0.2	142	5.38	< 0.5	6.57	35.0	528
	1/30/2020	0.115J	142	<5	< 0.5	6.88	44.5	544
	4/20/2020	<0.1	127	5.05	0.421J	6.54	51.9	526
	4/27/2020	< 0.0730	134	5.37	0.315J	6.61	52.6	550
	7/14/2020	0.113	129	4.38J	< 0.23	6.53	59.9	454
	10/5/2020	0.0996J	154	5.60	< 0.23	6.81	46.1	608
	4/12/2021	0.0838J	103	4.93J	0.311J	6.27	61.6	448
	10/4/2021	0.119	128	4.86J	< 0.275	6.93	62.6	486
	4/4/2022	0.126	128	3.29J	< 0.220	6.02 / 7.3^	60.4	444
	10/4/2022	0.160	118	5.30	<0.220	7.08	37.4	442
	3/14/2016	3.73	210	51	< 0.5	7.12	611.0	1310
	6/3/2016	3.98	217	36.6	< 0.5	7.01	590.0	1390
	8/31/2016	4.08	159	21.5	< 0.5	7.11	455.0	1280
	11/17/2016	4.27	228	21.6	1.89	7.54	414.0	1170
	2/15/2017	2.94	217	13.3	0.59	7.30	531.0	1210
	4/24/2017	2.85	183	12.5	1.25	7.55	331.0	1060
	6/15/2017	3.82	190	10.6	< 0.5	7.17	243.0	1090
	7/12/2017	4.63	191	7.93	<0.5	7.45	369.0	1190
	11/9/2017	2.91	168	13.2	< 0.5	7.20	404.0	1260
	3/12/2018	2	160	34.2	< 0.5	6.90 / 7.56 [1]	318.0	826
	6/6/2018	3.81	198	14	< 0.5	7.02	353.0	1060
NC2MW-5	10/3/2018	4.01	227	8.65	<0.5	7.00	503	1230
	4/8/2019	3.72	189	5.42	0.634	7.15	382	1030
	10/15/2019	3.66	195	9.2	<0.5	7.13	322	924
	1/30/2020	2.65	172	8.61	<0.5	7.23	297	692
	4/27/2020	3.31	174	6.39	0.323J	6.84	381	946
	7/14/2020	4.26	216	9.02	<0.23	6.83	324	1020
	10/5/2020					1		
		4.27	221	10.6	<0.23	6.96	339	1040
	4/12/2021	2.24	114	9.45	0.356J	6.60	203	606
	10/4/2021	2.86	168	9.28	<0.275	7.19	282	826
	4/4/2022	2.31	167	9.57	<0.220	7.37 / 7.5^	336	802
	10/4/2022	3.81	169	7.59	<0.220	7.30	202	832

Table 4 - Appendix III (Detection Monitoring) Constituents in Groundwater

	Appendix III (Detection Monitoring) Constituents									
	Constituent	Boron								
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L		
	3/9/2016	< 0.2	96.3	11.8	< 0.5	7.20	45	408		
	3/14/2016	<0.2	90.6	11.4	< 0.5	6.97	47.7	438		
	6/3/2016	<0.2	87.9	12	< 0.5	7.11	37.6	360		
	6/7/2016	<0.2	87.1	11.7	< 0.5	7.14	39.3	484		
	8/31/2016	<0.2	66.6	11.1	< 0.5	7.71	31.3	414		
	11/17/2016	<0.2	84.2	9.33	0.803	7.79	34.7	430		
	11/18/2016	<0.2	86.2	9.65	0.647	7.14	34.4	410		
	2/14/2017	<0.2	106	20.7	3.64	7.29	39.9	472		
	2/15/2017	<0.2	94.9	11.2	< 0.5	7.21	40.9	448		
	4/24/2017	<0.2	94.1	12	0.79	7.27	39.5	520		
	4/25/2017	< 0.2	93.5	12.1	0.80	7.36	38.9	430		
	6/15/2017	<0.2	91.1	12.4	< 0.5	7.28	34.2	454		
	6/20/2017	<0.2	88.6	12.7	0.51	7.17	35.6	456		
	7/12/2017	<0.2	95.8	16.8	< 0.5	8.10	42.0	676		
	7/13/2017	<0.2	94.1	12.5	< 0.5	8.09	39.8	592		
MW-13	11/8/2017	<0.2	90.2	12.7	0.608	7.00	37.4	498		
	11/9/2017	<0.2	95.2	12.4	0.55	7.12	36.4	488		
	3/12/2018	<0.2	99.8	12.9	< 0.5	6.45 / 7.51 ^[1]	37.0	412		
	6/6/2018	0.203	102	12.5	< 0.5	6.84	71.0	504		
	10/3/2018	<0.2	87.3	14.1	0.738	6.88	33.6	410		
	4/8/2019	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]						
	10/15/2019	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]						
	1/30/2020	0.121J	93.7	17.2	< 0.5	6.87	44.5	464		
	4/20/2020	0.133J	120	17.3	0.399J	6.96	371	742		
	4/27/2020	0.134	102	17.2	0.383J	6.93	271	622		
	7/14/2020	0.134	103	7.22	0.267J	6.84	299	566		
	10/5/2020	0.0955J	118	12.8	<0.23	6.9	46.2	508		
	4/12/2021	0.0653J	66.9	5.5	0.441J	6.58	101	350		
	10/4/2021	0.105	126	11.5	<0.275	6.99	47.4	510		
	4/4/2022	0.0931J	130	10.7	<0.220	6.15 / 7.2^	48.8	470		
	10/3/2022	0.113	112	9.85	<0.220	6.90	13.3	470		
	3/14/2016	<0.2	277	<5	0.371	6.80	388.0	1120		
	6/3/2016	0.301	196	<5	< 0.5	6.79	336.0	972		
	8/31/2016	0.511	130	<5	< 0.5	7.04	151.0	696		
	11/17/2016	0.302	236	<5	<0.5	7.23	298.0	1030		
	2/15/2017	0.219	269	13.2	2.51	7.28	290.0	1070		
	4/24/2017	0.264	158	5.4	1.38	7.21	135.0	652		
	6/15/2017	0.304	165	<5	< 0.5	7.04	139.0	780		
	7/12/2017	0.325	127	<5	< 0.5	7.03	73.0	592		
	11/9/2017	0.25	131	<5	< 0.5	7.19	130.0	662		
	3/12/2018	<0.2	176	5.08	< 0.5	6.26 / 6.96 ^[1]	258.0	656		
	6/6/2018	0.353	220	15.7	< 0.5	6.45 / 6.71 ^[2]	281.0	1180		
NC2MW-2	10/3/2018	0.438	167	<5	< 0.5	6.86	164	668		
	4/8/2019	0.270	227	11.8	< 0.5	6.68	290	978		
	9/23/2019	0.879	151	9.73	0.546	N.S.	238	654		
	10/15/2019	0.513	241	10.7	< 0.5	6.54	314	972		
	1/31/2020	0.322	258	9.78	< 0.5	6.39	312	1090		
	4/27/2020	0.265	252	9.64	0.256J	6.49	350	1140		
	7/14/2020	0.291	261	7.93	< 0.23	6.67	319	1070		
	10/5/2020	0.289	268	7.67	<0.23	6.70	324	1050		
	4/12/2021	0.371	235	24.7	0.392J	6.34	458	1040		
	10/4/2021	0.668	183	11.6	<0.275	6.91	266	726		
	4/4/2022	0.456	231	18.1	<0.220	4.18 / 6.7^	381	934		
	10/3/2022	0.559	241	11.3	0.330J	7.03	319	1030		

Table 4 - Appendix III (Detection Monitoring) Constituents in Groundwater

	Appendix III (Detection Monitoring) Constituents									
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS		
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L		
	3/14/2016	< 0.2	85.3	<5	0.168	7.05	21.0	334		
	6/3/2016	<0.2	121	<5	< 0.5	7.14	19.6	500		
	8/31/2016	< 0.2	51.3	<5	< 0.5	7.18	7.4	296		
	11/17/2016	<0.2	91	<5	1.28	7.32	5.6	354		
	2/15/2017	<0.2	74.2	15.6	5.11	7.09	49.6	378		
	4/24/2017	<0.2	63.3	9	2.87	7.68	10.5	324		
	6/15/2017	<0.2	89.4	<5	< 0.5	7.32	<5	386		
	7/12/2017	< 0.2	92.8	<5	< 0.5	7.99	8.9	528		
	11/9/2017	<0.2	148	<5	< 0.5	7.33	185.0	604		
	3/12/2018	<0.2	167	11.7	0.723	6.61 / 7.41 ^[1]	371.0	792		
	6/6/2018	0.654	198	22.9	< 0.5	4.40 / 6.91 ^[2]	491.0	978		
NC2MW-3	10/3/2018	<0.2	127	8.74	0.523	6.94	31.2	478		
	4/8/2019	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]	N.S. ^[4]		
	9/23/2019	<0.2	132	7.53	0.527	N.S.	24	494		
	10/15/2019	<0.2	138	7.92	< 0.5	6.81	20.3	472		
	1/31/2020	<0.1	156	6.90	< 0.5	6.61	89.9	600		
	4/27/2020	0.0765J	181	8.70	0.300J	6.62	183	774		
	7/14/2020	0.401	204	3.86J	<0.23	6.8	407	842		
	10/5/2020	0.213	159	7.71	0.535	6.76	156	644		
	4/12/2021	0.271	141	22.7	1.37	6.53	379	1080		
	10/4/2021	0.306	139	12.6	0.492J	7.02	292	860		
	4/4/2022	0.198	212	47.0	1.12	4.01 / 7.1^	703	1590		
	10/3/2022	0.468	194	12.1	1.17	7.15	563	1440		
	3/14/2016	3.83	134	16.5	<0.5	7.21	314.0	728		
	6/3/2016	4.14	93	6.16	<0.5	7.27	171.0	608		
	8/31/2016	4.79	90.4	<5.0	<0.5	7.43	149.0	592		
	11/17/2016	5.11	125	15	6.53	7.63	165.0	588		
	2/15/2017	4.11	132	<5.0	< 0.5	7.77	136.0	602		
	4/24/2017	3.08	96.5	10.2	1.71	7.68	99.1	530		
	6/15/2017	3.58	119	6.26	<0.5	7.35	196.0	636		
	7/12/2017	3.92	102	<5.0	<0.5	7.25	155.0	596		
	11/9/2017	4.39	128	6.75	<0.5	7.24	195.0	872		
	3/12/2018	3.06	145	7.14	<0.5	6.64 / 7.38 [1]	194.0	644		
	6/6/2018	3.58	133	5.53	<0.5	7.19	174.0	694		
NC2MW-6	10/3/2018	4.18	129	<5.0	<0.5	6.97	200	660		
	4/8/2019	2.46	94.3	<5	<0.5	7.18	141	520		
	10/15/2019	2.79	154	9.08	<0.5	6.82	151	656		
	1/31/2020	2.86	149	8.67	<0.5	6.94	171	884		
	4/27/2020	2.59	125	8.29	0.335J	6.80	149	586		
	7/14/2020	2.60	122	7.83	0.232J	6.93	135	526		
	10/5/2020	3.03	126	8.57	0.2323 0.329J	6.89	147	404		
	4/12/2021	1.94	90.4	3.57J	<0.275	6.65	101	406		
	10/4/2021	2.48	123	6.30	<0.275	7.20	132	524		
	4/4/2022	2.40	142	6.45	<0.220	7.48 / 7.2^	134	600		
	10/4/2022	2.33	120	6.05	<0.220	7.41	97.9	566		
NC2MW-7	3/14/2016	<0.2	134	6.55	0.312	6.92	6.9	496		
	6/3/2016	<0.2	128	7.63	<0.5	7.28	<5	690		
	8/31/2016	<0.2	100	6.68	<0.5	7.55	<5	534		
	11/17/2016	<0.2	138	5.73	0.544	7.77	<5	510		
	2/15/2017	<0.2	143	9.96	<0.5	7.55	<5	552		
	4/24/2017	<0.2	139	11.3	1.35	7.83	<5	576		
	6/15/2017	<0.2	128	9.81	<0.5	7.40	<5 <5	688		
	7/12/2017	<0.2	125	8.07	<0.5	7.40	<5 <5	636		
	1/12/2011	<u.z< td=""><td>120</td><td>0.07</td><td><u.u< td=""><td>1 .ZO</td><td><0</td><td>บงบ</td></u.u<></td></u.z<>	120	0.07	<u.u< td=""><td>1 .ZO</td><td><0</td><td>บงบ</td></u.u<>	1 .ZO	<0	บงบ		

Table 4 - Appendix III (Detection Monitoring) Constituents in Groundwater

Omaha Public Power District - NC2 Ash Disposal Area

			-	Appendix III (De	tection Monitor	ring) Constituents		
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
	11/9/2017	0.201	131	7.79	< 0.5	7.40	17.8	580
	3/12/2018	< 0.2	144	9.04	< 0.5	6.72 / 7.42 [1]	25.7	496
	6/6/2018	<0.2	119	9.41	< 0.5	7.21	12.0	528
	10/3/2018	<0.2	122	9.19	0.519	7.31	11.6	494
	4/8/2019	0.214	132	8.64	<0.5	7.33	44.0	820
	9/23/2019	<0.2	129	8.33	<0.5	N.S.	19.1	526
NICONAVA / 7	10/15/2019	<0.2	139	8.41	<0.5	7.02	32.1	520
NC2MW-7 (cont'd)	2/3/2020	0.133J	123	8.51	0.357J	6.76	30.9	534
(cont a)	4/27/2020	0.172	126	9.12	0.429J	6.89	9.26	518
	7/14/2020	0.161	121	9.83	< 0.23	6.81	<3.55	340
	10/5/2020	0.220	122	9.12	0.322J	7.21	<3.55	396
	4/12/2021	0.227	124	8.69	0.415J	6.85	<2.45	494
	10/4/2021	0.190	118	9.27	< 0.275	7.38	<2.45	430
	4/4/2022	0.241	132	7.08	<0.220	7.89 / 7.2^	6.49	484
	10/3/2022	0.249	117	8.88	< 0.220	7.60	<2.00	482
	10/3/2018	< 0.2	142	7.05	0.566	7.14	10.7	526
	1/15/2019	<0.2	102	8.10	< 0.5	6.73	11.6	504
	3/5/2019	<0.2	153	7.84	< 0.5	7.02	11.6	512
	4/8/2019	N.S. ^[4]						
	9/23/2019	<0.2	141	8.96	0.582	6.84	<5	534
	10/16/2019	<0.2	140	9.42	< 0.5	6.89	<5	476
NC2MW-8 [3]	1/31/2020	0.747	140	9.19	< 0.5	6.71	106	600
NC2MW-8	4/27/2020	0.0777J	127	10.8	0.504	6.81	6.46	500
	7/14/2020	0.0838J	127	10.3	< 0.23	7.04	6.24	448
	10/5/2020	0.115	116	10.0	0.331J	7.02	5.50	512
	4/12/2021	0.0894J	121	11.8	0.393J	6.58	7.34	470
	10/4/2021	0.107	130	10.3	< 0.275	7.26	7.47	436
	4/4/2022	0.114	132	9.66	<0.220	6.61 / 7.3^	9.69	428
	10/3/2022	0.153	125	9.91	< 0.220	7.30	13.3	492

N.S. indicates analyte not sampled due to flooding of area around monitoring well.

[&]quot;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 and was not used as a statistically significant detection.

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

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.

[^]Field measurements of pH for select samples were observed to be anomalous. The pH for these samples were also analyzed by the laboratory. The first pH value is the field measured value, and the second pH value is the lab measured value.

^[1] The first pH value obtained in the field on March 13, 2018 was found to be inaccurate due to equipment errors. The second pH value was a verification sample obtained in the field on March 19, 2018.

^[2] Verification sampling for pH was completed on August 7, 2018 and determined the June 5, 2018 reading was inaccurate.

^[3] NC2MW-8 was installed July 9, 2018 and was added to the Groundwater Monitoring System Certification in June 2019. The 9/23/2019 sampling event was part of an Alternative Source Demonstration for the Title 132 Groundwater Assessment Report.

^[4] MW-13, NC2MW-3, and NC2MW-8 were surrounded by ponding water during April 2019 sampling event and were not measured. Additionally, MW-13 was surrounded by ponding water and not sampled during the October 2019 sampling event.



Table 5 - Appendix IV (Assessment Monitoring) Constituents in Groundwater Omaha Public Power District - NC2 Ash Disposal Area

		Appendix IV (Assessment Monitoring) Constituents														
	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Combined Radium (Ra 226 + Ra 228)	Selenium	Thallium
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L
	3/9/2016	< 0.001	< 0.002	0.281	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.00199	< 0.05	< 0.0002	0.00272	1.54	< 0.005	< 0.001
	3/14/2016	< 0.001	< 0.002	0.276	< 0.001	< 0.0005	< 0.005	< 0.0005	0.213	0.00065	< 0.05	< 0.0002	0.00507	0.563	< 0.005	< 0.001
	6/3/2016	< 0.001	< 0.002	0.288	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000737	< 0.05	< 0.0002	0.00239	0.739	< 0.005	< 0.001
	6/7/2016	< 0.001	< 0.002	0.293	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000951	< 0.05	< 0.0002	0.00283	1.21	< 0.005	< 0.001
	8/31/2016	< 0.001	< 0.002	0.296	< 0.001	< 0.0005	< 0.005	< 0.0005	0.646	0.00162	< 0.05	< 0.0002	0.00252	1.04	< 0.005	< 0.001
	11/17/2016	< 0.001	< 0.002	0.284	< 0.001	< 0.0005	< 0.005	< 0.0005	1.28	0.000536	< 0.05	< 0.0002	0.00597	1.03	< 0.005	< 0.001
	11/18/2016	< 0.001	< 0.002	0.283	< 0.001	< 0.0005	< 0.005	< 0.0005	1.1	0.00127	< 0.05	< 0.0002	0.00288	0.984	< 0.005	< 0.001
	2/14/2017	< 0.001	< 0.002	0.3	< 0.001	< 0.0005	< 0.005	0.00129	<0.5	0.0032	< 0.05	< 0.0002	0.0028	0.894	< 0.005	< 0.001
	2/15/2017	< 0.001	< 0.002	0.272	< 0.001	< 0.0005	< 0.005	0.000584	2.43	0.00196	< 0.05	< 0.0002	0.00393	0.647	< 0.005	< 0.001
	4/24/2017	< 0.001	< 0.002	0.287	< 0.001	< 0.0005	< 0.005	< 0.0005	1.08	0.000802	< 0.05	< 0.0002	0.00224	1.08	< 0.005	< 0.001
	4/25/2017	< 0.001	< 0.002	0.3	< 0.001	< 0.0005	< 0.005	< 0.0005	<0.5	0.000714	< 0.05	< 0.0002	0.00323	1.23	< 0.005	< 0.001
	6/15/2017	< 0.001	< 0.002	0.249	< 0.001	< 0.0005	< 0.005	0.000521	< 0.5	0.00165	< 0.05	< 0.0002	0.00422	1.29	< 0.005	< 0.001
	6/20/2017	< 0.001	< 0.002	0.258	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000754	< 0.05	< 0.0002	0.00551	1.16	0.00593	< 0.001
	7/12/2017	< 0.001	< 0.002	0.232	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000549	< 0.05	< 0.0002	0.00233	1.42	< 0.005	< 0.001
NC2MW-4	7/13/2017	< 0.001	< 0.002	0.236	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000787	< 0.05	< 0.0002	0.00326	0.76	< 0.005	< 0.001
	3/12/2018	< 0.001	< 0.002	0.297	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.00192	0.0318	< 0.0002	< 0.002	1.71	0.0112	< 0.001
	6/6/2018	< 0.001	< 0.002	0.329	< 0.001	< 0.0005	< 0.005	0.000502	<0.5	0.00154	0.0292	< 0.0002	0.0049	1.9	0.00754	< 0.001
	10/3/2018	N.S.	< 0.002	0.321	N.S.	N.S.	N.S.	< 0.0005	< 0.5	0.000565	0.0332	N.S.	0.00707	1.13	< 0.005	N.S.
	4/8/2019	< 0.001	< 0.002	0.351	< 0.001	< 0.0005	< 0.005	< 0.0005	<0.5	< 0.0005	0.0351	< 0.0002	0.00283	0.743	< 0.005	< 0.001
	10/15/2019	< 0.001	< 0.002	0.390	< 0.001	0.000138	< 0.005	<0.0005	<0.5	< 0.0005	0.0343	<0.0002	0.00412	1.22	< 0.005	< 0.001
	1/30/2020	<0.00058	0.00109J	0.340	<0.00027	0.0000720J	< 0.0011	0.000531	<0.5	0.00167	0.0347	<0.0001	0.00177J	0.610	< 0.001	<0.00026
	4/20/2020	0.000609J	<0.000880	0.303	< 0.00027	<0.000039	< 0.0011	0.000167J	0.421J	0.000624	0.0305	<0.0001	0.00191J	0.684	< 0.001	<0.00026
	4/27/2020	<0.00058	<0.000880	0.335	<0.00027	0.0000470J	< 0.0011	0.000121J	0.315J	0.000398J	0.0284	< 0.0001	0.00192J	0.743	< 0.001	<0.00026
	7/14/2020	<0.00051	0.00104J	0.311	<0.00027	0.000119	< 0.0011	0.000591	< 0.23	0.00181	0.0311	<0.0001	0.00173J	2.19	0.00129J	<0.00026
	10/5/2020	<0.00051	0.00348	0.447	<0.00027	0.0000970J	0.00164J	0.00122	<0.23	0.00243	0.0349	<0.0001	0.00272	-0.927U	< 0.001	<0.00026
	4/12/2021	<0.00110	0.00113J	0.268	<0.00027	0.0000580J	<0.00110	0.000256J	0.311J	0.000833	0.023	<0.00015	0.0112	0.984	0.0111	<0.00026
	10/4/2021	<0.00110	0.00275	0.420	0.000571J	0.000469	0.00110J	0.00203	<0.275	0.00610	0.0324	<0.00015	0.00154J	8.390	0.00391J	0.000527J
	4/4/2022	<0.000690	0.00150J	0.338		0.0000820J		0.000723	<0.220	0.00208	0.0301	<0.000110	0.00609	0.555U	0.0146	<0.000260
	10/4/2022	<0.000690	0.00114J	0.347	<0.000270	0.0000600J	<0.00110	0.000383J	<0.220	0.000736	0.0303	< 0.000110	0.00422	2.64	<0.000960	<0.000260
	3/14/2016	< 0.001	< 0.002	0.0295	< 0.001	< 0.0005	< 0.005	< 0.0005	<0.5	<0.0005	< 0.05	<0.0002	0.00587	0.318	< 0.005	<0.001
	6/3/2016	<0.001	0.00291	0.0384	<0.001	<0.0005	< 0.005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0237	0.354	< 0.005	<0.001
	8/31/2016	<0.001	<0.002	0.0414	<0.001	<0.0005	< 0.005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0243	0.365	< 0.005	<0.001
	11/17/2016	<0.001	0.00218	0.0558	<0.001	<0.0005	<0.005	<0.0005	1.89	<0.0005	<0.05	<0.0002	0.0204	0.476	<0.005	<0.001
	2/15/2017	<0.001	< 0.002	0.0335	<0.001	<0.0005	<0.005	<0.0005	0.59	0.00088	<0.05	<0.0002	0.0168	0.106	<0.005	<0.001
	4/24/2017	<0.001	0.00236	0.0366	<0.001	<0.0005	<0.005	<0.0005	1.25	0.000734	<0.05	<0.0002	0.00818	0.136	<0.005	<0.001
	6/15/2017	<0.001	0.00207	0.0416	<0.001	<0.0005	<0.005	< 0.0005	<0.5	0.000601	< 0.05	0.0002	0.0125	0.265	< 0.005	<0.001
	7/12/2017	<0.001	0.0022	0.0484	<0.001	<0.0005	<0.005	<0.0005	<0.5	0.000584	<0.05	<0.0002	0.012	0.507	<0.005	<0.001
	3/12/2018	<0.001	0.0026	0.0395	<0.001	<0.0005	< 0.005	< 0.0005	<0.5	0.000562	<0.01	<0.0002	0.0145	0.236 U	0.0238	<0.001
NICON 1144 5	6/6/2018	<0.001	0.00325	0.0713	<0.001	<0.0005	<0.005	<0.0005	<0.5	0.00159	0.0129	<0.0002	0.0205	0.187	0.0144	<0.001
NC2MW-5	10/3/2018	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	<0.5	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
	4/8/2019	N.S.	<0.002	0.0341	N.S.	<0.0005	<0.005	N.S.	0.634	<0.0005	N.S.	<0.0002	N.S.	N.S.	<0.005	N.S.
	10/15/2019	<0.001	0.00247	0.0340	<0.001	<0.0001	<0.005	<0.0005	<0.5	<0.0005	0.0152	<0.0002	0.0339	-0.0619 U	<0.005	<0.001
	1/30/2020	0.00110	0.00187J	0.0299	<0.00027	<0.000039	<0.0011	0.0000910J	<0.5	0.000388J	0.00889J	< 0.0001	0.0120	0.0845U	0.00283J	<0.00026
	4/27/2020	<0.00058	0.00162J	0.0357	<0.00027	<0.000039	<0.0011	0.0000920J	0.323J	<0.00027	0.0102	<0.0001	0.0147	-0.0625	0.00189J	<0.00026
	7/14/2020	<0.00051	0.00279	0.0536	<0.00027	<0.000049	<0.0011	0.000123J	<0.23	0.000871	0.0194	< 0.0001	0.0114	0.0869	0.00551	<0.00026
	10/5/2020	<0.00051	0.00243	0.0588	 	0.0000990J	<0.0011	0.000236J	<0.23	0.000379J	0.0200	<0.0001	0.0212	0.255U	<0.001	<0.00026
	4/12/2021	<0.00110	0.00170J	0.0245	<0.00027	<0.000051	<0.0011	0.000105J	0.356J	<0.00210	0.00783J	<0.00015	0.0252	-0.0122U	0.00867	<0.00026
	10/4/2021	<0.00110	0.00245	0.0519	<0.00027	0.0000570J	<0.0011	0.000226J	<0.275	0.000630	0.0120	<0.00015	0.0236	1.03	0.00162J	<0.00026
	4/4/2022	<0.000690	0.00165J	0.0377	<0.000270	<0.0000550	<0.00110	0.000275J	<0.220	<0.000240	0.00776J	<0.000110	0.0291	0.163U	0.00944	<0.000260
	10/4/2022	< 0.000690	0.00225	0.0548	<0.000270	0.0000700J	< 0.00110	0.000306J	<0.220	0.00208	0.0142	< 0.000110	0.0356	0.716	< 0.000960	< 0.000260

Table 5 - Appendix IV (Assessment Monitoring) Constituents in Groundwater Omaha Public Power District - NC2 Ash Disposal Area

								Appendix IV	(Assessment Mor	nitoring) Const	tituents					
	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Combined Radium (Ra 226 + Ra 228)	Selenium	Thallium
	Reporting Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L
	3/9/2016	< 0.001	0.00492	0.302	< 0.001	< 0.0005	< 0.005	0.000817	< 0.5	< 0.0005	< 0.05	< 0.0002	< 0.002	1.14	< 0.005	< 0.001
	3/14/2016	< 0.001	0.00545	0.288	< 0.001	< 0.0005	< 0.005	0.00105	< 0.5	< 0.0005	< 0.05	< 0.0002	0.0167	0.741	< 0.005	< 0.001
	6/3/2016	< 0.001	0.00607	0.324	< 0.001	< 0.0005	< 0.005	0.00122	< 0.5	0.000704	< 0.05	< 0.0002	< 0.002	1.01	< 0.005	< 0.001
	6/7/2016	< 0.001	0.00591	0.317	< 0.001	< 0.0005	< 0.005	0.00118	< 0.5	0.000623	< 0.05	< 0.0002	< 0.002	0.69	< 0.005	< 0.001
	8/31/2016	< 0.001	0.00623	0.342	< 0.001	< 0.0005	< 0.005	0.00107	< 0.5	< 0.0005	< 0.05	< 0.0002	0.00216	1.09	< 0.005	< 0.001
	11/17/2016	< 0.001	0.00515	0.322	< 0.001	< 0.0005	< 0.005	0.000873	0.803	0.00089	< 0.05	< 0.0002	0.00258	1.37	< 0.005	< 0.001
	11/18/2020	< 0.001	0.0058	0.333	< 0.001	< 0.0005	< 0.005	0.000916	0.647	< 0.0005	< 0.05	< 0.0002	0.00235	0.745	< 0.005	< 0.001
	2/14/2017	< 0.001	0.00304	0.349	< 0.001	< 0.0005	< 0.005	0.000925	3.64	< 0.0005	< 0.05	< 0.0002	0.00228	0.532	< 0.005	< 0.001
	2/15/2017	<0.001	0.00289	0.321	< 0.001	<0.0005	< 0.005	0.000883	< 0.5	<0.0005	< 0.05	< 0.0002	0.00221	0.407	< 0.005	< 0.001
	4/24/2017	<0.001	0.0024	0.336	<0.001	<0.0005	< 0.005	0.00135	0.79	0.000516	< 0.05	< 0.0002	0.00207	0.579	< 0.005	<0.001
	4/25/2017	<0.001	0.00269	0.358	<0.001	<0.0005	<0.005	0.00141	0.80	0.000522	<0.05	<0.0002	<0.002	0.429	<0.005	<0.001
	6/15/2017	<0.001	0.00371	0.318	<0.001	<0.0005	<0.005	0.00127	<0.5	<0.0005	<0.05	<0.0002	<0.002	0.8	<0.005	<0.001
	6/20/2017	<0.001	0.00268	0.311	<0.001	<0.0005	< 0.005	0.00119	0.505	0.00171	< 0.05	<0.0002	<0.002	0.483	<0.005	< 0.001
NAVA 40	7/12/2017	<0.001	0.00263	0.328	<0.001	<0.0005	<0.005	0.00112	<0.5	<0.0005	<0.05	<0.0002	0.0021	1.56	<0.005	< 0.001
MW-13	7/13/2017	<0.001	0.00325	0.33	<0.001	<0.0005	< 0.005	0.00108	<0.5	<0.0005	<0.05	<0.0002	0.00206	0.502	<0.005	< 0.001
	3/12/2018	<0.001	0.00295	0.306	<0.001	<0.0005	<0.005	0.00189	<0.5	0.00086	0.0297 0.0423	<0.0002	<0.002	0.492	<0.005	<0.001
	6/6/2018	<0.001 N.S.	0.00262 0.00965	0.282 0.388	<0.001 N.S.	<0.0005 N.S.	<0.005 N.S.	0.00236 0.00191	<0.5 0.738	0.00577 0.00216	0.0423	<0.0002 N.S.	<0.002 0.00243	1.89 1.62	0.00553 <0.005	<0.001
	10/3/2018	N/A ^[2]	0.00965 N/A ^[2]	0.366 N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	0.00191 N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	0.00243 N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]
	4/8/2019			N/A [2]	N/A [2]									-		
	10/15/2019	N/A ^[2]	N/A ^[2]			N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]	N/A ^[2]
	1/30/2020	<0.00058	0.00824	0.230	<0.00027	<0.000039	<0.0011	0.00198	<0.5	0.000335J	0.0273	<0.0001	0.00187J	0.0337U	<0.001	<0.00026
	4/20/2020	<0.00058	0.00867	0.177	<0.00027	<0.000039	<0.0011	0.00193	0.399J	0.000311J	0.0374	<0.0001	0.00457	0.438	<0.001	<0.00026
	4/27/2020	<0.00058	0.0111	0.167 0.182	<0.00027	<0.000039	<0.0011	0.00208 0.000549	0.383J	0.000297J 0.000250J	0.0348 0.0277	<0.0001	0.00335	-0.0922 0.539	<0.001	<0.00026
	7/14/2020	<0.00051	0.0118 0.0188	0.182	<0.00027 <0.00027	<0.000049	<0.0011	0.000349 0.000384J	0.267J	0.000250J 0.000178J	0.0277	<0.0001 <0.0001	0.00130J	0.539	<0.001	<0.00026 <0.00026
	10/5/2020 4/12/2021	<0.00051	0.0188	0.225	<0.00027	<0.000049	<0.0011	0.0003843	<0.23 0.441J	0.0001783 0.000353J	0.0322	<0.0001	<0.0011 0.00443	0.872 0.429U	0.00194J	<0.00026
	10/4/2021	<0.00110	0.0467	0.0613 0.257J	<0.00027	< 0.000051	<0.0011	0.00099	<0.275	<0.0003333	0.0199	<0.00015	<0.00443	1.84	< 0.001943	<0.00026
	4/4/2022	<0.000110	0.0402	0.202		<0.000051	<0.0011	0.001020	<0.220	0.000698	0.0330	<0.00013		0.500U	<0.000960	
	10/3/2022	<0.000690	0.0154	0.253	<0.000270	<0.0000550	<0.00110	0.000079 0.000419J	<0.220	<0.000240	0.0323	< 0.000110	<0.00120	1.24	<0.000960	<0.000260
	3/14/2016	0.00188	<0.002	0.0679	<0.001	< 0.0005	< 0.005	< 0.0005	0.371	<0.0005	0.0512	<0.0002	0.00207	0.967	< 0.005	< 0.001
	6/3/2016	0.00944	<0.002	0.136	<0.001	<0.0005	0.0153	< 0.0005	<0.5	0.000538	< 0.05	<0.0002	0.00267	0.535	<0.005	<0.001
	8/31/2016	0.00812	<0.002	0.0814	<0.001	<0.0005	< 0.005	<0.0005	<0.5	0.000872	<0.05	<0.0002	0.00757	0.996	<0.005	<0.001
	11/17/2016	0.00452	<0.002	0.122	<0.001	<0.0005	< 0.005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.00519	1.39	<0.005	<0.001
	2/15/2017	0.00331	< 0.002	0.144	<0.001	<0.0005	< 0.005	< 0.0005	2.51	0.000671	<0.05	<0.0002	0.0093	0.304	<0.005	< 0.001
	4/24/2017	0.00303	<0.002	0.076	< 0.001	< 0.0005	< 0.005	< 0.0005	1.38	< 0.0005	< 0.05	< 0.0002	0.0158	0.518	< 0.005	< 0.001
	6/15/2017	0.00282	< 0.002	0.0828	< 0.001	< 0.0005	< 0.005	< 0.0005	<0.5	0.000721	< 0.05	< 0.0002	0.0106	0.48	< 0.005	< 0.001
	7/12/2017	0.00266	< 0.002	0.0837	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000949	< 0.05	< 0.0002	0.0174	0.721	< 0.005	< 0.001
	3/12/2018	0.00261	< 0.002	0.12	< 0.001	< 0.0005	< 0.005	0.000626	< 0.5	0.000604	0.0165	< 0.0002	0.0402	0.882	< 0.005	< 0.001
	6/6/20018	0.00345	< 0.002	0.179	< 0.001	< 0.0005	< 0.005	0.00132	< 0.5	< 0.0005	0.0201	< 0.0002	0.137	1.15	< 0.005	< 0.001
NC2MW-2	10/3/2018	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	< 0.5	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
NOZIVIVV-Z	4/8/2019	N.S.	<0.002	0.127	N.S.	< 0.0005	< 0.005	N.S.	< 0.5	0.00206	N.S.	< 0.0002	N.S.	N.S.	< 0.005	N.S.
	9/23/2019	0.00388	<0.002	0.107	<0.001	<0.0001	< 0.005	< 0.0005	0.546	0.00183	0.0150	< 0.0002	0.0938	N.S.	< 0.005	< 0.001
	10/15/2019	0.00900	<0.002	0.142	< 0.001	0.000220	< 0.005	< 0.0005	< 0.5	0.000787	0.0313	<0.0002	0.0361	0.650	< 0.005	< 0.001
	1/31/2020	0.00510	<0.000880	0.133	< 0.00027	0.000111	< 0.0011	0.000277J	< 0.5	0.00106	0.0406	< 0.0001	0.0158	0.736	0.00165J	<0.00026
	4/27/2020	0.00243	<0.000880	0.141		0.0000980J	< 0.0011	0.000161J	0.256J	0.00106	0.0411	< 0.0001	0.00966	0.987	0.00116J	<0.00026
	7/14/2020	0.00268	0.000989J	0.152	< 0.00027	0.000306	< 0.0011	0.000202J	<0.23	0.000908	0.0468	< 0.0001	0.0163	0.995	< 0.001	<0.00026
	10/5/2020	0.00381	0.00117J	0.170	<0.00027	0.000186	<0.0011	0.000208J	<0.23	0.000797	0.0523	<0.0001	0.0177	1.06	<0.001	<0.00026
	4/12/2021	0.00524	<0.000750	0.0967		0.0000690J	<0.00110	0.000118J	0.392J	0.000752	0.0311	<0.00015	0.0178	1.01	0.00641	<0.00026
	10/4/2021	0.00323	0.000907J	0.106	<0.000270	0.000287	<0.00110	0.00224	<0.275	0.000609	0.0247	<0.00015	0.0505	1.92	0.00128J	<0.00026
	4/4/2022	0.00298	0.000766J	0.124		0.0000900J	<0.00110	0.000522	<0.220	0.000861	0.0254	<0.000110	0.0322	1.09	0.00627	<0.000260
	10/3/2022	0.00298	0.00104J	0.108	<0.000270	0.000206	< 0.00110	0.000713	0.330J	0.000853	0.0338	< 0.000110	0.0354	2.08	<0.000960	< 0.000260

Table 5 - Appendix IV (Assessment Monitoring) Constituents in Groundwater Omaha Public Power District - NC2 Ash Disposal Area

								Appendix IV	(Assessment Mo	nitoring) Const	tituents					
	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Combined Radium (Ra 226 + Ra 228)	Selenium	Thallium
	Reporting Unit	mg/L	pCi/L	mg/L	mg/L											
	3/14/2016	< 0.001	0.00762	0.253	< 0.001	< 0.0005	< 0.005	< 0.0005	0.168	< 0.0005	< 0.05	<0.0002	0.00293	0.948	< 0.005	< 0.001
	6/3/2016	<0.001	0.0191	0.362	< 0.001	<0.0005	< 0.005	< 0.0005	<0.5	< 0.0005	< 0.05	<0.0002	0.00377	0.924	< 0.005	<0.001
	8/31/2016	<0.001	0.0103	0.211	<0.001	<0.0005	< 0.005	< 0.0005	<0.5	0.000692	< 0.05	<0.0002	0.00301	0.446	< 0.005	< 0.001
	11/17/2016	<0.001	0.0113	0.234	<0.001	< 0.0005	< 0.005	< 0.0005	1.28	< 0.0005	< 0.05	< 0.0002	< 0.002	0.616	< 0.005	< 0.001
	2/15/2017	0.00111	0.0066	0.281	<0.001	< 0.0005	< 0.005	0.00051	5.11	< 0.0005	< 0.05	< 0.0002	0.0176	0.381	< 0.005	< 0.001
	4/24/2017	< 0.001	0.00892	0.174	< 0.001	< 0.0005	< 0.005	0.00216	2.87	0.000691	< 0.05	< 0.0002	0.00677	0.521	< 0.005	< 0.001
	6/15/2017	< 0.001	0.0101	0.225	< 0.001	< 0.0005	< 0.005	0.00103	< 0.5	0.00103	< 0.05	< 0.0002	0.00298	0.928	< 0.005	< 0.001
	7/12/2017	< 0.001	0.00286	0.267	< 0.001	< 0.0005	< 0.005	0.000806	< 0.5	0.000913	< 0.05	< 0.0002	0.00206	0.479	< 0.005	< 0.001
	3/12/2018	< 0.001	0.0027	0.125	< 0.001	< 0.0005	< 0.005	0.000997	0.723	0.00178	0.0128	< 0.0002	0.00454	0.6	< 0.005	< 0.001
	6/6/2019	< 0.001	0.00835	0.163	< 0.001	< 0.0005	< 0.005	0.00768	< 0.5	< 0.0005	0.0182	< 0.0002	0.0628	1.22	< 0.005	< 0.001
NOOMALO	10/3/2018	N.S.	0.532	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.						
NC2MW-3	4/8/2019	N/A ^[2]	N/A ^[2]	N/A ^[2]												
	9/23/2019	< 0.001	0.00325	0.289	< 0.001	< 0.0001	< 0.005	0.00224	0.527	< 0.0005	0.0452	< 0.0002	0.00550	N.S.	< 0.005	< 0.001
	10/15/2019	< 0.001	0.00344	0.312	< 0.001	< 0.0001	< 0.005	0.00232	<0.5	< 0.0005	0.0428	< 0.0002	0.00526	0.878	< 0.005	< 0.001
	1/31/2020	< 0.00058	0.00338	0.297	< 0.00027	< 0.000039	< 0.0011	0.00197	< 0.5	< 0.00027	0.0333	< 0.0001	0.00392	0.707	< 0.001	< 0.00026
	4/27/2020	< 0.00058	0.00483	0.340	< 0.00027	< 0.000039	< 0.0011	0.00991	0.300J	0.000617	0.0333	< 0.0001	0.00565	0.552	< 0.001	< 0.00026
	7/14/2020	< 0.00051	0.00685	0.171	< 0.00027	< 0.000049	< 0.0011	0.00274	<0.23	0.000595	0.0317	< 0.0001	0.0112	0.885	< 0.001	< 0.00026
	10/5/2020	< 0.00051	0.00735	0.191	< 0.00027	< 0.000049	< 0.0011	0.000647	0.535	0.000163J	0.0399	< 0.0001	0.00487	1.32	< 0.001	< 0.00026
	4/12/2021	< 0.00110	0.00113J	0.113	< 0.00027	0.0000680J	< 0.0011	0.000188J	1.37	< 0.000210	0.0146	< 0.0015	0.00306	0.188U	< 0.00096	< 0.00026
	10/4/2021	< 0.00110	0.00354	0.0769	< 0.00027	0.0000820J	< 0.0011	0.0115	0.492J	0.000485J	0.0241	< 0.00015	0.00356	0.898	< 0.00096	< 0.00026
	4/4/2022	< 0.000690	0.00171J	0.0977	< 0.000270	0.000104	< 0.00110	0.00101	1.12	0.000288J	0.0201	< 0.000110	0.00371	0.955	0.0174	< 0.000260
	10/3/2022	< 0.000690	0.00344	0.0718	< 0.000270	< 0.0000550	< 0.00110	0.00328	1.17	< 0.000240	0.0234	< 0.000110	0.00250	1.00	< 0.000960	< 0.000260
	3/14/2016	< 0.001	< 0.002	0.0818	< 0.001	< 0.0005	0.00629	< 0.0005	< 0.5	< 0.0005	< 0.05	< 0.0002	0.0210	0.392	0.00645	< 0.001
	6/3/2016	< 0.001	< 0.002	0.0823	< 0.001	< 0.0005	0.00535	< 0.0005	< 0.5	< 0.0005	< 0.05	< 0.0002	0.0593	0.603	< 0.005	< 0.001
	8/31/2016	< 0.001	< 0.002	0.122	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	< 0.0005	< 0.05	< 0.0002	0.0677	1.03	< 0.005	< 0.001
	11/17/2016	< 0.001	< 0.002	0.109	< 0.001	< 0.0005	< 0.005	< 0.0005	6.53	< 0.0005	< 0.05	< 0.0002	0.0455	1.48	< 0.005	< 0.001
	2/15/2017	< 0.001	< 0.002	0.0948	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.000901	< 0.05	< 0.0002	0.0265	0.429	< 0.005	< 0.001
	4/24/2017	< 0.001	< 0.002	0.0791	< 0.001	< 0.0005	< 0.005	< 0.0005	1.71	< 0.0005	< 0.05	< 0.0002	0.041	0.425	< 0.005	< 0.001
	6/15/2017	< 0.001	< 0.002	0.105	< 0.001	< 0.0005	0.00501	< 0.0005	< 0.5	0.00329	< 0.05	< 0.0002	0.0354	0.641	< 0.005	< 0.001
	7/12/2017	< 0.001	< 0.002	0.0916	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	< 0.0005	< 0.05	< 0.0002	0.0419	0.949	< 0.005	< 0.001
	3/12/2018	< 0.001	< 0.002	0.107	< 0.001	< 0.0005	< 0.005	0.000505	< 0.5	0.00258	0.0371	< 0.0002	0.00672	0.530	< 0.005	< 0.001
	6/6/2018	< 0.001	< 0.002	0.12	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.00193	0.0321	< 0.0002	0.0108	1.020	0.00679	< 0.001
NC2MW-6	10/3/2018	N.S.	< 0.5	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.						
	4/8/2019	N.S.	< 0.002	0.121	< 0.001	< 0.0005	< 0.005	N.S.	< 0.5	0.000527	N.S.	< 0.0002	N.S.	N.S.	< 0.005	N.S.
	10/15/2019	< 0.001	< 0.002	0.145	< 0.001	< 0.0001	< 0.005	< 0.0005	< 0.5	< 0.0005	0.0408	< 0.0002	0.0121	0.494	< 0.005	< 0.001
	1/31/2020	<0.00058	<0.000880	0.118	< 0.00027	< 0.000039	< 0.0011	< 0.000091	< 0.5	0.000635	0.0321	< 0.0001	0.0123	0.616	< 0.001	< 0.00026
	4/27/2020	<0.00058	<0.000880	0.114		0.0000540J	< 0.0011	< 0.000091	0.335J	<0.00027	0.0258	< 0.0001	0.0114	0.155	< 0.001	<0.00026
	7/14/2020	< 0.00051	<0.000880	0.118		0.0000680J	< 0.0011	0.000122J	0.232J	0.000482J	0.0309	< 0.0001	0.0133	0.870	<0.001	<0.00026
	10/5/2020	<0.00051	0.000889J	0.132		0.0000810J	<0.0011	0.000438J	0.329J	0.000929	0.0362	< 0.0001	0.0144	1.310	< 0.001	<0.00026
	4/12/2021	< 0.00110	<0.000750	0.0825	<0.00027	< 0.000051	0.001796J	< 0.000091	< 0.275	0.000264J	0.0143	< 0.00015	0.0207	0.436	0.00154J	<0.00026
	10/4/2021	<0.00110	0.000925J	0.133	< 0.00027	0.000080J	< 0.00110	0.000504	<0.275	0.000719	0.0345	< 0.00015	0.0124	4.990	<0.00096	<0.00026
	4/4/2022	0.00123J	0.00118J	0.143	<0.000270	< 0.0000550	0.00188J	0.000289J	<0.220	0.00221	0.0420	< 0.000110	0.00630	0.778	0.00329J	<0.000260
	10/4/2022	<0.000690	0.00123J	0.146	<0.000270	<0.0000550	<0.00110	0.000724	<0.220	0.000568	0.0387	<0.000110	0.0137	2.78	<0.000960	<0.000260
	3/14/2016	< 0.001	0.0994	0.687	< 0.001	< 0.0005	< 0.005	0.000794	0.312	< 0.0005	0.0602	<0.0002	< 0.002	1.43	< 0.005	< 0.001
	6/3/2016	< 0.001	0.0529	0.591	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	0.00166	0.0542	< 0.0002	< 0.002	1.14	< 0.005	< 0.001
	8/31/2016	< 0.001	0.0418	0.526	< 0.001	< 0.0005	< 0.005	0.000681	< 0.5	< 0.0005	0.0581	<0.0002	< 0.002	0.847	< 0.005	< 0.001
NC2MW-7	11/17/2016	< 0.001	0.0473	0.544	< 0.001	< 0.0005	< 0.005	< 0.0005	0.544	< 0.0005	0.0613	<0.0002	< 0.002	0.851	< 0.005	< 0.001
	2/15/2017	< 0.001	0.0608	0.558	< 0.001	< 0.0005	< 0.005	0.000639	< 0.5	< 0.0005	0.0638	<0.0002	< 0.002	0.745	< 0.005	< 0.001
	4/24/2017	< 0.001	0.0592	0.614	< 0.001	< 0.0005	< 0.005	0.000629	1.35	< 0.0005	0.0624	<0.0002	< 0.002	1.04	< 0.005	< 0.001
	6/15/2017	< 0.001	0.0469	0.538	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	< 0.0005	0.0579	< 0.0002	< 0.002	0.815	< 0.005	< 0.001

Table 5 - Appendix IV (Assessment Monitoring) Constituents in Groundwater

Omaha Public Power District - NC2 Ash Disposal Area

								Appendix IV	(Assessment Mor	nitoring) Const	ituents					
	Constituent	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride*	Lead	Lithium	Mercury	Molybdenum	Combined Radium (Ra 226 + Ra 228)	Selenium	Thallium
	Reporting Unit	mg/L	pCi/L	mg/L	mg/L											
	7/12/2017	< 0.001	0.041	0.501	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	< 0.0005	0.0602	< 0.0002	< 0.002	1.15	< 0.005	< 0.001
	3/12/2018	< 0.001	0.0387	0.473	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.5	< 0.0005	0.0546	< 0.0002	< 0.002	1.06	< 0.005	< 0.001
	6/6/2019	< 0.001	0.0418	0.624	< 0.001	< 0.0005	< 0.005	0.000876	< 0.5	0.00069	0.0535	< 0.0002	< 0.002	0.986	< 0.005	< 0.001
	10/3/2018	N.S.	0.519	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.						
	4/8/2019	N.S.	0.0391	0.565	N.S.	< 0.0005	< 0.005	N.S.	< 0.5	< 0.0005	N.S.	< 0.0002	N.S.	N.S.	< 0.005	N.S.
	9/23/2019	< 0.001	0.0416	0.619	< 0.001	< 0.0001	< 0.005	< 0.0005	< 0.5	< 0.0005	0.0622	< 0.0002	< 0.002	N.S.	< 0.005	< 0.001
NC2MW-7	10/15/2019	< 0.001	0.0384	0.597	< 0.001	< 0.0001	< 0.005	< 0.0005	< 0.5	< 0.0005	0.0633	< 0.0002	< 0.002	0.532	< 0.005	< 0.001
(cont'd)	2/3/2020	<0.00058	0.0348	0.512	< 0.00027	< 0.000039	< 0.0011	0.000353J	0.357J	< 0.00027	0.0545	< 0.0001	0.00163J	0.615	< 0.001	< 0.00026
(cont a)	4/27/2020	<0.00058	0.0388	0.534	< 0.00027	< 0.000039	< 0.0011	0.000396J	0.429J	< 0.00027	0.0568	< 0.0001	0.00185J	0.722	< 0.001	< 0.00026
	7/14/2020	< 0.00051	0.0381	0.515	< 0.00027	< 0.000049	< 0.0011	0.000233J	< 0.23	< 0.00011	0.0580	< 0.0001	0.00170J	0.804	< 0.001	< 0.00026
	10/5/2020	< 0.00051	0.0435	0.585	< 0.00027	< 0.000049	< 0.0011	0.000233J	0.322J	< 0.00011	0.0641	< 0.0001	0.00122J	0.71	< 0.001	< 0.00026
	4/12/2021	< 0.00110	0.0439	0.53	< 0.00027	< 0.000051	< 0.0011	0.000384J	0.415J	< 0.00021	0.064	< 0.00015	0.00195J	1.05	< 0.00096	< 0.00026
	10/4/2021	< 0.00110	0.0427	0.592	< 0.00027	< 0.000051	< 0.0011	0.000253J	< 0.275	< 0.00021	0.0566	< 0.00015	0.00183J	1.77	< 0.00096	< 0.00026
	4/4/2022	<0.000690	0.0487	0.563	< 0.000270	< 0.0000550	< 0.00110	0.000422J	< 0.220	< 0.000240	0.0654	< 0.000110	0.00159J	0.747	< 0.000960	< 0.000260
	10/3/2022	<0.000690	0.0478	0.607	< 0.000270	< 0.0000550	< 0.00110	0.000236J	< 0.220	< 0.000240	0.0572	< 0.000110	0.00186J	1.24	< 0.000960	< 0.000260
	10/3/2018	< 0.001	0.0223	0.617	< 0.001	< 0.0005	< 0.005	0.0025	0.566	0.00125	0.0347	< 0.0002	0.00307	1.7	< 0.005	< 0.001
	1/15/2019	< 0.001	0.0177	0.503	< 0.001	< 0.0005	< 0.005	0.00224	< 0.5	< 0.0005	0.0292	< 0.0002	0.00288	0.716	< 0.005	< 0.001
	3/5/2019	< 0.001	0.00716	0.566	< 0.001	< 0.0005	< 0.005	0.00304	< 0.5	< 0.0005	0.036	< 0.0002	0.00304	N.S.	< 0.005	< 0.001
	4/8/2019	N/A ^[2]	N/A ^[2]	N/A ^[2]												
	9/23/2019	< 0.001	0.0175	0.609	< 0.001	< 0.0001	< 0.005	0.00172	0.582	< 0.0005	0.0369	< 0.0002	0.00327	N.S.	< 0.005	< 0.001
	10/16/2019	< 0.001	0.0206	0.596	< 0.001	< 0.0001	< 0.005	0.00175	< 0.5	< 0.0005	0.0333	< 0.0002	0.00347	0.735	< 0.005	< 0.001
	1/31/2020	< 0.00058	0.00168J	0.191	< 0.00027	0.000160	< 0.0011	0.00133	< 0.5	< 0.00027	0.0249	< 0.0001	< 0.0011	0.445	< 0.001	< 0.00026
NC2MW-8 ^[1]	4/27/2020	<0.00058	0.0190	0.548	< 0.00027	< 0.000039	< 0.0011	0.00201	0.504	< 0.00027	0.0297	< 0.0001	0.00291	0.587	< 0.001	< 0.00026
	7/14/2020	< 0.00051	0.0195	0.523	< 0.00027	< 0.000049	< 0.0011	0.00178	< 0.23	0.000201J	0.0306	< 0.0001	0.00285	0.598	< 0.001	< 0.00026
	10/5/2020	< 0.00051	0.0322	0.579	< 0.00027	< 0.000049	< 0.0011	0.00176	0.331J	0.000486J	0.0325	< 0.0001	0.00220	1.24	< 0.001	< 0.00026
	4/12/2021	< 0.00110	0.0108	0.489	< 0.00027	0.0000520J	< 0.0011	0.0022	0.393J	0.000490J	0.0340	< 0.00015	0.00267	0.615	0.00142J	< 0.00026
	10/4/2021	< 0.00110	0.00958	0.616	< 0.00027	< 0.000051	< 0.0011	0.00229	< 0.275	0.000393J	0.0340	< 0.00015	0.00281	2.32	< 0.00096	< 0.00026
	4/4/2022	< 0.000690	0.00887	0.552	< 0.000270	<0.0000550	< 0.00110	0.00264	< 0.220	< 0.000240	0.0363	< 0.000110	0.00202	0.912	< 0.000960	< 0.000260
	10/3/2022	< 0.000690	0.0181	0.618	< 0.000270	< 0.0000550	< 0.00110	0.00230	< 0.220	0.000321J	0.0364	< 0.000110	0.00184J	1.57	< 0.000960	< 0.000260

N.S. indicates analyte not sampled because NC2 was detection monitoring.

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.

[&]quot;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.

[&]quot;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.

^[1] NC2MW-8 was installed July 9, 2018 and was added to the Groundwater Monitoring System Certification in June 2019. The 9/23/2019 sampling event was part of an Alternative Source Demonstration for the Title 132 Groundwater Assessment Report.

^[2] MW-13, NC2MW-3, and NC2MW-8 were surrounded by ponding water during April 2019 sampling event and were not sampled. MW-13 was surrounded by ponding water during October 2019 sample and was not sampled.

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



Table 6 - Background Threshold Values for Assessment Monitoring

Omaha Public Power District - NC2 Ash Disposal Area

Constituents	Units	Background Threshold Values (BTVs)
Appendix III (Detection N	lonitoring)	
Boron	mg/l	4.63
Calcium	mg/l	229
Chloride	mg/l	36.6
Fluoride [1]	mg/l	1.89
pH (LPL) ^[2]	SU	6.38
pH (UPL) ^[3]	SU	7.87
Sulfate	mg/l	611
TDS	mg/l	1,390
Appendix IV (Assessmer	nt Monitoring)	
Antimony ^[4]	mg/l	0.0020
Arsenic	mg/l	0.0402
Barium	mg/l	0.447
Beryllium	mg/l	0.001
Cadmium	mg/l	0.0005
Chromium	mg/l	0.005
Cobalt	mg/l	0.00236
Fluoride [1]	mg/l	1.89
Lead	mg/l	0.0061
Lithium	mg/l	0.0423
Mercury	mg/l	0.0002
Molybdenum	mg/l	0.0339
Radium 226 + 228	pCi/l	1.94
Selenium	mg/l	0.0146
Thallium	mg/l	0.001

Notes:

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

^[2] Indicates the lower bound of the range is the lower prediction limit (LPL).

^[3] Indicates the upper bound is the upper prediction limit (UPL).

^[4] Antimony UPL was previously 0.001 mg/l based on the laboratory's reporting limit (RL). The lab adjusted the RL for antimony to 0.002 mg/l during their annual quality control review. The UPL has been updated to 0.002 mg/l to reflect the change in the laboratory's RL.



Table 7 - Established Groundwater Protection Standards

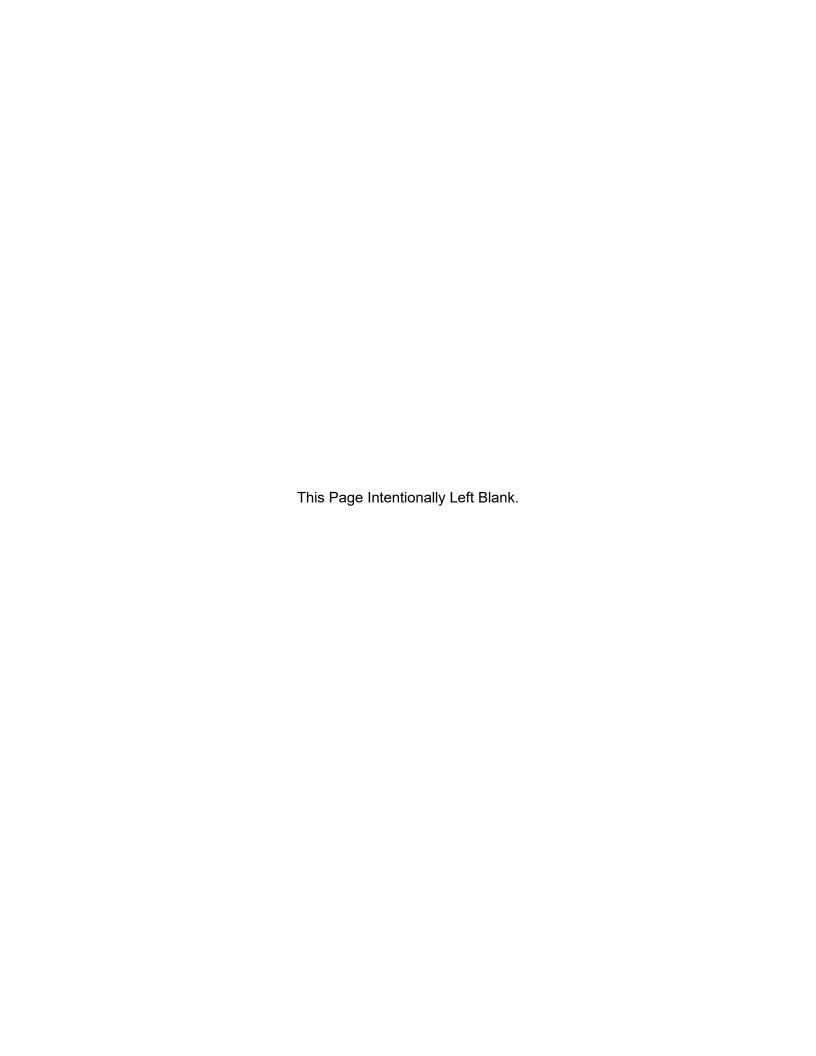
Omaha Public Power District - NC2 Ash Disposal Area

Constituents	Units	Established Groundwater Protection Standard (GWPS) ^[1]
Appendix IV (Assessm	ent Monitoring)	
Antimony	mg/l	0.006
Arsenic	mg/l	0.0402 [2]
Barium	mg/l	2.0
Beryllium	mg/l	0.004
Cadmium	mg/l	0.005
Chromium	mg/l	0.1
Cobalt	mg/l	0.006
Flouride	mg/l	4
Lead	mg/l	0.015
Lithium	mg/l	0.0423 [2]
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:

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

 $^{^{[2]}}$ GWPS is established as the upper prediction limit (UPL) when the background level is higher than the U.S. EPA MCL or the GWPS specified in §257.95(h)(2).



Appendix A Field Sampling Forms



NEBRASKA CITY STATION

Water Levels Prior to Purging (Feet Below TOC)

NC1MW2	Date of Sampling	4/1/2022	Time of Sampling	12:17	Static Water Level 12.52
NC1MW3	Date of Sampling	4/1/2022	Time of Sampling	13:11	Static Water Level 12.22
NC1MW4	Date of Sampling	4/1/2022	Time of Sampling	12:21	Static Water Level 13.01
NC1MW5	Date of Sampling	4/1/2022	Time of Sampling	12:50	Static Water Level 14.02
NC1MW6	Date of Sampling	4/1/2022	Time of Sampling	12:30	Static Water Level 10.72
NC1MW7	Date of Sampling	4/1/2022	Time of Sampling	11:57	Static Water Level 11.99
NC1MW8	Date of Sampling	4/1/2022	Time of Sampling	11:55	Static Water Level 12.29
NC1MW9	Date of Sampling	4/1/2022	Time of Sampling	13:17	Static Water Level 12.74
NC2MW2	Date of Sampling	4/1/2022	Time of Sampling	11:33	Static Water Level 14.14
NC2MW3	Date of Sampling	4/1/2022	Time of Sampling	11:23	Static Water Level 12.00
NC2MW4	Date of Sampling	4/1/2022	Time of Sampling	10:43	Static Water Level 10.27
NC2MW5	Date of Sampling	4/1/2022	Time of Sampling	11:02	Static Water Level 6.29
NC2MW6	Date of Sampling	4/1/2022	Time of Sampling	11:11	Static Water Level 11.21
NC2MW7	Date of Sampling	4/1/2022	Time of Sampling	11:37	Static Water Level 10.45
NC2MW8	Date of Sampling	4/1/2022	Time of Sampling	11:27	Static Water Level 9.61
MW11	Date of Sampling	4/1/2022	Time of Sampling	12:04	Static Water Level 10.42
MW12	Date of Sampling	4/1/2022	Time of Sampling	12:10	Static Water Level 12.35
MW13	Date of Sampling	4/1/2022	Time of Sampling	10:40	Static Water Level 8.19
MW14	Date of Sampling	4/1/2022	Time of Sampling	10:50	Static Water Level 11.74

NOTES:

TOC = Top of Casing

NM = Not Measured, Inaccessible

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW2 - 7	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 57°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	15:44	Pump Start Time	15:45
Static Water Level (+/- 0.01 feet)*	14.08	Purge Rate (mL/minute)	200
Bottom of Well Casing (+/- 0.01 feet)*	17.61	Time to Purge Well (hours:minutes)	0:15
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)	1 712	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	2 000	Water Level Indicator	ind Electronic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
15:50	1,000	13.80	3.46	35.1	4.13	1.44	14.58
15:52	1,400	13.76	2.88	23.2	4.13	1.47	14.59
15:54	1,800	13.81	2.47	19.7	4.13	1.49	14.64
15:56	2,200	13.79	2.38	17.8	4.14	1.49	14.66
15:58	2,600	13.80	2.37	19.5	4.16	1.50	14.72
16:00	3,000	13.82	2.30	18.8	4.18	1.49	14.76

Well Evacuated to Dryness?

Nο

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
16:00	3,000	13.82	2.30	18.8	4.18	1.49	14.76
Duplicate?	No	Preservation?	Cool on Ice, HNO ₃ for Metals		O ₃ for Metals Pump Rate (ml		200

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	4/4/2022, 6:26	

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW3 - 5	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 52°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	14:13	Pump Start Time	14:14
Static Water Level (+/- 0.01 feet)*	Top of Pump	Purge Rate (mL/minute)	200
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:15
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	ured Purge and Sample Equipment: Dedicated Bladder Pump water QED Flow Controller and Nitrogen Gas, Graduated Measu Bucket and Cup, Multi-Parameter Water Meter, and Elect	
2" Well Casing Volume (L)			
Actual Volume of Water Purged (mL)	2 000	Water Level Indicator	ind Electronic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
14:19	1,000	11.50	3.70	31.1	3.95	2.37	Top of Pump
14:21	1,400	11.46	3.29	34.0	3.94	2.42	Top of Pum
14:23	1,800	11.16	2.80	35.5	3.95	2.47	Top of Pum
14:25	2,200	11.09	2.15	32.6	3.98	2.48	Top of Pum
14:27	2,600	10.98	2.11	26.3	4.00	2.48	Top of Pum
14:29	3,000	10.86	2.09	23.1	4.01	2.48	Top of Pum
	1						

Well Evacuated to Dryness?

Vo

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
14:29	3,000	10.86	2.09	23.1	4.01	2.48	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO ₃ for Metals		Pump Rate	(mL/minute)	200

Sample Ph	vsical 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	4/4/2022, 6:26

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW4 - 2	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 37°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	9:33	Pump Start Time	9:35	
Static Water Level (+/- 0.01 feet)*	10.28	Purge Rate (mL/minute)	100	
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:23	
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump w QED Flow Controller and Nitrogen Gas, Graduated Measu Bucket and Cup, Multi-Parameter Water Meter, and Elect		
2" Well Casing Volume (L)	761			
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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
9:40	500	8.82	9.22	437	6.09	0.971	10.70
9:42	700	8.79	9.27	395	6.08	0.967	10.80
9:44	900	8.74	9.23	277	6.07	0.965	10.85
9:46	1,100	8.75	9.23	280	6.05	0.964	10.89
9:48	1,300	8.74	9.27	227	6.04	0.963	10.94
9:50	1,500	8.77	9.31	185	6.04	0.963	11.01
9:52	1,700	8.78	9.45	156	6.04	0.962	11.09
9:54	1,900	8.74	9.52	159	6.03	0.959	11.15
9:56	2,100	8.74	9.45	152	6.02	0.960	11.20
9:58	2,300	8.78	9.53	155	6.02	0.959	11.25

Well Evacuated to Dryness?

Vo

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
9:58	2,300	8.78	9.53	155	6.02	0.959	11.25
Duplicate?	No	Preservation?	Cool on Ice, HNO ₃ for Metals		Pump Rate	(mL/minute)	125

Sample Physical Characteristics Equipment Information

Sample Clarity	Mostly Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi	
Sample Color	Light Brown 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	4/4/2022, 6:26	

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW5 - 3	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, 43°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	11:35	Pump Start Time 11:36		
Static Water Level (+/- 0.01 feet)*	6.51	Purge Rate (mL/minute)	150	
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:19	
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with	
2" Well Casing Volume (L)	5 7/1	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•	
Actual Volume of Water Purged (mL)	2.050	Water Level Indicator	ina Liectionic	

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
11:41	750	7.08	13.96	14.1	7.53	1.36	8.74
11:43	1,050	7.12	13.88	12.7	7.39	1.37	8.70
11:45	1,350	7.08	13.84	10.4	7.43	1.36	8.70
11:47	1,650	7.06	7.07	9.7	7.40	1.36	8.70
11:49	1,950	7.05	7.11	10.2	7.37	1.36	8.70
11:51	2,250	7.09	7.16	8.6	7.35	1.36	8.70
11:53	2,550	7.09	7.19	7.2	7.36	1.37	8.70
11:55	2,850	7.13	7.24	7.0	7.37	1.37	8.70

Well Evacuated to Dryness?

J٥

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
11:55	2,850	7.13	7.24	7.0	7.37	1.37	8.70
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate (mL/minute)		150

Sample Physical Characterist	ics 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	4/4/2022, 6:26	

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King			
Monitoring Well Identification - Sample Number: MW6 - 4	Date: 4/4/2022			
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, 50°F			

Groundwater Measurements and Purge Data

Time of Water Level Measurement	13:02	Pump Start Time	13:03
Static Water Level (+/- 0.01 feet)*	11.17	Purge Rate (mL/minute)	100
Bottom of Well Casing (+/- 0.01 feet)*	14.50	Time to Purge Well (hours:minutes)	0:09
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)	2.06	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	4 400	Water Level Indicator	ina Liectionic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Leve (feet)
13:08	1,000	11.30	6.04	6.3	7.50	1.08	11.88
13:10	1,200	11.44	6.07	7.0	7.49	1.10	12.02
13:12	1,400	11.40	6.18	10.8	7.48	1.11	12.11
		<u> </u>					
-							

Well Evacuated to Dryness?

'es

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
13:12	1,400	11.40	6.18	10.8	7.48	1.11	12.11
Duplicate?	No	Preservation?	Cool on Ice, H	NO₃ 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	4/4/2022, 6:26

Notes / Unusual Occurrences: Well Pumped Dry, Filled Up Partial Bottle for Radium

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW7 - 8	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 59°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	17:02	Pump Start Time	17:03	
Static Water Level (+/- 0.01 feet)*	10.36	Purge Rate (mL/minute)	200	
Bottom of Well Casing (+/- 0.01 feet)*	24.10	Time to Purge Well (hours:minutes)	0:37	
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	red Purge and Sample Equipment: Dedicated Bladder Pump w		
2" Well Casing Volume (L)	1 2/12	QED Flow Controller and Nitrogen Gas, Graduated Meas		
Actual Volume of Water Purged (mL)	7 400	Bucket and Cup, Multi-Parameter Water Meter, and Elect Water Level Indicator		

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
17:08	1,000	15.31	0.84	376	8.99	1.07	10.36
17:10	1,400	14.40	0.67	243	8.96	1.10	10.36
17:12	1,800	14.07	0.52	152	8.81	1.10	10.36
17:14	2,200	14.00	0.52	143	8.74	1.10	10.36
17:16	2,600	13.96	0.52	118	8.69	1.10	10.36
17:18	3,000	14.08	0.49	100	8.58	1.10	10.36
17:20	3,400	13.99	0.46	95.1	8.42	1.10	10.36
17:22	3,800	13.96	0.43	85.2	8.34	1.11	10.36
17:24	4,200	13.82	0.44	69.1	8.20	1.11	10.36
17:26	4,600	13.80	0.42	63.2	8.15	1.11	10.36
17:28	5,000	13.76	0.43	60.4	8.10	1.11	10.36
17:30	5,400	13.80	0.43	52.4	8.02	1.11	10.36
17:32	5,800	13.77	0.42	50.1	7.97	1.11	10.36
17:34	6,200	13.74	0.43	42.2	7.95	1.11	10.36
17:36	6,600	13.68	0.43	37.2	7.93	1.11	10.36
17:38	7,000	13.56	0.42	30.4	7.91	1.11	10.36
17:40	7,400	13.55	0.42	24.2	7.89	1.11	10.36
	1						

Well Evacuated to Dryness? ____ Groundwater Sample Information

l٥

Recharge time? Not Measured

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
17:40	7,400	13.55	0.42	24.2	7.89	1.11	10.36
Duplicate?	Yes, DUP2	Preservation?	Cool on Ice, HNO ₃ for Metals		NO ₃ for Metals Pump Rate (mL/minute)		200

Duplicate:	103, 001 2	i reservation:	Tamp hate (i			(IIIL) IIIIIIace)	200
Sample Physical Characteristics Equipment Information							
Sample Clarity			Clear	QED Pump Cont	rol Information	CPM-2, 27	/3, ~20 psi
Sample Color	ample Color		Clear	Decontamination Procedure		Alconox and DI Water Rinse	
Sample Odor	Sample Odor		Odorless	Instrument Calibration By		Kyle K	. Uhing
Immiscible Laye	r Observed? If so	, thickness?	No	Date and Time o	of Calibration	4/4/20	22, 6:26
Notes / Unusual	Occurrences: No	one		•			

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW8 - 6	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 54°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	14:46	Pump Start Time	14:48		
Static Water Level (+/- 0.01 feet)* 9.56		Purge Rate (mL/minute)	200-300		
Bottom of Well Casing (+/- 0.01 feet)*	15.60	Time to Purge Well (hours:minutes)	0:33		
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	ed Purge and Sample Equipment: Dedicated Bladder Pump with			
2" Well Casing Volume (L)	1 373	QED Flow Controller and Nitrogen Gas, Graduated Measu			
Actual Volume of Water Purged (mL)	0.000	 Bucket and Cup, Multi-Parameter Water Meter, and Electro Water Level Indicator 			

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
14:53	1,000	11.37	1.27	>1,000	6.56	1.10	9.57
14:55	1,400	10.71	0.61	>1,000	6.60	1.05	9.59
14:57	1,800	10.73	0.50	>1,000	6.60	1.04	9.59
14:59	2,200	10.62	0.40	973	6.62	1.03	9.59
15:01	2,800	10.69	0.32	>1,000	6.64	1.03	9.59
15:03	3,400	10.65	0.34	873	6.71	1.03	9.59
15:05	4,000	10.48	0.36	436	6.70	1.03	9.59
15:07	4,600	10.38	0.36	272	6.68	1.03	9.59
15:09	5,200	10.33	0.37	132	6.66	1.04	9.59
15:11	5,800	10.37	0.38	79.6	6.64	1.04	9.59
15:13	6,400	10.34	0.39	66.3	6.63	1.04	9.59
15:15	7,000	10.37	0.39	64.2	6.63	1.04	9.59
15:17	7,600	10.40	0.40	42.5	6.62	1.04	9.59
15:19	8,200	10.38	0.39	28.0	6.61	1.04	9.59
15:21	8,800	10.34	0.39	21.2	6.61	1.04	9.59
<u>'</u>							

Well Evacuated to Dryness?

Nο

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
15:21	8,800	10.34	0.39	21.2	6.61	1.04	9.59
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	300

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	4/4/2022, 6:26

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481), Cathy King
Monitoring Well Identification - Sample Number: MW13 - 1	Date: 4/4/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, 34°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	8:40	Pump Start Time	8:44
Static Water Level (+/- 0.01 feet)*	8.29	Purge Rate (mL/minute)	150
Bottom of Well Casing (+/- 0.01 feet)*	15.19	Time to Purge Well (hours:minutes)	0:15
Pump Intake Elevation (+/- 0.01 feet)*	900.30	Purge and Sample Equipment: Dedicated Bladder Pump with	
2" Well Casing Volume (L)	1 176	QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic	
Actual Volume of Water Purged (mL)	2,250	Water Level Indicator	ina Liectionic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Leve (feet)
8:49	750	10.07	5.10	48.7	6.47	1.03	8.40
8:51	1,050	9.74	5.08	34.1	6.32	1.04	8.38
8:53	1,350	9.42	5.03	26.3	6.26	1.05	8.38
8:55	1,650	9.45	4.92	20.8	6.20	1.05	8.38
8:57	1,950	9.45	4.78	18.7	6.17	1.05	8.38
8:59	2,250	9.38	4.79	20.5	6.15	1.06	8.38

Well Evacuated to Dryness?

l٥

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
8:59	2,250	9.38	4.79	20.5	6.15	1.06	8.38
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	150

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	4/4/2022, 6:26

Equipment Calibration Sheet

Date:	4/4/2022
Time:	6:26

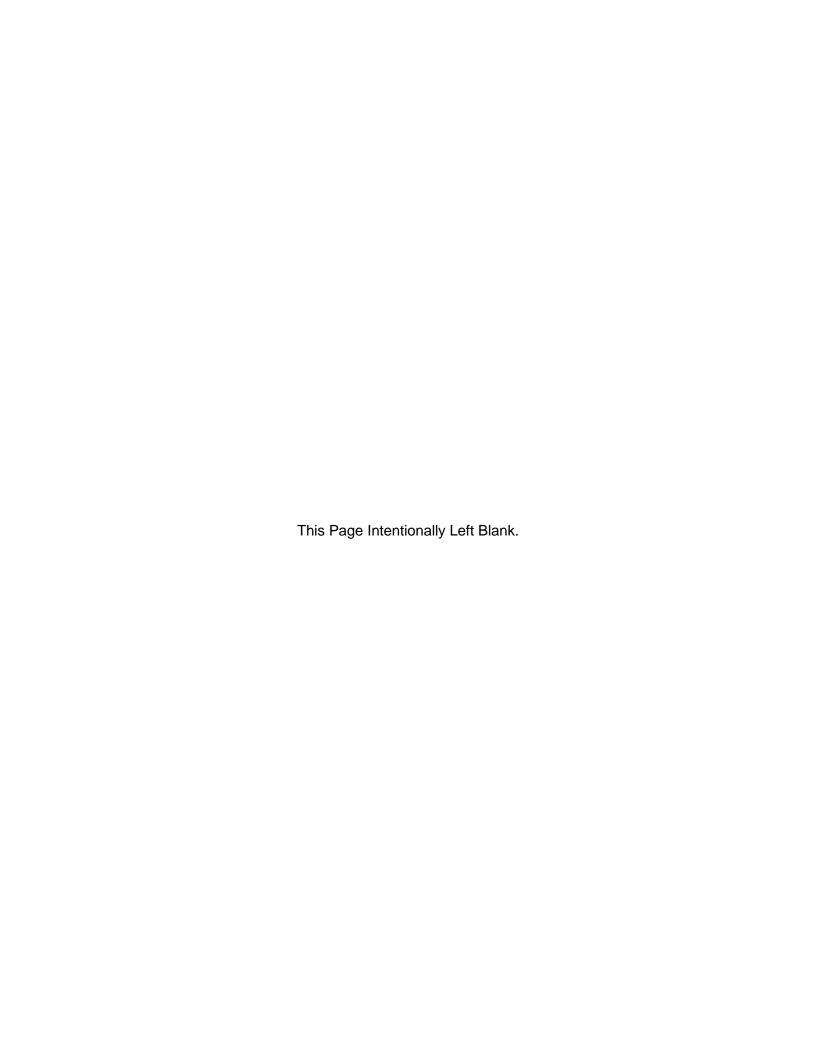
Person Calibrating Instrument: Kyle K. Uhing

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

Parameter:	Reading	Units
pH 4	4.00	NA
Conductivity	4.48	μS/cm
Turbidity	0.0	NTU
DO	10.96	mg/L

Comments:
The Horiba was calibrated using pH 4.0 AutoCal buffer solution.

.



NEBRASKA CITY STATION

Water Levels Prior to Purging (Feet Below TOC)

NC1MW2	Date of Sampling	10/1/2022	Time of Sampling	13:50	Static Water Level 12.62
NC1MW3	Date of Sampling	10/1/2022	Time of Sampling	14:35	Static Water Level 13.09
NC1MW4	Date of Sampling	10/1/2022	Time of Sampling	13:55	Static Water Level 13.12
NC1MW5	Date of Sampling	10/1/2022	Time of Sampling	14:17	Static Water Level 14.82
NC1MW6	Date of Sampling	10/1/2022	Time of Sampling	14:26	Static Water Level 11.05
NC1MW7	Date of Sampling	10/1/2022	Time of Sampling	13:35	Static Water Level 11.91
NC1MW8	Date of Sampling	10/1/2022	Time of Sampling	13:33	Static Water Level 12.23
NC1MW9	Date of Sampling	10/1/2022	Time of Sampling	14:41	Static Water Level 13.28
NC2MW2	Date of Sampling	10/1/2022	Time of Sampling	13:14	Static Water Level 14.60
NC2MW3	Date of Sampling	10/1/2022	Time of Sampling	13:07	Static Water Level 12.72
NC2MW4	Date of Sampling	10/1/2022	Time of Sampling	12:31	Static Water Level 11.82
NC2MW5	Date of Sampling	10/1/2022	Time of Sampling	12:48	Static Water Level 14.90
NC2MW6	Date of Sampling	10/1/2022	Time of Sampling	12:56	Static Water Level 11.84
NC2MW7	Date of Sampling	10/1/2022	Time of Sampling	13:29	Static Water Level 10.79
NC2MW8	Date of Sampling	10/1/2022	Time of Sampling	13:10	Static Water Level 11.66
MW11	Date of Sampling	10/1/2022	Time of Sampling	13:43	Static Water Level 11.31
MW12	Date of Sampling	10/1/2022	Time of Sampling	13:38	Static Water Level 13.24
MW13	Date of Sampling	10/1/2022	Time of Sampling	12:27	Static Water Level 10.04
MW14	Date of Sampling	10/1/2022	Time of Sampling	12:34	Static Water Level 13.87

NOTES:

TOC = Top of Casing

NM = Not Measured, Inaccessible

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW2 - 7	Date: 10/3/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 82°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	15:05	Pump Start Time	15:06
Static Water Level (+/- 0.01 feet)*	14.91	Purge Rate (mL/minute)	150
Bottom of Well Casing (+/- 0.01 feet)*	17.61	Time to Purge Well (hours:minutes)	0:14
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)	1 67	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	2 4 0 0	Water Level Indicator	ina Liecti Offic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Leve (feet)
15:11	750	18.86	7.02	27.0	7.05	1.34	15.47
15:14	1,200	18.98	6.94	22.2	7.06	1.35	15.48
15:17	1,650	18.52	6.85	14.2	7.05	1.36	15.48
15:20	2,100	17.75	6.82	10.8	7.03	1.36	15.48

Well Evacuated to Dryness?

J٥

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
15:20	2,100	17.75	6.82	10.8	7.03	1.36	15.48
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	150

Sample Physical Characteristics	Equipment Information

Clear	QED Pump Control Information	CPM-2, 27/3, ~20 psi
Clear	Decontamination Procedure	Alconox and DI Water Rinse
Odorless	Instrument Calibration By	Kyle K. Uhing
No	Date and Time of Calibration	10/3/2022, 8:43
	Clear Odorless	Clear Decontamination Procedure Odorless Instrument Calibration By

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)		
Monitoring Well Identification - Sample Number: MW3 - 5	Date: 10/3/2022		
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, 70°F		

Groundwater Measurements and Purge Data

Time of Water Level Measurement	12:56	Pump Start Time	12:57
Static Water Level (+/- 0.01 feet)*	Top of Pump	Purge Rate (mL/minute)	150
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)		QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	
Actual Volume of Water Purged (mL)	2 000	Water Level Indicator	ina Liectionic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
13:02	750	21.52	2.18	73.1	7.23	1.81	Top of Pump
13:05	1,200	20.85	1.02	65.5	7.23	1.84	Top of Pump
13:08	1,650	20.73	0.68	41.6	7.20	1.86	Top of Pum
13:11	2,100	20.76	0.49	24.1	7.18	1.86	Top of Pum
13:14	2,550	20.82	0.47	18.9	7.16	1.86	Top of Pum
13:17	3,000	20.83	0.44	14.1	7.15	1.86	Top of Pum

Well Evacuated to Dryness?

Nο

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
13:17	3,000	20.83	0.44	14.1	7.15	1.86	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ 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	10/3/2022, 8:43

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)		
Monitoring Well Identification - Sample Number: MW4 - 2	Date: 10/3/2022		
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, 59°F		

Groundwater Measurements and Purge Data

Time of Water Level Measurement	9:42	Pump Start Time	9:44
Static Water Level (+/- 0.01 feet)*	11.83	Purge Rate (mL/minute)	100-125
Bottom of Well Casing (+/- 0.01 feet)*	14.50	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)	1 65	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	4 025	Water Level Indicator	ind Liectionic

^{*}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

Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
625	16.24	0.77	283	7.27	0.742	13.95
925	16.41	1.04	670	7.22	0.726	Top of Pump
1,225	16.50	0.94	>1,000	7.22	0.730	Top of Pum
1,525	16.56	0.90	>1,000	7.09	0.734	Top of Pum
1,825	16.62	0.84	>1,000	7.08	0.739	Top of Pum
	Purged (mL) 625 925 1,225 1,525	Purged (mL) (°C) 625 16.24 925 16.41 1,225 16.50 1,525 16.56	Purged (mL) (°C) DO (mg/L) 625 16.24 0.77 925 16.41 1.04 1,225 16.50 0.94 1,525 16.56 0.90	Purged (mL) (°C) DO (mg/L) (NTU) 625 16.24 0.77 283 925 16.41 1.04 670 1,225 16.50 0.94 >1,000 1,525 16.56 0.90 >1,000	Purged (mL) (°C) DO (mg/L) (NTU) PH 625 16.24 0.77 283 7.27 925 16.41 1.04 670 7.22 1,225 16.50 0.94 >1,000 7.22 1,525 16.56 0.90 >1,000 7.09	Purged (mL) (°C) DO (mg/L) (NTU) pH (mS/cm) 625 16.24 0.77 283 7.27 0.742 925 16.41 1.04 670 7.22 0.726 1,225 16.50 0.94 >1,000 7.22 0.730 1,525 16.56 0.90 >1,000 7.09 0.734

Well Evacuated to Dryness?

J۸

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
10:01	1,825	16.62	0.84	>1,000	7.08	0.739	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	100

Sample Physical Characterist	ics Equipment Information

Sample Clarity	Mostly 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	10/3/2022, 8:43

Notes / Unusual Occurrences: Pumped Dry - Collected Mostly Clear Grab Sample on 10/4/2022, 8:14

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)		
Monitoring Well Identification - Sample Number: MW5 - 3	Date: 10/3/2022		
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 68°F		

Groundwater Measurements and Purge Data

Time of Water Level Measurement	11:03	Pump Start Time	11:04
Static Water Level (+/- 0.01 feet)*	Top of Pump	Purge Rate (mL/minute)	50-150
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:14
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)		QED Flow Controller and Nitrogen Gas, Graduated Bucket and Cup, Multi-Parameter Water Meter, a	
Actual Volume of Water Purged (mL)	4 200	Water Level Indicator	ina Liectionic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
11:09	750	17.55	7.42	18.9	7.34	1.17	Top of Pump
11:12	900	17.66	7.44	11.5	7.31	1.18	Top of Pum
11:15	1,050	17.92	7.37	10.3	7.29	1.19	Top of Pum
11:18	1,200	18.18	7.21	11.1	7.30	1.19	Top of Pum

Well Evacuated to Dryness?

l٥

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
11:18	1,200	18.18	7.21	11.1	7.30	1.19	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ 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	10/3/2022, 8:43

Notes / Unusual Occurrences: Pumped Dry - Collected Mostly Clear Grab Sample on 10/4/2022, 8:36

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW6 - 4	Date: 10/3/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, 75°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	12:13	Pump Start Time	12:14		
Static Water Level (+/- 0.01 feet)*	11.86	Purge Rate (mL/minute)	150		
Bottom of Well Casing (+/- 0.01 feet)*	14.50	Time to Purge Well (hours:minutes)	0:17		
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	d Purge and Sample Equipment: Dedicated Bladder Pump with			
2" Well Casing Volume (L)	163	QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic			
Actual Volume of Water Purged (mL)	2 5 5 6	Water Level Indicator	ina Liectionic		

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
12:19	750	20.07	1.75	29.3	7.48	0.955	Top of Pump
12:22	1,200	20.49	1.44	27.3	7.48	0.888	Top of Pump
12:25	1,650	20.72	1.14	27.0	7.43	0.864	Top of Pum
12:28	2,100	20.83	1.07	24.1	7.42	0.859	Top of Pum
12:31	2,550	20.99	1.05	21.7	7.41	0.855	Top of Pum
							_

Well Evacuated to Dryness? ____ Groundwater Sample Information /es

Recharge time? Not Measured

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
12:31	2,550	20.99	1.05	21.7	7.41	0.855	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ 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	10/3/2022, 8:43			
Notes / Unusual Occurrences: Pumped Dry - Collected Mostly Clear Grab Sample on 10/4/2022, 8:47						

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW7 - 8	Date: 10/3/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Breezy, 82°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	15:53	Pump Start Time	15:53
Static Water Level (+/- 0.01 feet)*	10.79	Purge Rate (mL/minute)	250
Bottom of Well Casing (+/- 0.01 feet)*	24.10	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)	277	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	4 250	Water Level Indicator	ind Liectionic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
15:58	1,250	19.56	0.20	358	7.62	0.941	10.79
16:01	2,000	19.04	0.00	93.2	7.63	0.900	10.79
16:04	2,750	18.87	0.00	48.2	7.59	0.895	10.79
16:07	3,500	18.53	0.00	48.8	7.61	0.893	10.79
16:10	4,250	18.50	0.00	24.4	7.60	0.893	10.79

Well Evacuated to Dryness?

Nο

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
16:10	4,250	18.50	0.00	24.4	7.60	0.893	10.79
Duplicate?	Yes, DUP2	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	250

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	10/3/2022, 8:43

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW8 - 6	Date: 10/3/2022
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, 75°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	13:57	Pump Start Time	13:58
Static Water Level (+/- 0.01 feet)*	10.69	Purge Rate (mL/minute)	200
Bottom of Well Casing (+/- 0.01 feet)*	15.60	Time to Purge Well (hours:minutes)	0:41
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder	Pump with
2" Well Casing Volume (L)	3 03	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	0.200	Water Level Indicator	ina Liectionic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
14:03	1,000	18.65	8.48	973	7.35	0.856	10.75
14:06	1,600	18.18	7.78	399	7.40	0.842	10.79
14:09	2,200	18.16	7.27	242	7.36	0.840	10.80
14:12	2,800	18.27	6.80	310	7.37	0.842	10.82
14:15	3,400	18.14	6.74	176	7.34	0.844	10.82
14:18	4,000	18.15	6.52	77.3	7.32	0.842	10.83
14:21	4,600	18.04	6.00	114	7.34	0.843	10.85
14:24	5,200	18.07	5.92	86.9	7.31	0.842	10.86
14:27	5,800	18.19	5.70	58.8	7.28	0.843	10.87
14:30	6,400	18.05	5.54	67.3	7.29	0.844	10.86
14:33	7,000	18.02	5.42	36.4	7.30	0.843	10.87
14:36	7,600	17.94	5.33	36.6	7.30	0.842	10.88
14:39	8,200	17.90	5.28	22.7	7.30	0.843	10.89

Well Evacuated to Dryness? ______
Groundwater Sample Information

Nο

Recharge time? Not Measured

	Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
I	14:39	8,200	17.90	5.28	22.7	7.30	0.843	10.89
ſ	Dunlicate?	No	Preservation?	Cool on Ice. H	NO ₂ for Metals	Pumn Rate	(ml /minute)	200

Sample Physical Characteristics		Equipment Information			
Sample Clarity	Mostly 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	10/3/2022, 8:43		
Notes / Unusual Occurrences: None					

Facility Name: OPPD Nebraska City Station 2	Sampler Name(s): Kyle K. Uhing (29481)	
Monitoring Well Identification - Sample Number: MW13 - 1	Date: 10/3/2022	
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, 55°F	

Groundwater Measurements and Purge Data

Time of Water Level Measurement	8:50	Pump Start Time	8:51
Static Water Level (+/- 0.01 feet)*	10.05	Purge Rate (mL/minute)	200
Bottom of Well Casing (+/- 0.01 feet)*	15.19	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	908.30		
2" Well Casing Volume (L)	1 217	QED Flow Controller and Nitrogen Gas, Graduated Measur Bucket and Cup, Multi-Parameter Water Meter, and Electr	
Actual Volume of Water Purged (mL)	3,400 Water Level Indicator		ind Electronic

^{*}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

Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
8:56	1,000	16.36	5.52	85.7	6.91	0.774	Top of Pump
8:59	1,600	16.26	5.50	65.2	6.93	0.772	Top of Pump
9:02	2,200	16.18	5.52	42.7	6.95	0.771	Top of Pump
9:05	2,800	16.17	5.46	30.4	6.97	0.773	Top of Pump
9:08	3,400	16.19	5.40	23.5	6.90	0.774	Top of Pump
	1						

Well Evacuated to Dryness?

J۸

Recharge time? Not Measured

Groundwater Sample Information

Sample Time	Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
9:08	3,400	16.19	5.40	23.5	6.90	0.774	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO ₃ for Metals		Pump Rate	(mL/minute)	200

Sample Physical Characterist	ics 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	10/3/2022, 8:43

Equipment Calibration Sheet

Date:	10/3/2022
Time:	8:43

Person Calibrating Instrument: Kyle K. Uhing

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

Parameter:	Reading	Units
pH 4	4.00	NA
Conductivity	4.54	μS/cm
Turbidity	0.3	NTU
DO	9.77	mg/L

Comments:	
The Horiba was calibrated using pH 4.0 AutoCal buffer solution.	

.



Appendix B Laboratory Analytical Reports





Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-228285-1

Client Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

For:

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

Attn: Kyle Uhing

Authorized for release by: 4/21/2022 11:35:23 AM

Shawn Hayes, Senior Project Manager (319)229-8211

Shawn.Hayes@et.eurofinsus.com

LINKS

Review your project results through Total Access



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1	Client: Omaha Public Power District
	Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landf

Laboratory Job ID: 310-228285-1

Ta	h	حا	Λf	C_{0}	nto	nts
ı a		ıC	OI.	$\mathbf{c}\mathbf{c}$	HILE	1113

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	6
Definitions	8
QC Sample Results	9
QC Association	12
Chronicle	14
Certification Summary	15
Method Summary	16
Chain of Custody	17
Receipt Checklists	19

Case Narrative Client: Omaha Public Power District Job ID: 310-228285-1 Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-1 **Laboratory: Eurofins Cedar Falls** Narrative Job Narrative 310-228285-1 Comments No additional comments. Receipt The samples were received on 4/5/2022 5:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C. No analytical or quality issues were noted, other than those described in the Definitions/Glossary page. No analytical or quality issues were noted, other than those described in the Definitions/Glossary page. **General Chemistry** No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-228285-1	NC2MW4	Water	04/04/22 08:49	04/05/22 17:00
310-228285-2	MW13	Water	04/04/22 09:58	04/05/22 17:00

7

10

12

13

1

Eurofins Cedar Falls
Page 3 of 19

Eurofins Cedar Falls
Page 4 of 19

Eurofins Cedar Falls
4/21/2022
Page 4 of 19

Detection Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Molybdenum

Total Dissolved Solids

Selenium

Job ID: 310-228285-1

0.00120 mg/L

26.0 mg/L

0.000960 mg/L

6020A

6020A

SM 2540C

Total/NA

Total/NA

Total/NA

lient Sample ID: NC2	MW4					Lab	ample ID:	D: 310-228285-	
- Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.29	J	5.00	2.25	mg/L	5	_	9056A	Total/NA
Sulfate	60.4		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.00150	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.338		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.126		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.0000820	J	0.000100	0.0000550	mg/L	1		6020A	Total/NA
Calcium	128		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000723		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.00208		0.000500	0.000240	mg/L	1		6020A	Total/NA
Lithium	0.0301		0.0100	0.00250	mg/L	1		6020A	Total/NA

рН	7.3 HF	0.1	0.1 SU	1	SM 4500 H+ B	Total/NA
Client Sample ID: MW13				Lab	Sample ID: 3	10-228285-2

0.00200

0.00500

50.0

0.00609

0.0146

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	10.7		5.00	2.25	mg/L		_	9056A	Total/NA
Sulfate	48.8		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.0134		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.202		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.0931	J	0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	130		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000879		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.000698		0.000500	0.000240	mg/L	1		6020A	Total/NA
Lithium	0.0329		0.0100	0.00250	mg/L	1		6020A	Total/NA
Total Dissolved Solids	470		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

3.29 J

Client: Omaha Public Power District

Analyte

Chloride

Analyte

Method: 9056A - Anions, Ion Chromatography

Client Sample ID: NC2MW4 Lab Sample ID: 310-228285-1 Date Collected: 04/04/22 08:49 Matrix: Water Date Received: 04/05/22 17:00

RL

5.00

MDL Unit

MDL Unit

2.25 mg/L

Job ID: 310-228285-1

Dil Fac

Analyzed

04/11/22 15:35

Client Sample Results

Fluoride	< 0.220		0.500	0.220	mg/L			04/11/22 15:35	5
Sulfate	60.4		5.00	2.00	mg/L			04/11/22 15:35	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 18:20	1
Arsenic	0.00150	J	0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 18:20	1
Barium	0.338		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 18:20	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 18:20	1
Boron	0.126		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 18:20	1
Cadmium	0.0000820	J	0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 18:20	1
Calcium	128		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 18:20	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 18:20	1
Cobalt	0.000723		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 18:20	1
Lead	0.00208		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 18:20	1
Lithium	0.0301		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 18:20	1
Molybdenum	0.00609		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 18:20	1
Selenium	0.0146		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 18:20	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 18:20	1
Method: 7470A - Mercury (CVAA)									

Mercury	<0.000110		0.000200	0.000110	mg/L		04/14/22 14:03	04/15/22 13:18	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	444		50.0	26.0	mg/L			04/07/22 16:37	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3	HF	0.1	0.1	SU			04/06/22 14:13	1

RL

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls Eurofins Cedar Falls

Page 5 of 19 4/21/2022 Page 6 of 19 4/21/2022

Job ID: 310-228285-1

Matrix: Water

Lab Sample ID: 310-228285-2

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Client Sample ID: MW13

Date Received: 04/05/22 17:00

Date Collected: 04/04/22 09:58

Method: 9056A - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	10.7		5.00	2.25	mg/L			04/11/22 16:22	5	
Fluoride	<0.220		0.500	0.220	mg/L			04/11/22 16:22	5	
Sulfate	48.8		5.00	2.00	mg/L			04/11/22 16:22	5	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 18:23	1
Arsenic	0.0134		0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 18:23	1
Barium	0.202		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 18:23	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 18:23	1
Boron	0.0931	J	0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 18:23	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 18:23	1
Calcium	130		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 18:23	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 18:23	1
Cobalt	0.000879		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 18:23	1
Lead	0.000698		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 18:23	1
Lithium	0.0329		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 18:23	1
Molybdenum	<0.00120		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 18:23	1
Selenium	<0.000960		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 18:23	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 18:23	1

Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	<0.000110		0.000200	0.000110	mg/L		04/14/22 14:03	04/15/22 13:20	

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids	470		50.0	26.0	mg/L			04/07/22 16:37	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
pH	7.2	HF	0.1	0.1	SU			04/06/22 14:15	

Definitions/Glossary

Job ID: 310-228285-1

Client: Omaha Public Power District	
Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill	

Qualifiers HPLC/IC Qualifier Qualifier Description Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. Qualifier Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. **General Chemistry** Qualifier Qualifier Description Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Glossary

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

Eurofins Cedar Falls Eurofins Cedar Falls

Page 7 of 19 4/21/2022 Page 8 of 19 4/21/2022

Toxicity Equivalent Quotient (Dioxin) Too Numerous To Count

TEQ

			QC	C Sam	ple I	Resu	ts							
lient: Omaha Public Power District roject/Site: Nebraska City Station Un	it 1 & 2	CCR	/ Landfill									Job ID:	310-228	3285-1
lethod: 9056A - Anions, Ion C	hroma	tog	raphy											
Lab Sample ID: MB 310-349722/3											Client	Sample ID:	Method	Blank
Matrix: Water												Prep 1	уре: То	tal/NA
Analysis Batch: 349722														
		MB	MB											
Analyte	R	esult	Qualifier		RL		MDL	Unit		D	Prepared	Analyz	ed	Dil Fac
Chloride	<(.450			1.00		0.450	mg/L				04/11/22	15:03	1
Fluoride	<0.	0440			0.100	0.	0440	mg/L				04/11/22	15:03	1
Sulfate	<(.400			1.00	(0.400	mg/L				04/11/22	15:03	1
Lab Sample ID: LCS 310-349722/4										Clie	nt Sampl	e ID: Lab C		The state of the s
Matrix: Water												Prep	ype: To	tal/NA
Analysis Batch: 349722				_										
				Spike			LCS					%Rec		
Analyte		_		Added 10.0		Result 10.23	Qual	ifier	Unit			Limits		
Chloride Fluoride				2.00		1.944			mg/L		102 97	90 - 110 90 - 110		
Sulfate				10.0		10.55			mg/L		105	90 - 110		
Sunate				10.0		10.55			mg/L		105	90 - 110		
Lab Sample ID: 310-228285-1 MS											CI	ient Sample	D: NC	2MW4
Matrix: Water												Prep 1	Гуре: То	tal/NA
Analysis Batch: 349722														
	Sample	Sam	ple	Spike		MS	MS					%Rec		
Analyte	Result	Qual	ifier	Added		Result	Qual	ifier	Unit		%Rec	Limits		
Chloride	3.29	J		25.0		26.36			mg/L		92	80 - 120		
Fluoride	<0.220			5.00		4.847			mg/L		97	80 - 120		
Sulfate	60.4			25.0		85.64			mg/L		101	80 - 120		
Lab Sample ID: 310-228285-1 MSD											CI	ient Sample	D: NC	2MW4
Matrix: Water												Prep 1	Гуре: То	tal/NA
Analysis Batch: 349722														
	Sample	Sam	ple	Spike		MSD	MSD					%Rec		RPD
Analyte	Result	Qual	ifier	Added		Result	Qual	ifier	Unit		%Rec	Limits	RPD	Limit
Chloride	3.29	J		25.0		26.06			mg/L		91	80 - 120	1	15
Fluoride	<0.220			5.00		4.771			mg/L		95	80 - 120	2	15
Sulfate	60.4			25.0		85.09			mg/L		99	80 - 120	1	15

wethou.	0020A -	Metais	(ICF/IVIS)

Lab Sample ID: MB 310-3489 Matrix: Water Analysis Batch: 350581							Client Sa	mple ID: Metho Prep Type: 1 Prep Batch:	Γotal/NA
		MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0009760	J	0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 17:13	1
Arsenic	< 0.000750		0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 17:13	1
Barium	<0.000880		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 17:13	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 17:13	1
Boron	<0.0580		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 17:13	1
Cadmium	< 0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 17:13	1
Calcium	<0.190		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 17:13	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 17:13	1
Cobalt	< 0.000190		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 17:13	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 17:13	1
Lithium	<0.00250		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 17:13	1
Molybdenum	< 0.00120		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 17:13	1

QC Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-348978/2-A

Lab Sample ID: 310-228285-2 DU

Matrix: Water

Client Sample ID: Method Blank Lab Sample ID: MB 310-348978/1-A Matrix: Water Prep Type: Total/NA Analysis Batch: 350581 Prep Batch: 348978

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.000960		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 17:13	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 17:13	1

Analysis Batch: 350581							Prep Batch: 348	3978
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.200	0.2182		mg/L		109	80 - 120	
Arsenic	0.200	0.2149		mg/L		107	80 - 120	
Barium	0.100	0.1072		mg/L		107	80 - 120	
Beryllium	0.100	0.1004		mg/L		100	80 - 120	
Boron	0.200	0.2060		mg/L		103	80 - 120	
Cadmium	0.100	0.1030		mg/L		103	80 - 120	
Calcium	2.00	1.967		mg/L		98	80 - 120	
Chromium	0.100	0.1018		mg/L		102	80 - 120	
Cobalt	0.100	0.1066		mg/L		107	80 - 120	
Lead	0.200	0.2128		mg/L		106	80 - 120	
Lithium	0.200	0.2103		mg/L		105	80 - 120	
Molybdenum	0.200	0.2063		mg/L		103	80 - 120	
Selenium	0.400	0.4092		mg/L		102	80 - 120	
Thallium	0.200	0.2113		ma/l		106	80 120	

Watrix: water							Prep Type: 10	
Analysis Batch: 350581							Prep Batch: 3	
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Antimony	<0.000690		<0.000690		mg/L		NC	20
Arsenic	0.0134		0.01308		mg/L		3	20
Barium	0.202		0.2029		mg/L		0.6	20
Beryllium	<0.000270		<0.000270		mg/L		NC	20
Boron	0.0931	J	0.1043		mg/L		11	20
Cadmium	< 0.0000550		< 0.0000550		mg/L		NC	20
Calcium	130		128.9		mg/L		0.6	20
Chromium	< 0.00110		< 0.00110		mg/L		NC	20
Cobalt	0.000879		0.0009570		mg/L		8	20
Lead	0.000698		0.0007140		mg/L		2	20
Lithium	0.0329		0.03457		mg/L		5	20
Molybdenum	< 0.00120		< 0.00120		mg/L		NC	20
Selenium	<0.000960		0.001026	J	mg/L		NC	20
Thallium	< 0.000260		< 0.000260		mg/L		NC	20

Eurofins Cedar Falls Eurofins Cedar Falls

Page 9 of 19 4/21/2022 Page 10 of 19 4/21/2022

Job ID: 310-228285-1

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

Client Sample ID: MW13

		Q	C Sam	ple Res	ults					
Client: Omaha Public Power District Project/Site: Nebraska City Station Unit	1 & 2 CCI	R/ Landfill							Job ID: 310-2	228285-1
Method: 7470A - Mercury (CVA	A)									
Lab Sample ID: MB 310-349871/1-A Matrix: Water Analysis Batch: 350063	ME	з мв						Client S	ample ID: Meth Prep Type: Prep Batch	Total/NA
Analyte	Resul	t Qualifier		RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110)	0.0	00200	0.000110 m	g/L	04	1/14/22 14:03	04/15/22 12:34	1
Lab Sample ID: LCS 310-349871/2-A Matrix: Water Analysis Batch: 350063			Spike		CS LCS				ID: Lab Contro Prep Type: Prep Batch %Rec	Total/NA
Analyte Mercury			0.00167	0.001	ult Qualific	er Unit mg/L		91	80 - 120	
Method: SM 2540C - Solids, Tot	al Disso	lved (TD	S)							
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water	al Disso	Ived (TD	S)					Client S	ample ID: Meth	
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1			S)					Client S		
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water	МЕ	Ived (TD	S)	RL	MDL U	nit	D	Client S		
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water Analysis Batch: 349178	МЕ	B MB	S)	RL		nit	D		Prep Type:	Total/NA
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water Analysis Batch: 349178 Analyte	ME Resul	B MB		50.0	26.0 m			Prepared	Analyzed O4/07/22 16:37 ID: Lab Contro Prep Type:	Total/NA Dil Fac 1 I Sample
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water Analysis Batch: 349178 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-349178/2 Matrix: Water Analysis Batch: 349178	ME Resul	B MB	Spike	50.0	26.0 m	g/L	Clie	Prepared nt Sample	Analyzed O4/07/22 16:37 ID: Lab Contro Prep Type: %Rec	Total/NA Dil Fac 1 I Sample
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water Analysis Batch: 349178 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-349178/2 Matrix: Water	ME Resul	B MB		50.0	26.0 m	g/L		Prepared nt Sample	Analyzed O4/07/22 16:37 ID: Lab Contro Prep Type:	Total/NA Dil Fac 1 I Sample
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water Analysis Batch: 349178 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-349178/2 Matrix: Water Analysis Batch: 349178 Analyte Total Dissolved Solids Lab Sample ID: 310-349178/2 Matrix: Water Analysis Batch: 349178 Lab Sample ID: 310-228285-1 DU Matrix: Water Analysis Batch: 349178	ME Resul <26.0	B MB t Qualifier	Spike Added	50.0	26.0 m	g/L er Unit	Clie	nt Sample MRec 94	Analyzed 04/07/22 16:37 ID: Lab Contro Prep Type: %Rec Limits	Dil Fac 1 I Sample Total/NA
Method: SM 2540C - Solids, Tot Lab Sample ID: MB 310-349178/1 Matrix: Water Analysis Batch: 349178 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-349178/2 Matrix: Water Analysis Batch: 349178 Analyte Total Dissolved Solids Lab Sample ID: 310-349178/2 Matrix: Water Analysis Batch: 349178 Lab Sample ID: 310-228285-1 DU Matrix: Water Analysis Batch: 349178	ME Resul	B MB t Qualifier	Spike Added	1 Re 94	26.0 m	g/L er Unit mg/L	Clie	Prepared nt Sample NRec 94	Analyzed 04/07/22 16:37 ID: Lab Contro Prep Type: %Rec Limits 90 - 110 ent Sample ID: I	Dil Fac 1 I Sample Total/NA NC2MW4 Total/NA RPD

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-1

HPLC/IC

Analysis Batch: 349722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	9056A	
310-228285-2	MW13	Total/NA	Water	9056A	
MB 310-349722/3	Method Blank	Total/NA	Water	9056A	
LCS 310-349722/4	Lab Control Sample	Total/NA	Water	9056A	
310-228285-1 MS	NC2MW4	Total/NA	Water	9056A	
310-228285-1 MSD	NC2MW4	Total/NA	Water	9056A	

Metals

Prep Batch: 348978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	3005A	
310-228285-2	MW13	Total/NA	Water	3005A	
MB 310-348978/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-348978/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-228285-2 DU	MW13	Total/NA	Water	3005A	

Prep Batch: 349871

Lab Sample ID 310-228285-1	Client Sample ID NC2MW4	Prep Type Total/NA	Matrix Water	Method 7470A	Prep Batch
310-228285-2	MW13	Total/NA	Water	7470A	
MB 310-349871/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-349871/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 350063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	7470A	349871
310-228285-2	MW13	Total/NA	Water	7470A	349871
MB 310-349871/1-A	Method Blank	Total/NA	Water	7470A	349871
LCS 310-349871/2-A	Lab Control Sample	Total/NA	Water	7470A	349871

Analysis Batch: 350581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	6020A	348978
310-228285-2	MW13	Total/NA	Water	6020A	348978
MB 310-348978/1-A	Method Blank	Total/NA	Water	6020A	348978
LCS 310-348978/2-A	Lab Control Sample	Total/NA	Water	6020A	348978
310-228285-2 DU	MW13	Total/NA	Water	6020A	348978

General Chemistry

Analysis Batch: 348982

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	310-228285-1	NC2MW4	Total/NA	Water	SM 4500 H+ B	
	310-228285-2	MW13	Total/NA	Water	SM 4500 H+ B	
l	LCS 310-348982/27	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 349178

Eurofins Cedar Falls

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	SM 2540C	
310-228285-2	MW13	Total/NA	Water	SM 2540C	
MB 310-349178/1	Method Blank	Total/NA	Water	SM 2540C	

Eurofins Cedar Falls

Page 11 of 19 4/21/2022 Page 12 of 19 4/21/2022

QC Association Summary

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Job ID: 310-228285-1

General Chemistry (Continued)

Analysis Batch: 349178 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-349178/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-228285-1 DU	NC2MW4	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Client Sample ID: NC2MW4
Date Collected: 04/04/22 08:49

Date Received: 04/05/22 17:00 Batch Dilution Batch Prepared Prep Type Type Method or Analyzed Analyst TAL CF Total/NA Analysis 9056A 349722 04/11/22 15:35 JNR Total/NA 3005A 348978 04/07/22 09:00 ACM2 TAL CF Prep Total/NA Analysis 6020A 04/20/22 18:20 SAP Total/NA 7470A 349871 04/14/22 14:03 EAM TAL CF Prep Total/NA Analysis 7470A 350063 04/15/22 13:18 EAM TAL CF Total/NA Analysis SM 2540C 349178 04/07/22 16:37 ARG Total/NA Analysis SM 4500 H+ B 348982 04/06/22 14:13 JAJ TAL CF

Client Sample ID: MW13 Date Collected: 04/04/22 09:58

Date Received: 04/05/22 17:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 16:22	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 18:23	SAP	TAL CF
Total/NA	Prep	7470A			349871	04/14/22 14:03	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 13:20	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 14:15	JAJ	TAL CF

_aboratory References:

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

Eurofins Cedar Falls Eurofins Cedar Falls

Page 13 of 19 4/21/2022 Page 14 of 19

Job ID: 310-228285-1

Matrix: Water

Lab Sample ID: 310-228285-1

Lab Sample ID: 310-228285-2

4

7

10







Accreditation/Certification Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-22
Georgia	State	IA100001 (OR)	09-29-22
Illinois	NELAP	200024	11-29-22
lowa	State	007	12-01-21 *
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	04-06-23
North Dakota	State	R-186	09-29-22
Oregon	NELAD	IA100001	00 20 22

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL CF
6020A	Metals (ICP/MS)	SW846	TAL CF
7470A	Mercury (CVAA)	SW846	TAL CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 H+ B	pH	SM	TAL CF
3005A	Preparation, Total Metals	SW846	TAL CF
7470A	Preparation, Mercury	SW846	TAL CF

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:

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

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

Eurofins Cedar Falls Eurofins Cedar Falls

Page 15 of 19 4/21/2022 Page 16 of 19 4/21/2022



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Cilent information	the state of the s			
Client Omaha Public Power Distr				
City/State CITY Dmake STATE	E Project Nubraska City Station Unit 18200			
Receipt Information .				
Date/Time DATE 4-5-22 TIME 1700	Received By HED			
Delivery Type UPS FedEx	☐ FedEx Ground ☐ US Mail ☐ Spee-Dee			
🛛 Lab Courier 🗌 Lab Field Serv	vices Client Drop-off Other			
Condition of Cooler/Containers				
Sample(s) received in Cooler? Yes N				
Multiple Coolers? ☐ Yes ⊠ N	· — — .			
Cooler Custody Seals Present? Yes No	o If yes Cooler custody seals intact? 🔀 Yes 🗌			
Sample Custody Seals Present? Yes X No	o <i>If yes</i> Sample custody seals intact?☐ Yes ☐			
Trip Blank Present? ☐ Yes 🗖 N	o If yes Which VOA samples are in cooler? ↓			
Temperature Record				
Coolant Wet ice Blue ice D	ry ice Other: NONE			
Thermometer ID N	Correction Factor (°C) 0			
• Temp Blank Temperature - If no temp blank, or temp bl	lank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C) 1,6	Corrected Temp (°C) \.\o			
Sample Container Temperature				
Container(s) used	CONTAINER 2			
Uncorrected Temp (°C)				
Corrected Temp (°C)				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling?				
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?)				
Note. If yes, contact PM before proceeding. If no, proceed with login				
Additional Comments				

Eurofins Cedar Falls Page 17 of 19

i	Document: CED-P-SAM-FRM45521
E	Revision 26
	2nto, 27 Inn 2022

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C Page 18 of 19 4/21/2022

TestAmerica TestAmerica Omaha SC 268 13 14 Chain of Custody Record Perform MS/MSD (Yes or No) Poison B U TestAmerica Cedar Falls

Login Sample Receipt Checklist

Client: Omaha Public Power District

List Source: Eurofins Cedar Falls

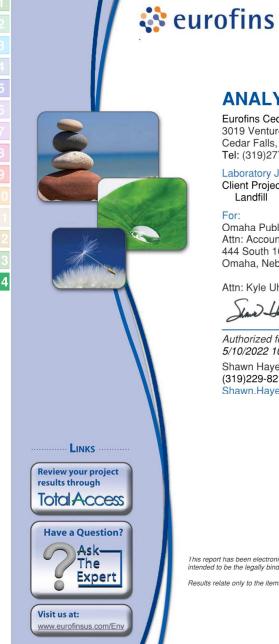
Job Number: 310-228285-1

SDG Number:

Login Number: 228285 List Number: 1

Creator: Homolar, Dana J

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-228285-2

Client Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

For:

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

Attn: Kyle Uhing

Authorized for release by: 5/10/2022 10:38:26 AM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Laboratory Job ID: 310-228285-2

Table of Contents

Table of Contents 2 Case Narrative 3 Sample Summary 4	
Sample Summary	
Sample Summary	
Client Sample Results	
Definitions	
QC Sample Results	
QC Association	
Chronicle	
Certification Summary	
Method Summary	
Chain of Custody	
Receipt Checklists	
Tracer Carrier Summary 19	

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-2

Job ID: 310-228285-2

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-228285-2

Comments No additional comments.

The samples were received on 4/5/2022 5:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C.

Method PrecSep 0: Radium-228 Prep Batch 160-559628

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW4 (310-228285-1) and MW13 (310-228285-2).

Method PrecSep-21: Radium-226 Prep Batch 160-559626

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW4 (310-228285-1) and MW13 (310-228285-2).

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

Eurofins Cedar Falls 5/10/2022 Page 2 of 19 Page 3 of 19

Sample Summary

Client: Omaha Public Power District

Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Job ID: 310-228285-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-228285-1	NC2MW4	Water	04/04/22 08:49	04/05/22 17:00
310-228285-2	MW13	Water	04/04/22 09:58	04/05/22 17:00

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Lab Sample ID: 310-228285-1

Date Collected: 04/04/22 08:49 Date Received: 04/05/22 17:00

Client Sample ID: NC2MW4 Matrix: Water

noa: 9315 - Ra	alum-226 (GFF	(C)				
			Count	Total		
			Uncert.	Uncert.		
lyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	
226	0.205	11	0.254	0.255	1.00	

40 - 110

Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.295	U	0.254	0.255	1.00	0.395	pCi/L	04/11/22 12:07	05/07/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/11/22 12:07	05/07/22 13:44	1
Method: 9320 - Rad	ium-228 (GFF	PC)								

Method: 9320 - Radiu	ım-228 (GFP	C)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.260	U	0.438	0.439	1.00	0.741	pCi/L	04/11/22 12:30	05/03/22 12:49	1
Carrier		Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/11/22 12:30	05/03/22 12:49	1

Method: Ra226_Ra228	B - Combin	ed Radium	-226 and Rac	lium-228						
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.555	U	0.506	0.508	5.00	0.741	pCi/L		05/09/22 22:46	1
+ 228										

Y Carrier

Eurofins Cedar Falls 5/10/2022

Eurofins Cedar Falls 5/10/2022

Page 4 of 19

Page 5 of 19

Job ID: 310-228285-2

04/11/22 12:30 05/03/22 12:49

			Clie	nt Samp	le Resu	ılts					
lient: Omaha Public Po	wer District	t							Job ID: 310-2	28285-2	
roject/Site: Nebraska C	ity Station	Unit 1 & 2 C	CR/ Landfill								
lient Sample ID: M	W13							Lab Samp	le ID: 310-22	8285-2	4
ate Collected: 04/04/2	2 09:58								Matri	x: Water	
ate Received: 04/05/22	2 17:00										
Method: 9315 - Radiur	n-226 (GFF	PC)									
	*	14	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.170	U	0.147	0.148	1.00	0.224	pCi/L	04/11/22 12:07	05/07/22 13:46	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	91.3		40 - 110					04/11/22 12:07	05/07/22 13:46	1	
Method: 9320 - Radiur	11-220 (011	O)	Count Uncert.	Total Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-228	0.329	U	0.330	0.331	1.00	0.536	pCi/L	04/11/22 12:30	05/03/22 12:49	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	91.3		40 - 110					04/11/22 12:30	05/03/22 12:49		
Y Carrier	86.7		40 - 110					04/11/22 12:30	05/03/22 12:49	1	
: Method: Ra226 Ra228	R - Combine	ad Padium.	.226 and Rad	ium-228							1
metriou. Nazzu_Nazzu	, - Combine	ou naululli	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Combined Radium 226 + 228	0.500	U	0.361	0.363	5.00	0.536	pCi/L		05/09/22 22:46	1	

	Definitions/Glossary	
	Public Power District bebraska City Station Unit 1 & 2 CCR/ Landfill	Job ID: 310-228285-2
Qualifiers	edraska City Station Onit 1 & 2 COR/ Landilli	
Rad		
Qualifier U	Qualifier Description 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 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	

Eurofins Cedar Falls Eurofins Cedar Falls

Page 6 of 19 5/10/2022 Page 7 of 19 5/10/2022

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

TEF

TEQ

TNTC

QC	Sam	ple	Res	ults
----	-----	-----	-----	------

Client: Omaha Public Power District	
Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill	

40 - 110

Method: 9315 - Radium-226 (GFPC) Lab Sample ID: MB 160-559626/23-A

Ba Carrier

Lab Sample ID. WIL	5 100-555020/2	-J-A						Olletti Ja	inple ib. Metho	u Dialik
Matrix: Water									Prep Type:	Total/NA
Analysis Batch: 56	64353								Prep Batch:	559626
65.			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.009138	U	0.0765	0.0766	1.00	0.152	pCi/L	04/11/22 12:07	05/07/22 13:46	1
	MB	MB								
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac

Lab Sample ID: LCS 160-559626/1-A Matrix: Water							Clien	t Sample II	D: Lab Control Sample Prep Type: Total/NA	
Analysis Batch: 563515				Total					Prep Batch: 559626	
	Spike	ıcs	LCS	Uncert.					%Rec	
Analyte	Added	Result		(2σ+/-)	RL	MDC	Unit	%Rec	Limits	
Radium-226	11.3	10.56		1.26	1.00	0.203	pCi/L	93	75 - 125	
100 100										

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	87.3		40 - 110

91.0

Lab Sample ID: LCSD 160-559626/2-A

muuix.	utci	
Analysis	Batch:	563515

Analysis Dateil. 000010									1 TCP D	aton. o	330E0
				Total							
	Spike	LCSD	LCSD	Uncert.					%Rec		RER
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
Radium-226	11.3	10.23		1.23	1.00	0.217	pCi/L	90	75 - 125	0.13	1

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.3		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 10 Matrix: Water Analysis Batch: 5634		23-A						Client Sa	mple ID: Metho Prep Type: 1 Prep Batch:	otal/NA
			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.07525	U	0.233	0.233	1.00	0.428	pCi/L	04/11/22 12:30	05/03/22 12:49	1
	MB	MB								
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					04/11/22 12:30	05/03/22 12:49	1
Y Carrier	88.2		40 - 110					04/11/22 12:30	05/03/22 12:49	1

Eurofins Cedar Falls

Job ID: 310-228285-2

Client Sample ID: Method Blank

05/07/22 13:46

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

04/11/22 12:07

Page 8 of 19 5/10/2022

QC Sample Results

Client: Omaha Public Power District Job ID: 310-228285-2 Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

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

Lab Sample II Matrix: Water Analysis Bate								Client	t Sample I	D: Lab Control Sample Prep Type: Total/NA Prep Batch: 559628
					Total					N
		Spike	LCS	LCS	Uncert.					%Rec
Analyte		Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits
Radium-228		8.65	9.320		1.11	1.00	0.410	pCi/L	108	75 - 125
	LCS LCS									

Carrier	76 Held Qualiti	iei Liiiits
Ba Carrier	87.3	40 - 110
Y Carrier	82.6	40 - 110
Lab Sample I	D: LCSD 160-559	9628/2-A

8.716

8.65

Matrix: Water Prep Type: Total/NA Prep Batch: 559628 Analysis Batch: 563489 Total LCSD LCSD %Rec Spike Uncert. Analyte Added Result Qual (2σ+/-) Limits

1.10

	LUSD	LUSD		
Carrier	%Yield	Qualifier	Limits	
Ba Carrier	88.3		40 - 110	
Y Carrier	82.6		40 - 110	

Radium-228

Eurofins Cedar Falls

101

0.447 pCi/L

75 - 125 0.27

Page 9 of 19 5/10/2022

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-2

Rad

Prep Batch: 559626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	PrecSep-21	
310-228285-2	MW13	Total/NA	Water	PrecSep-21	
MB 160-559626/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-559626/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-559626/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 559628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228285-1	NC2MW4	Total/NA	Water	PrecSep_0	
310-228285-2	MW13	Total/NA	Water	PrecSep_0	
MB 160-559628/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-559628/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-559628/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Client Sample ID: NC2MW4

Date Collected: 04/04/22 08:49 Date Received: 04/05/22 17:00

Lab Sample ID: 310-228285-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559626	04/11/22 12:07	HRT	TAL SL
Total/NA	Analysis	9315		1	564351	05/07/22 13:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559628	04/11/22 12:30	HRT	TAL SL
Total/NA	Analysis	9320		1	563488	05/03/22 12:49	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	564727	05/09/22 22:46	EMH	TAL SL

Client Sample ID: MW13

Date Collected: 04/04/22 09:58

Date Received: 04/05/22 17:00

Lab Sample ID: 310-228285-2

Matrix: Water

Job ID: 310-228285-2

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559626	04/11/22 12:07	HRT	TAL SL
Total/NA	Analysis	9315		1	564353	05/07/22 13:46	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559628	04/11/22 12:30	HRT	TAL SL
Total/NA	Analysis	9320		1	563488	05/03/22 12:49	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	564727	05/09/22 22:46	EMH	TAL SL

Laboratory References:

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

Eurofins Cedar Falls Eurofins Cedar Falls

Page 10 of 19 5/10/2022 Page 11 of 19 5/10/2022

Accreditation/Certification Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-2

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	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	07-01-22
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
lowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill Job ID: 310-228285-2

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

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:

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

4

5/10/2022

Eurofins Cedar Falls Eurofins Cedar Falls

Page 12 of 19 5/10/2022 Page 13 of 19

4

7

0

10

10

13



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information				1
	volic Power			
	maha	STATE	Project Nu	oraska City Station Unit 18200
Receipt Information				
Date/Time E	Y-5-22	1700	Received By	HED
Delivery Type UPS	☐ FedE	K	☐ FedEx Gro	und US Mail Spee-Dee
	Courier Lab F	ield Services	Client Drop	o-off Other
Condition of Cooler/Cont				
Sample(s) received in C	ooler? Yes		If yes Cool	
Multiple Coolers?	Yes			er# of
Cooler Custody Seals P No				er custody seals intact? 🔀 Yes 🗌
Sample Custody Seals I No	Present? Yes	× ⊠ No	If yes Sam	ple custody seals intact? Yes
Trip Blank Present?	☐ Yes	12 No	If yes Which	ch VOA samples are in cooler? ↓
Temperature Record	-			
Coolant Wet ice	☐ Blue ice	☐ Dry ice	Other:	NONE
Thermometer ID N			Correction Fa	
 Temp Blank Temperatu 	re - If no temp blank,	or temp blank te	mperature above	criteria, proceed to Sample Container Temperature
Uncorrected Temp (°C)	1.6		Corrected Te	emp (°C) \
 Sample Container Temp 				
Container(s) used	CONTAINER 1			CONTAINER 2
Uncorrected Temp (°C)				
Corrected Temp (°C)				
Exceptions Noted				
If temperature excee a) If yes Is there excees				v of sampling? ☐ Yes ☐ No ☐ Yes ☐ No
 If temperature is <0° (e.g., bulging septa, 				of sample containers is compromised?
Note. If yes, contact I	PM before proceedi	ng. If no, proce	ed with login	
Additional Comments		,		

Eurofins Cedar Falls Page 14 of 19

Document: CED-P-SAM-FRM45521 Revision 26 Date: 27 Jan 2022

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

5/10/2022

704 Enterprise Drive Cedar Falls, 1A 50613 Phone (319) 277-2401 Fax (319) 277-2425	Chain of	Chain of Custody Record	io Seco	5		5	N N	268 268 268 268	E E	0	ח	₹ 1		78
Client Information	Sampler Kyle K. Uhing	Lab	Lab PM: Hayes, Shawn M	M				Camier Tracking No(s):	:(s)oN Bu		COC No:	(O:		
Client Contact: Kyle Uhing	Phone: (531) 226-2515	E-Ma	II: vn.hayes	s@testa	mericai	mo:com					Page:			
trict						Analy	Analysis Requested	ested			# qor			
Address: 444 South 16th Street Mall 9E/EP1	Due Date Requested:			-							Prese	Preservation Codes:	des:	
Ony: Omaha	TAT Requested (days):										4 B O	NaOH Zn Acetate	N None O AsNaO2	
State, Zip: NE, 68102-2247			,,,,,,,,,,		oje						2 2 3	Nitric Acid NaHSO4	P Na2O4S Q Na2SO3	
Phone: (531) 226-2515	PO #		(illuë ,e						SA	nchlor scorbic Acid	S H2SO4 T TSP Dodecahydra	ate
<u>moo-pad</u>	₩O₩				biroul						>	lce DI Water FDTA	V MCAA	
Project Name: Nebraska City Station Unit 1 & 2 CCR / Landfill	TestAmerica Project#: 31007559				ebito						()		Z other (specify)	
Site: Nebraska City Station Unit 1 & 2	SSOW#;				142 A8						100 TO			
Community of the control of the cont	Sample Date Time	Sample Matrix Type Secold. (C=Comp.	bereilii blei MiSM miohe	315 Ra226, 932 olal 6020A CCI	240C 1DS' 302						otal Number	Leisons	Cooriel Instructions Motor	*****
Sample identification		Preservation Code:		+-	+-	d Z	ļ	ļ	‡	Ĭ	1×	Special	isu double.	
NC2MW4	4/4/22 8:49	» о	Z	×	×	×		L			4 CCR	Appendix III	CCR Appendix III and IV Constituents	
MW13	4/4/22 9:58	> o	z	×	×	×	-		Ė		4 CCR	Appendix III	CCR Appendix III and IV Constituents	
			E	_										
				_										
				-										
				\dashv							4			
			_	\dashv			1			-	-			Т
			-	+	†	4			1	7				
Possible Hazard Identification				- 900	7/6900	- V	- Ave	J. pessed if	Samulas	are refa	ined for	cor than	month	T
lant [Poison B Unknown Ra	Radiological	<u> </u>	Retur	70 Cl	ent	Return To Client Disposal By Lab Archive For Mon	osal By	ab		rchive Fo	1	Months	
Deliverable Requested: I III, IV Other (specify)		:	Spe	cial Inst	uctions	/QC Re	Special Instructions/QC Requirements:							
quished by:	Date:		Time;					Method	Method of Shipment:	щ				П
Continue of the second	WEIRER 7:50			Received by:	١ ١	W		1	Date/Time:		22 (0750		
141	95 22 OSO	C Company		Received by:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				Date/Time:	.;e			Company	П
Refinquished by:	Date/Time:	Company		Received by:	N.	9	Q	\$	Date/Til	Date/Time: 4-5-27	2 1700	00	Company Company	
Custody Seals Intact: Custody Seal No.				Cooler Te	nperatur	(s) C an	Cooler Temperature(s) °C and Other Remarks:	ks:						
			١			1		1						

0-211-2401 Lax: 010-211-2420				ŀ										
nformation (Sub Contract Lab)	Sampler			Lab PM Hayes	Lab PM Hayes, Shawn M	M			Carner 1	Carner Tracking No(s)		310-48332.1	2.1	
ct Receiving	Phone:			E-Mail.	vn. Have	s@et eu	E-Mail. Shawn Haves@et eurofinsus com	moc	State of Origin	Origin		Page:		
ca Laboratores, Inc.					Accredita	ions Requ	Accreditations Required (See note)	ote):				Job #		
ler Trail North	Due Date Requested: 5/10/2022	ÿ					4	alveie	Analysis Requested	,		Preservation Codes:	on Codes:	
	TAT Requested (days)	ys):			-	-		-	Panhau	,		A - HCL B - NaOH		M · Hexane N · None
2					712 (3		pue ;					C - Zn Acetate D - Nifric Acid E - NaHSO4		O · AsNaO2 P · Na2O4S Q · Na2SO3
566(Tel) 314-298-8757(Fax)	PO#:						9zz-wn	- 02				F - MeOH G - AmcMor		R · Na2S203 S · H2S04
	#OM				(0)		ibeA b					I - Ice		U - Acetone V - MCAA
City Station Unit 1 & 2 CCR/ Landfill	Project # 31007559				N 10 8		enidm					K-EDTA L-EDA		W - pH 4-5 Z - other (specity)
) Nebraska City Unit 2	SSOW#				SD (Ye		DC) CC					Other:		
rentification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (wwwstor. Swolid. Owesteloit.	Field Filtered S MICM mnohed	3312_Ra226/Pre decay 3315_Ra226/Pre	392567 228 292567 228 292567 258					o redmuN lato	100	The state of the s
	\bigvee	X	Preserva	Preservation Code:				To the second		256	1000		Via IIIsii	Cilons/Rote.
(310-228285-1)	4/4/22	08:49 Central		Water		×	×					2		
0-228285-2)	414/22	09:58 Central		Water		×	×	L				2		
						+	+							
No. and the second seco					+	+				+				
					E	-								
Post currently making accretiation in the State of Origin listed above for analystatestations the surrent result post currently contact the surrent surrently making asset of currently making asset of	nt Testing North Centra bove for analysis/lests	II, LLC places t	he ownership assigned, the sa	of method, ana	yte & accre	editation co	ompliance u	pon out su	ocontract labora	itones. This s	ample shipm	ent is forwarded u	under chain-o	-custody. If the
Hazard Identification	rindi, LLC ditemiori in	перанету п ап	reduested ac	reditations are	Sam	date, retur	m the signe	fee may	custody attestin	d if sample	plicance to E	urofins Environme	ent Testing N	orth Central, LLC.
ed					Ш	Return	Return To Client	_	Disposal By Lab	By Lab		Return To Client Disposal By Lab Archive For Mon		Months
e Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank:	ible Rank: 2			Spec	ial Instri	Special Instructions/QC Requirements:	C Requir	ements:					
Relinquished by:		Date:			Time:			l	Me	Method of Shipment.	neut.			
on The	Date/Time	1203		Сотрапу	<u>u</u>	Received by			FED EX	Date	Date/Time		S	Company
FED EX	Date/Time			Company	in.	ecelves b	Received by	200	Woodhington			7000 COC 77	-	Company
ph:	Date/Time.			Company	ju.	Received by	*				Date/Time		-	Company
Seals Intact Custody Seal No					1									

Page 16 of 19 5/10/2022

Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-228285-2 SDG Number:

List Source: Eurofins Cedar Falls

Login Number: 228285 List Number: 1

Creator: Homolar, Dana J

Question	Answer	Comment
Realiactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Comment</td>	N/A	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Eurofins Cedar Falls

Residual Chlorine Checked.





N/A

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-228285-2

Login Number: 228285 List Number: 2

Multiphasic samples are not present.

Residual Chlorine Checked.

Samples do not require splitting or compositing.

Creator: Worthington, Sierra M		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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	

True

True

False

Client: Omaha Public Power District Job ID: 310-228285-2 Project/Site: Nebraska City Station Unit 1 & 2 CCR/ Landfill

Method: 9315 - Radium-226 (GFPC)

SDG Number:

13

List Source: Eurofins St. Louis

List Creation: 04/07/22 12:06 PM

Prep Type: Total/NA

			Percent Yield (
		Ва	
Lab Sample ID	Client Sample ID	(40-110)	
310-228285-1	NC2MW4	102	
310-228285-2	MW13	91.3	
LCS 160-559626/1-A	Lab Control Sample	87.3	
LCSD 160-559626/2-A	Lab Control Sample Dup	88.3	
MB 160-559626/23-A	Method Blank	91.0	
Tracer/Carrier Legend			
Ba = Ba Carrier			

Method: 9320 - Radium-228 (GFPC)

Matrix: Water Prep Type: Total/NA

				Percent Yield (Acceptance Limits)
		Ва	Y	
Lab Sample ID	Client Sample ID	(40-110)	(40-110)	
310-228285-1	NC2MW4	102	86.4	
310-228285-2	MW13	91.3	86.7	
LCS 160-559628/1-A	Lab Control Sample	87.3	82.6	
LCSD 160-559628/2-A	Lab Control Sample Dup	88.3	82.6	
MB 160-559628/23-A	Method Blank	91.0	88.2	
Tracer/Carrier Legend				

Ba = Ba Carrier Y = Y Carrier

Eurofins Cedar Falls Page 18 of 19 5/10/2022 Page 19 of 19 5/10/2022

Eurofins Cedar Falls



Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-228286-1

Client Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

For:

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

Attn: Kyle Uhing

Authorized for release by: 4/21/2022 11:56:50 AM

Shawn Hayes, Senior Project Manager (319)229-8211

Shawn.Hayes@et.eurofinsus.com

LINKS

Review your project results through

Total Access



Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1	Client: Omaha Public Power District
-	Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfi
	Tab

Laboratory Job ID: 310-228286-1

Table	of	Content	ts
--------------	----	---------	----

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	6
Definitions	7
QC Sample Results	8
QC Association	10
Chronicle	11
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	16

Case Narrative		
Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill	Job ID: 310-228286-1	
Job ID: 310-228286-1		i
Laboratory: Eurofins Cedar Falls		Ī
Narrative Job Narrative		
310-228286-1		
Comments No additional comments.		
Receipt The sample was received on 4/5/2022 5:00 PM. Unless otherwise noted below, the sample arrived in good cond	lition, and where	
required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.		
HPLC/IC No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.		
Metals No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.		
General Chemistry		
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.		
		Ē

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill Job ID: 310-228286-1

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 310-228286-1
 NC2MW5A
 Water
 04/04/22 12:32
 04/05/22 17:00

6

11

12

1

Detection Summary

Client: Omaha Public Power District

Job ID: 310-228286-1

Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

lient Sample ID: NC2MW5A	Lab Sample ID: 310-228286-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.25		5.00	2.25	mg/L		_	9056A	Total/NA
Fluoride	0.551		0.500	0.220	mg/L	5		9056A	Total/NA
Sulfate	168		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.00104	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.0456		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	1.59		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.000162		0.000100	0.0000550	mg/L	1		6020A	Total/NA
Calcium	113		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000397	J	0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.000811		0.000500	0.000240	mg/L	1		6020A	Total/NA
Lithium	0.0171		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00313		0.00200	0.00120	mg/L	1		6020A	Total/NA
Selenium	0.0115		0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	522		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Chloride

Fluoride

Sulfate

Thallium

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Lab Sample ID: 310-228286-1

04/07/22 09:00

04/20/22 18:31

Client Sample ID: NC2MW5A

Date Collected: 04/04/22 12:32

Date Received: 04/05/22 17:00

Matrix: Water

Job ID: 310-228286-1

Method: 9056A - Anions, Ion Chromatography Analyte

RL MDL Unit Analyzed Dil Fac 2.25 mg/L 5.00 04/11/22 16:38 5.25 0.500 04/11/22 16:38 0.551 0.220 mg/L 5.00 2.00 mg/L 04/11/22 16:38

Method: 6020A - Metals (ICP/MS) Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed Antimony <0.000690 0.00200 0.000690 mg/L 04/07/22 09:00 04/20/22 18:31 Arsenic 0.00104 J 0.00200 0.000750 mg/L 04/07/22 09:00 04/20/22 18:31 Barium 0.00200 0.000880 mg/L 04/07/22 09:00 04/20/22 18:31 0.0456 Beryllium <0.000270 0.00100 0.000270 mg/L 04/07/22 09:00 04/20/22 18:31 1.59 0.100 0.0580 mg/L 04/07/22 09:00 04/20/22 18:31 Boron Cadmium 0.000162 0.000100 0.0000550 mg/L 04/07/22 09:00 04/20/22 18:31 0.190 mg/L Calcium 0.500 04/07/22 09:00 04/20/22 18:31 113 Chromium < 0.00110 0.00500 0.00110 mg/L Cobalt 0.000397 J 0.000500 0.000190 mg/L 04/07/22 09:00 04/20/22 18:31 0.000240 mg/L 0.000500 04/07/22 09:00 04/20/22 18:31 Lead 0.000811 04/07/22 09:00 Lithium 0.0171 0.0100 0.00250 mg/L 04/20/22 18:31 Molybdenum 0.00313 0.00200 0.00120 mg/L 04/07/22 09:00 04/20/22 18:31 0.000960 mg/L Selenium 0.0115 0.00500 04/07/22 09:00 04/20/22 18:31

Method: 7470A - Mercury (CVAA) Analyte Result Qualifier RL MDL Unit Prepared Analyzed <0.000110 0.000110 mg/L Mercury 0.000200 04/14/22 14:03 04/15/22 13:22

0.000260 mg/L

0.00100

< 0.000260

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	522		50.0	26.0	mg/L			04/07/22 16:37	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.6	HF	0.1	0.1	SU			04/06/22 13:59	1

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Eurofins Cedar Falls

Page 5 of 16

4/21/2022

Page 6 of 16

Qualifiers		_
Metals Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
General Chen	nistry Qualifier Description	
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.	- [
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
a	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	

Definitions/Glossary

Client: Omaha Public Power District

\sim	Sam	~ I~	D~~	14.
Qυ	Saiii	DIE I	ne5	uit

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Job ID: 310-228286-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-349722/3 Matrix: Water Client Sample ID: Method Blank Prep Type: Total/NA

Analysis Batch: 349722

Matrix: Water

Job ID: 310-228286-1

мв мв Analyte Result Qualifie RL MDL Unit Analyzed Dil Fac Chloride <0.450 1.00 0.450 mg/L 04/11/22 15:03 Fluoride < 0.0440 0.100 0.0440 mg/L 04/11/22 15:03 Sulfate < 0.400 1.00 0.400 mg/L 04/11/22 15:03

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

> > Eurofins Cedar Falls

Analysis Batch: 349722 Spike LCS LCS %Rec Added Limits Analyte Result Qualifier Unit %Rec Chloride 10.0 10.23 mg/L 102 90 - 110 Fluoride 2.00 1.944 mg/L 97 90 - 110 Sulfate 10.0 10.55 mg/L 105 90 - 110

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: LCS 310-349722/4

Lab Sample ID: MB 310-348978/1-A
Matrix: Water
Analysis Batch: 350581

MB MB

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 348978

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0009760	J	0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 17:13	1
Arsenic	< 0.000750		0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 17:13	1
Barium	<0.000880		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 17:13	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 17:13	1
Boron	<0.0580		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 17:13	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 17:13	1
Calcium	<0.190		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 17:13	1
Chromium	<0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 17:13	1
Cobalt	< 0.000190		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 17:13	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 17:13	1
Lithium	<0.00250		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 17:13	1
Molybdenum	<0.00120		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 17:13	1
Selenium	< 0.000960		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 17:13	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 17:13	1

| Client Sample ID: Lab Control Sample | ID: L

Analyte	Added	Result Q	ualifier Unit	D	%Rec	Limits	
Antimony	0.200	0.2182	mg/L		109	80 - 120	
Arsenic	0.200	0.2149	mg/L		107	80 - 120	
Barium	0.100	0.1072	mg/L		107	80 - 120	
Beryllium	0.100	0.1004	mg/L		100	80 - 120	
Boron	0.200	0.2060	mg/L		103	80 - 120	
Cadmium	0.100	0.1030	mg/L		103	80 - 120	
Calcium	2.00	1.967	mg/L		98	80 - 120	
Chromium	0.100	0.1018	mg/L		102	80 - 120	
Cobalt	0.100	0.1066	mg/L		107	80 - 120	

Eurofins Cedar Falls

Page 7 of 16 4/21/2022 Page 8 of 16 4/21/2022

	Q	C Sample	e Results				1		QC /	Association Summa	ry		
Client: Omaha Public Power District Project/Site: Nebraska City Station Unit	1 & 2 CCR/Landfill					Job ID: 310-2	228286-1	Client: Omaha Public P Project/Site: Nebraska	ower District City Station Unit 1 & 2 CCR/Landfill	I		Job ID:	310-228286-1
Method: 6020A - Metals (ICP/MS	6) (Continued)						3	HPLC/IC					
Lab Sample ID: LCS 310-348978/2-A					Client Sample	ID: Lab Contro	I Sample	Analysis Batch: 34972	2				
Matrix: Water						Prep Type:		Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Analysis Batch: 350581						Prep Batch	1: 348978	310-228286-1	NC2MW5A	Total/NA	Water	9056A	
Niles Parenty		Spike	LCS LCS			%Rec	5	MB 310-349722/3	Method Blank	Total/NA	Water	9056A	
Analyte		Added	Result Qualifier	Unit	D %Rec	Limits		LCS 310-349722/4	Lab Control Sample	Total/NA	Water	9056A	
Lead		0.200	0.2128	mg/L	106	80 - 120			- 100 mg ang 14 mg	3000000 (00000000000000000000000000000	10 100 pag 1	Sealer Control of	
Lithium		0.200	0.2103	mg/L	105	80 - 120		Metals					
Molybdenum		0.200	0.2063	mg/L	103	80 - 120		Prep Batch: 348978					
Selenium		0.400	0.4092	mg/L	102	80 - 120		Prep Batch: 346976					
Thallium		0.200	0.2113	mg/L	106	80 - 120	8	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Method: 7470A - Mercury (CVAA	A)							310-228286-1	NC2MW5A	Total/NA	Water	3005A	
-	'/						9	MB 310-348978/1-A	Method Blank	Total/NA	Water	3005A	
Lab Sample ID: MB 310-349871/1-A					Client S	Sample ID: Meth	od Blank	LCS 310-348978/2-A	Lab Control Sample	Total/NA	Water	3005A	
Matrix: Water						Prep Type:		Prep Batch: 349871					
Analysis Batch: 350063						Prep Batch		Frep Batch. 349071					
A STATE OF THE PARTY OF THE PAR	MB MB							Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Analyte	Result Qualifier	F	RL MDL Unit	t	D Prepared	Analyzed	Dil Fac	310-228286-1	NC2MW5A	Total/NA	Water	7470A	
Mercury	<0.000110	0.00020	0.000110 mg/l	L	04/14/22 14:03	3 04/15/22 12:34	1 40	MB 310-349871/1-A	Method Blank	Total/NA	Water	7470A	
								LCS 310-349871/2-A	Lab Control Sample	Total/NA	Water	7470A	
Lab Sample ID: LCS 310-349871/2-A					Client Sample	ID: Lab Contro	I Sample	Analysis Batch: 35006	3				
Matrix: Water						Prep Type:							
Analysis Batch: 350063						Prep Batch	n: 349871	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Spike	LCS LCS			%Rec		310-228286-1	NC2MW5A	Total/NA	Water	7470A	349871
Analyte		Added	Result Qualifier	Unit	D %Rec	Limits		MB 310-349871/1-A	Method Blank	Total/NA	Water	7470A	349871
Mercury		0.00167	0.001509	mg/L	91	80 - 120		LCS 310-349871/2-A	Lab Control Sample	Total/NA	Water	7470A	349871
Method: SM 2540C - Solids, Total	al Dissolved (TD	S)						Analysis Batch: 35058	1				
L -1- 01- ID: MD 040 0404704					0114.0		- d Blook	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Lab Sample ID: MB 310-349178/1 Matrix: Water					Client	Sample ID: Meth		310-228286-1	NC2MW5A	Total/NA	Water	6020A	348978
						Prep Type:	iotal/NA	MB 310-348978/1-A	Method Blank	Total/NA	Water	6020A	348978
Analysis Batch: 349178	MB MB							LCS 310-348978/2-A	Lab Control Sample	Total/NA	Water	6020A	348978
Analyte	MB MB Result Qualifier		RL MDL Unit		D Prepared	Analyzed	Dil Fac	Conoral Charrita					
Total Dissolved Solids	<26.0				- Frepared	04/07/22 16:37	1	General Chemistry	1				
Total Dissolved Golida	~20.0	50	20.0 mg/l	_		54/01/22 10.37	,	Analysis Batch: 34898	2				
Lab Sample ID: LCS 310-349178/2					Client Sample	ID: Lab Contro	l Sample	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Matrix: Water						Prep Type:	Total/NA	310-228286-1	NC2MW5A	Total/NA	Water	SM 4500 H+ B	riep Batch
Analysis Batch: 349178								LCS 310-348982/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
		Spike	LCS LCS			%Rec		L	·	10001111			
Analyte		Added	Result Qualifier	Unit	D %Rec	Limits		Analysis Batch: 34917	8				
Total Dissolved Solids		1000	940.0	mg/L	94	90 - 110		Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Method: SM 4500 H+ B - pH								310-228286-1	NC2MW5A	Total/NA	Water	SM 2540C	. rep Batell
ментоц. ЭМ 4500 Пт D - PП								MB 310-349178/1	Method Blank	Total/NA	Water	SM 2540C	
Lab Sample ID: LCS 310-348982/1					Client Sample	ID: Lab Contro	l Sample	LCS 310-349178/2	Lab Control Sample	Total/NA	Water	SM 2540C	
Matrix: Water					Short Gumple	Prep Type:	•	_	•				
A . I . I D. (I D. () D. ()						rich type.	TOTAL THE						

Analysis Batch: 348982

Analyte pH

Spike

Added

7.00

LCS LCS

7.0

Result Qualifier Unit

SU

Eurofins Cedar Falls Eurofins Cedar Falls

Page 9 of 16 Page 10 of 16 4/21/2022 4/21/2022

Lab Chronicle

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Job ID: 310-228286-1

Client Sample ID: NC2MW5A

Date Collected: 04/04/22 12:32 Date Received: 04/05/22 17:00 Lab Sample ID: 310-228286-1 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 16:38	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 18:31	SAP	TAL CF
Total/NA	Prep	7470A			349871	04/14/22 14:03	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 13:22	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 13:59	JAJ	TAL CF

Laboratory References

TAL 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: Nebraska City Station Unit 1 & 2 CCR/Landfill

Job ID: 310-228286-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-22
Georgia	State	IA100001 (OR)	09-29-22
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-21 *
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	04-06-23
North Dakota	State	R-186	09-29-22
Oregon	NELAP	IA100001	09-29-22

1

12

14

Eurofins Cedar Falls

4/21/2022

Eurofins Cedar Falls

Page 12 of 16

Page 11 of 16

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Omaha Public Power District

Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Preparation, Mercury

Job ID: 310-228286-1

TAL CF

SW846

			= [
Method Description	Protocol	Laboratory	
Anions, Ion Chromatography	SW846	TAL CF	
Metals (ICP/MS)	SW846	TAL CF	
Mercury (CVAA)	SW846	TAL CF	E
Solids, Total Dissolved (TDS)	SM	TAL CF	
pH	SM	TAL CF	
Preparation, Total Metals	SW846	TAL CF	

Method 9056A

6020A

7470A SM 2540C SM 4500 H+ B 3005A

7470A

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.

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



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information					
Client Omaha Pu	blic Powe	ar Distr	*ct		
City/State CITY	u	STATE	Project		
Receipt Information					
Date/Time PA	Y-5-22	1700	Received By	HED	
Delivery Type UPS	☐ FedEx		☐ FedEx Grou		☐ Spee-Dee
	Courier Lab Fi	eld Services	Client Drop-	off Other	
Condition of Cooler/Conta					
Sample(s) received in Co		□No	If yes Coole		
Multiple Coolers?	☐ Yes	⊠ No	If yes Coole	r# of	
Cooler Custody Seals Pro	esent? Yes	⊠ No	If yes Coole	r custody seals intact?	☐ Yes ☐
Sample Custody Seals P No	resent? Yes	⊠No	If yes Samp	le custody seals intact?	Yes 🗌
Trip Blank Present?	Yes	⊠ No	If yes Which	VOA samples are in co	ooler? ↓
Temperaturé Record					
Coolant Wet ice	☐ Blue ice	☐ Dry ice	Other		NONE
Thermometer ID N			Correction Fa	Second Mr. School Devol	
Temp Blank Temperature	- If no temp blank, o	or temp blank te	mperature above cr	iteria, proceed to Sample Co	ntainer Temperature
Uncorrected Temp (°C)			Corrected Ter	np (°C)	
Samplé Container Tempe	rature				
Container(s) used	NC2MWS	250mL	Nitric	ONTAINER 2	
Uncorrected Temp (°C)	2.9				
Corrected Temp (°C)	2.9				
Exceptions Noted					
If temperature exceed a) If yes Is there ev			•	of sampling?	□ No □ No
2) If temperature is <0°0 (e g , bulging septa, t				sample containers is co	ompromised?
Note If yes, contact P	M before proceedin	g If no, proce	eed with login		

Revision, 26 Date 27 Jan 2022

Document: CED-P-SAM-FRM45521

Eurofins Cedar Falls Page 14 of 16 General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

Eurofins Cedar Falls

4/21/2022

Page 13 of 16

	_	_	_		_					_			_	_	_	_	_	_		_	_	_	_	7	·			_		_	T	_		1
<u>TestAmerica</u>	COC No:		Page:	# qop	servation Codes:	NaOH N Zn Acetate O	a. 0	F MoOH R Na2S2SO3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate	J DI Water V	۲ ـ	Other	Special Instructions/Note:		CCR Appendix III and IV Constituents				to the second se					***************************************			er than 1 mc	ive For Months			2 0750 Ampany	_	(700 Company	- Mariani Privi	2 3 4 5 6
Ο								-		1enleti	noo lo	Total Number	X	4	L	†	$^{+}$									e retain	Archive For			7		The: 4-5-22		7
TestAmerica Omaha SC 268	No(s):														-	+	+	1				-				nples ar			ethod of Shipment	Date/Time	Date/Time	Date/Time		8
Ота	Carrier Tracking No(s):			pa										F	F	Ŧ	Ŧ	+	4			F	_	\vdash		ed if sar	Disposal By Lab		Method of 3	N		4		9
26.	Carrie	_		Analysis Requested											F	Ŧ	7	1						F		assess	Dispos.			1		V	Remarks:	10
stAme			ε	lysis R				_							İ	1	1	1								may be	Sequiren		-		11	2	and Other	11
5			E-Mail: shawn.hayes@testamericainc.com	Ana						~~		Нс	1-	×	L		1	1								31 (A fee	Special Instructions/OC Requirements:			\setminus	1	1	Cooler Temperature(s) °C and Other Remarks:	12
			stameri			Дın						Total 6020A CC	Z	×	\vdash	+	+	+				\vdash	-	\vdash	\vdash	Dispos	eturn To nstructic			Received by:	Received by:	Received by:	гТетрег	13
ord		hawn M	ayes@te			528	eA bas	Ra226				Perform MS/M 9315 Ra226, 933	a X	×	F	Ŧ	1	4								Sample] Re			Recei	Recel	Recei	98	14
Rec	Lab PM:	dayes, S	s-Mail: shawn.h					[or No	se)) e	ldme8	Field Filtered		Z	F	\dagger	Ŧ	7	\exists				F	F	F		T		Time:		Ld			
tody	_		D 07									Matrix (Wewester Smeoild, Ownersteloft,	tion Cod	>																	Company	Company		
Chain of Custody Record												Sample Type (C=comp, G=grab)	Preservation Code:	o													Radiological							
ain o												Sample (V	2.23	-		†	1				_				Ľ	2		äi	1.50	osso			
ວົ		g.	515		nested:	days):				hoject #:			()		l		+	+	\dashv			-		_			Unknown		Date:	23	7.			
	Teldr	Kyle K. Uhing	Phone: (402) 226-2515		Due Date Requested:	TAT Requested (days)		#	*O	TestAmerica Project #: 31007558)W#:	Sample Date	X	CE/11/h	-															17.27	DateTimos 9 5-22	Date/Time:		
	Sar	₹	4 <u>4</u>		ă	Ι¥	<u> </u>	# 0 #	Š.	Tes 31	SS	ű		7		-	+	+	1			-	-				Poison B			de 7	100	Dat		
)							
										alla dfili			M														ther (specify)							
S 77-2425										CR / Lan			V														Other (sr			f	X)	1	Seal No.	
ar Fall				技	1 9E/EP1					1 & 2 C(182															ation	mmable I, III IV			10 m	\		Custody Seal No.	
a Cedi		tion		wer Distr	reet Mal				ΕĮ	tion Unit	rtion Unit	gion	$\ $						***************************************							Identific	Ha Sted 1		ished by	2	\setminus	١	ntact:	
meric: prise Dr Ils. IA 5 19) 277-3	١,	nforms	g g	ublic Por	h 16th St		2-2247	-2515	Soppd.cc	e: City Sta	City Sta	dentifica	$\ \ $	Ą												Hazard	Hazaro le Reque		Relinqu	ži P	. id p	Sep.	Custody Seals Intact: △ Yes △ No	
TestAmerica Cedar Falls 704 Enterprise Drive Cedar Falls, 1A 50613 Phone (319) 277-2425		Client Information	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: Nebraska City Station Unit 1 & 2 CCR / Landfill	Site: Nebraska City Station Unit 1 & 2	Sample Identification		NCZMWSA												Possible Hazard Identification	Non-Hazard Hammable Skin Imi Deliverable Requested 11, 111 IV Other (specify)		Empty Kit Relinquished by	Relinquished by:	Relinquished by:	Relinquished-85	Custod A Y	

Page 15 of 16

Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-228286-1

SDG Number:

List Source: Eurofins Cedar Falls

Login Number: 228286 List Number: 1 Creator: Homolar, Dana J

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-228286-2

Client Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

For:

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

Attn: Kyle Uhing

Authorized for release by: 5/5/2022 4:37:52 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@et.eurofinsus.com

LINKS

Review your project results through

Total Access



Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1	Client: Omaha Public Power District
6	Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landf
	Toh

Laboratory Job ID: 310-228286-2

Tab		∽ f	Cal	nto	nto
ıabı	ıe	OI.	COI	IILE	IIIS

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	6
QC Sample Results	7
QC Association	9
Chronicle	10
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	16
Tracer Carrier Summary	18

Case Narrative Client: Omaha Public Power District Job ID: 310-228286-2 Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill Job ID: 310-228286-2 **Laboratory: Eurofins Cedar Falls** Narrative Job Narrative 310-228286-2 Comments No additional comments. Receipt The sample was received on 4/5/2022 5:00 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C. Method PrecSep 0: Radium-228 Prep Batch 559860 The following samples were prepared at a reduced aliquot due to Matrix: NC2MW5A (310-228286-1). Method PrecSep-21: Radium-226 Prep Batch 559855 The following samples were prepared at a reduced aliquot due to Matrix: NC2MW5A (310-228286-1). 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: Nebraska City Station Unit 1 & 2 CCR/Landfill

Job ID: 310-228286-2

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 310-228286-1
 NC2MV5A
 Water
 04/04/22 12:32
 04/05/22 17:00

7

11

13

1

	: NC2MW5A	.						Lab Samp	le ID: 310-22	
ate Collected: 04/0 ate Received: 04/0									Matrix	c: Water
Method: 9315 - Ra	dium-226 (GFF	PC)								
			Count	Total						
	_		Uncert.	Uncert.						
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac
Radium-226	0.166	U	0.190	0.191	1.00	0.310	pCi/L	04/12/22 13:54	05/04/22 07:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					04/12/22 13:54	05/04/22 07:49	1
Method: 9320 - Rad	dium-228 (GFP	PC)								
		110,811	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.176	U	0.312	0.313	1.00	0.530	pCi/L	04/12/22 14:39	05/02/22 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
	84.6		40 - 110					04/12/22 14:39	05/02/22 12:09	
Ba Carrier								04/12/22 14:39	05/02/22 12:09	

0.367

0.530 pCi/L

05/05/22 12:40

Combined Radium 226

+ 228

0.341 U

Definitions/Glossary Client: Omaha Public Power District Job ID: 310-228286-2 Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill Qualifiers Rad Qualifier Qualifier Description 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 Minimum Level (Dioxin) ML 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

Eurofins Cedar Falls Eurofins Cedar Falls

Relative Percent Difference, a measure of the relative difference between two points

Page 5 of 18 5/5/2022 Page 6 of 18 5/5/2022

Presumptive

Quality Control

Relative Error Ratio (Radiochemistry)
Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

PRES

QC

RER

RPD

TEF

TEQ

TNTC

QC	Sam	ple	Res	ults
----	-----	-----	-----	------

Client: Omaha Public Power District	
Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill	

Limits

Method: 9315 - Radium-226 (GFPC) Lab Sample ID: MB 160-559855/21-A

Carrier

Matrix: Water									Prep Type:	Total/NA
Analysis Batch: 56	3515								Prep Batch:	559855
65.			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06447	U	0.0869	0.0871	1.00	0.146	pCi/L	04/12/22 13:54	05/04/22 15:46	1
	MB	МВ								

Ba Carrier	99.3		40 - 110					04/12/22	13:54	05/04/22 15:46	1
Lab Sample ID: L0	CS 160-559855/1-A							Client Sar	mple II	D: Lab Control	Sample
Matrix: Water										Prep Type:	Total/NA
Analysis Batch: 5	63516									Prep Batch	: 559855
					Total						
		Spike	LCS	LCS	Uncert.					%Rec	
Analyte		Added	Result	Qual	(2σ+/-)	RL	MDC	Unit %	%Rec	Limits	
Radium-226		11.3	10.18		1.21	1.00	0.262	pCi/L	90	75 - 125	

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	91.0		40 - 110

%Yield Qualifier

Lab Sample ID: LCSD 160-559855/2-A

Watrix: Water	
Analysis Batch: 563516	

Lab Sample	ID: LCSD 1	60-559855/2	2-A					Cli	ent San	nple ID: La	ab Control	Sample	e Dup
Matrix: Wate	r										Prep Ty	/pe: To	tal/NA
Analysis Bat	ch: 563516										Prep B	atch: 5	59855
-						Total							
			Spike	LCSD	LCSD	Uncert.					%Rec		RER
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
Radium-226	_		11.3	11.17		1.27	1.00	0.212	pCi/L	99	75 - 125	0.40	1
	LCSD	LCSD											
Carrier	%Yield	Qualifier	Limits										

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	92.0		40 - 110

Method: 9320 - Radium-228 (GFPC)

Matrix: Water	.ab Sample ID: MB 160-559860/21-A Matrix: Water Analysis Batch: 563272									d Blank Γotal/NA 559860
7 maryolo Batom 6002	МВ	мв	Count Uncert.	Total Uncert.					Trop Batom	000000
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1173	U	0.189	0.189	1.00	0.319	pCi/L	04/12/22 14:39	05/02/22 12:13	1
	MB	MB								
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.3		40 - 110					04/12/22 14:39	05/02/22 12:13	1
Y Carrier	91.6		40 - 110					04/12/22 14:39	05/02/22 12:13	1

Eurofins Cedar Falls

Job ID: 310-228286-2

Client Sample ID: Method Blank

Analyzed

Client Sample ID: Lab Control Sample Dup

Page 7 of 18 5/5/2022

QC Sample Results

Client: Omana Public Power District	
Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill	

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

Lab Sample ID: LCS 160-559860/1-A Matrix: Water							Clien	t Sample I	D: Lab Control Sample Prep Type: Total/NA
Analysis Batch: 563273									Prep Batch: 559860
				Total					N.
	Spike	LCS	LCS	Uncert.					%Rec
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits
Radium-228	8.66	10.03		1.15	1.00	0.379	pCi/L	116	75 - 125
100 100									

Carrier	%Yield	Qualifier	Limits	
Ba Carrier	91.0		40 - 110	
Y Carrier	87.1		40 - 110	
Lab Sample ID	. I CCD 4	CO EE00CO/2		Client Semale ID: 1
	: LCSD II	00-559600/2-	*	Client Sample ID: La
Matrix: Water				
Analysis Batch	n: 563273			

				Total							
	Spike	LCSD	LCSD	Uncert.					%Rec		RER
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
Radium-228	8.66	9,708		1.11	1.00	0.257	pCi/L	112	75 - 125	0.14	

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	92.0		40 - 110
Y Carrier	90.1		40 - 110

Eurofins Cedar Falls

Page 8 of 18 5/5/2022



Job ID: 310-228286-2







QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill Job ID: 310-228286-2

Rad

Prep Batch: 559855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228286-1	NC2MW5A	Total/NA	Water	PrecSep-21	
MB 160-559855/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-559855/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-559855/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 559860

Lab Sample ID 310-228286-1	Client Sample ID NC2MW5A	Prep Type Total/NA	Matrix Water	Method PrecSep_0	Prep Batch
MB 160-559860/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-559860/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-559860/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Client Sample ID: NC2MW5A

Date Collected: 04/04/22 12:32 Date Received: 04/05/22 17:00

Lab Sample ID: 310-228286-1

Job ID: 310-228286-2

Matrix: Water

ab
AL SL
AL SL
41 01

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559855	04/12/22 13:54	ВМР	TAL SL
Total/NA	Analysis	9315		1	563514	05/04/22 07:49	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559860	04/12/22 14:39	BMP	TAL SL
Total/NA	Analysis	9320		1	563273	05/02/22 12:09	CLP	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	563897	05/05/22 12:40	CAH	TAL SL

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

Eurofins Cedar Falls Eurofins Cedar Falls

Page 9 of 18 5/5/2022 Page 10 of 18 5/5/2022

Accreditation/Certification Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill Job ID: 310-228286-2

Eurofins Cedar Falls

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	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	07-01-22
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
lowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

Method Summary

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Job ID: 310-228286-2

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

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:

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

Eurofins Cedar Falls

5/5/2022

Page 11 of 18 5/5/2022 Page 12 of 18



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Cheft information								
Client Omaha Public Power District								
City/State CITY	u	NE	Project					
Receipt Information								
Date/Time D/Received	4-5-22	1700	Received B	y HED				
Delivery Type UPS	☐ FedEx		☐ FedEx Gr		US Mail	☐ Spee-Dee		
🛛 Lab C	Courier 🗌 Lab Fi	ield Services	☐ Client Dro	p-off	Other			
Condition of Cooler/Conta	liners							
Sample(s) received in Co	ooler? Yes	☐ No	If yes Coo	oler ID				
Multiple Coolers?	Yes	4	If yes Coo	oler #	of			
Cooler Custody Seals Pr No	esent?	⊠ No	If yes Coo	oler custod	y seals intact?	Yes 🗆		
Sample Custody Seals P No	resent?	⊠No	If yes San	nple custoo	ty seals intact?	Yes 🗌		
Trip Blank Present?	☐ Yes	⊠ No	If yes Whi	ich VOA sa	ımples are in cod	oler? ↓		
Temperaturé Record								
Coolant 🔀 Wet ice	☐ Blue ice	Dry ice	Other		DNG	ONE		
Thermometer ID N			Correction I					
Temp Blank Temperature	e – If no temp blank,	or temp blank te	mperature above	e criteria, proc	eed to Sample Cont	alner Temperature		
Uncorrected Temp (°C)			Corrected T	emp (°C)				
Samplé Container Tempe	erature							
Container(s) used	NC2MWS	250mL	Nitric	CONTAINE	<u>R 2</u>			
Uncorrected Temp (°C)	2.9							
Corrected Temp (°C)	2.9					***************************************		
Exceptions Noted	· · · · · · · · · · · · · · · · · · ·		,					
1) If temperature exceeds criteria, was sample(s) received same day of sampling?								
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?)								
Note If yes, contact P	M before proceeding	ng If no, proce	ed with login					
Additional Comments								

Eurofins Cedar Falls Page 13 of 18

Document: CED-P-SAM-FRM45521 Revision, 26 Date 27 Jan 2022

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

TestAmerica TestAmerica Omaha SC 268 Z 2540C TDS, 9056A Chloride, Fluoride, Suifate X ☐ Total 6020A CCR Appendix III and IV, 7470A Mercury Chain of Custody Record 9315 Ra226, 9326 Ra228, Combined Ra226 and Ra228 (oh to seY) (Yes or No) 7:50 Radic Unknown Poison B TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls. IA 80613
Phone (319) 277-2401 Fax (319) 277-24 Page 14 of 18

5/5/2022

Client Information (Sub Contract Lab)

Eurofins Cedar Falls

Client: Omaha Public Power District

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

Cooler Temperature is acceptable.

COC is filled out in ink and legible.

Sample containers have legible labels

Containers are not broken or leaking.

Sample bottles are completely filled.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Sample Preservation Verified.

Residual Chlorine Checked

MS/MSDs

Sample collection date/times are provided.

Appropriate sample containers are used.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

Cooler Temperature is recorded.

Radioactivity wasn't checked or is </= background as measured by a survey

The cooler or samples do not appear to have been compromised or

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Login Number: 228286

List Number: 1 Creator: Homolar, Dana J

tampered with. Samples were received on ice.

COC is present.

Question

2022 0900

띴

Wenthi

True True True True True There are no discrepancies between the containers received and the COC. True Samples are received within Holding Time (excluding tests with immediate True True True True True True

True

True

True

True

True

N/A

Login Sample Receipt Checklist

Answer

N/A

True

N/A

True

True

True

Comment

SDG Number:

List Source: Eurofins Cedar Falls

Job Number: 310-228286-2

Eurofins Cedar Falls

5/5/2022

ample Identification - Client ID (Lab ID)

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-228286-2

Login Number: 228286 List Number: 2

Creator: Worthington, Sierra M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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	

	Tracer/Carrier Summary
Client: Omaha Public Power District	

Project/Site: Nebraska City Station Unit 1 & 2 CCR/Landfill

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

List Source: Eurofins St. Louis List Creation: 04/07/22 12:06 PM

SDG Number:

Prep Type: Total/NA

Percent Yield (Acceptance Limits) Lab Sample ID Client Sample ID (40-110) 310-228286-1 NC2MW5A 84.6 LCS 160-559855/1-A Lab Control Sample 91.0 LCSD 160-559855/2-A Lab Control Sample Dup 92.0 MB 160-559855/21-A Method Blank 99.3 Tracer/Carrier Legend Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC) Matrix: Water

Percent Yield (Acceptance Limits) Ва (40-110) (40-110) Lab Sample ID Client Sample ID 310-228286-1 NC2MW5A LCS 160-559860/1-A Lab Control Sample 91.0 87.1 LCSD 160-559860/2-A Lab Control Sample Dup 92.0 90.1 MB 160-559860/21-A Method Blank 99.3

Tracer/Carrier Legend Ba = Ba Carrier

Y = Y Carrier

Eurofins Cedar Falls

Job ID: 310-228286-2

Prep Type: Total/NA

Eurofins Cedar Falls Page 17 of 18 5/5/2022 Page 18 of 18 5/5/2022



Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-228287-1

Client Project/Site: Nebraska City Station Unit 2 CCR/Landfill

For

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

Attn: Kyle Uhing

Authorized for release by: 4/21/2022 12:00:02 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@et.eurofinsus.com

LINKS

Review your project results through
Total Access



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1	Client: Omaha Public Power District
	Project/Site: Nebraska City Station Unit 2 CCR/Landfi

Laboratory Job ID: 310-228287-1

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	
Definitions	15
QC Sample Results	16
QC Association	19
Chronicle	21
Certification Summary	24
Method Summary	25
Chain of Custody	26
Receipt Checklists	29

Case Narrative Client: Omaha Public Power District Job ID: 310-228287-1 Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-1 **Laboratory: Eurofins Cedar Falls** Narrative Job Narrative 310-228287-1 Comments No additional comments. Receipt The samples were received on 4/5/2022 5:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 4.3° C. No analytical or quality issues were noted, other than those described in the Definitions/Glossary page. No analytical or quality issues were noted, other than those described in the Definitions/Glossary page. **General Chemistry** No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Job ID: 310-228287-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-228287-1	NC2MW2	Water	04/04/22 16:00	04/05/22 17:00
310-228287-2	NC2MW3	Water	04/04/22 14:29	04/05/22 17:00
310-228287-3	NC2MW5	Water	04/04/22 11:55	04/05/22 17:00
310-228287-4	NC2MW6	Water	04/04/22 13:12	04/05/22 17:00
310-228287-5	NC2MW7	Water	04/04/22 17:40	04/05/22 17:00
310-228287-6	NC2MW8	Water	04/04/22 15:21	04/05/22 17:00
310-228287-7	DUP2	Water	04/04/22 00:00	04/05/22 17:00

7

10

12

1

1

Detection Su	mmary
--------------	-------

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Job ID: 310-228287-1

010-220207-1

Client Sample ID: NC2MW2

Lab Sample	ID: 310-228287-1
------------	------------------

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	Method	Prep Type
Chloride	18.1		5.00	2.25	mg/L	5	9056A	Total/NA
Sulfate	381		5.00	2.00	mg/L	5	9056A	Total/NA
Antimony	0.00298	В	0.00200	0.000690	mg/L	1	6020A	Total/NA
Arsenic	0.000766	J	0.00200	0.000750	mg/L	1	6020A	Total/NA
Barium	0.124		0.00200	0.000880	mg/L	1	6020A	Total/NA
Boron	0.456		0.100	0.0580	mg/L	1	6020A	Total/NA
Cadmium	0.0000900	J	0.000100	0.0000550	mg/L	1	6020A	Total/NA
Calcium	231		0.500	0.190	mg/L	1	6020A	Total/NA
Cobalt	0.000522		0.000500	0.000190	mg/L	1	6020A	Total/NA
Lead	0.000861		0.000500	0.000240	mg/L	1	6020A	Total/NA
Lithium	0.0254		0.0100	0.00250	mg/L	1	6020A	Total/NA
Molybdenum	0.0322		0.00200	0.00120	mg/L	1	6020A	Total/NA
Selenium	0.00627		0.00500	0.000960	mg/L	1	6020A	Total/NA
Total Dissolved Solids	934		50.0	26.0	mg/L	1	SM 2540C	Total/NA
pH	6.7	HF	0.1	0.1	SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: NC2MW3

Lab Sample ID: 310-228287-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	47.0		5.00	2.25	mg/L	5	_	9056A	Total/NA
Fluoride	1.12		0.500	0.220	mg/L	5		9056A	Total/NA
Sulfate	703		20.0	8.00	mg/L	20		9056A	Total/NA
Arsenic	0.00171	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.0977		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.198		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.000104		0.000100	0.0000550	mg/L	1		6020A	Total/NA
Calcium	212		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00101		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.000288	J	0.000500	0.000240	mg/L	1		6020A	Total/NA
Lithium	0.0201		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00371		0.00200	0.00120	mg/L	1		6020A	Total/NA
Selenium	0.0174		0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	1590		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: NC2MW5

Lab Sample ID: 310-228287-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.57		5.00	2.25	mg/L	5	_	9056A	Total/NA
Sulfate	336		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.00165	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.0377		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	2.31		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	167		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000275	J	0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.00776	J	0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.0291		0.00200	0.00120	mg/L	1		6020A	Total/NA
Selenium	0.00944		0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	802		50.0	26.0	mg/L	1		SM 2540C	Total/NA
рН	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Omaha Public Power District
Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Job ID: 310-228287-1

Client Sample ID: NC2MW6 Lab Sample ID: 310-228287-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.45		5.00	2.25	mg/L		_	9056A	Total/NA
Sulfate	134		5.00	2.00	mg/L	5		9056A	Total/NA
Antimony	0.00123	JB	0.00200	0.000690	mg/L	1		6020A	Total/NA
Arsenic	0.00118	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.143		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	2.42		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	142		0.500	0.190	mg/L	1		6020A	Total/NA
Chromium	0.00188	J	0.00500	0.00110	mg/L	1		6020A	Total/NA
Cobalt	0.000289	J	0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.00221		0.000500	0.000240	mg/L	1		6020A	Total/NA
Lithium	0.0420		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00630		0.00200	0.00120	mg/L	1		6020A	Total/NA
Selenium	0.00329	J	0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	600		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: NC2MW7

Lab Sample ID: 310-228287-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.08		5.00	2.25	mg/L	5	_	9056A	Total/NA
Sulfate	6.49		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.0487		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.563		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.241		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	132		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000422	J	0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0654		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00159	J	0.00200	0.00120	mg/L	1		6020A	Total/NA
Total Dissolved Solids	484		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: NC2MW8

Lab Sample ID: 310-228287-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.66		5.00	2.25	mg/L	5	_	9056A	Total/NA
Sulfate	9.69		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.00887		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.552		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.114		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	132		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00264		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0363		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00202		0.00200	0.00120	mg/L	1		6020A	Total/NA
Total Dissolved Solids	428		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.3	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: DUP2

Lab Sample ID: 310-228287-7

	Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	F	Prep Type
	Chloride	7.34		5.00	2.25	mg/L	5	_	9056A	1	Total/NA
	Sulfate	6.69		5.00	2.00	mg/L	5		9056A	7	Total/NA
ı	Arsenic	0.0481		0.00200	0.000750	mg/L	1		6020A	7	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Eurofins Cedar Falls

Page 5 of 29 4/21/2022 Page 6 of 29 4/21/2022

Detection Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Lab Sample ID: 310-228287-7

Job ID: 310-228287-1

Client Sample	מווח יחו	(Continued)	

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.570		0.00200	0.000880	mg/L		_	6020A	Total/NA
Boron	0.204		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	130		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000546		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0649		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00151	J	0.00200	0.00120	mg/L	1		6020A	Total/NA
Total Dissolved Solids	482		50.0	26.0	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Page 7 of 29

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Lab Sample ID: 310-228287-1

04/07/22 09:00

04/07/22 09:00

04/07/22 09:00

04/07/22 09:00

Client Sample ID: NC2MW2 Date Collected: 04/04/22 16:00

Date Received: 04/05/22 17:00

Chloride

Fluoride

Sulfate

Lithium

Selenium

Thallium

Molybdenum

Matrix: Water

04/20/22 18:35

04/20/22 18:35

04/20/22 18:35

04/20/22 18:35

4/21/2022

Job ID: 310-228287-1

Method: 9056A - Anions, Ion Chromatography Analyte

RL MDL Unit Analyzed Dil Fac 2.25 mg/L 04/11/22 16:53 18.1 5.00 <0.220 04/11/22 16:53 0.500 0.220 mg/L 381 5.00 2.00 mg/L 04/11/22 16:53

0.00250 mg/L

0.00120 mg/L

0.000960 mg/L

0.000260 mg/L

Method: 6020A - Metals (ICP/MS) Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed Antimony 0.00298 B 0.00200 0.000690 mg/L 04/07/22 09:00 04/20/22 18:35 Arsenic 0.000766 J 0.00200 0.000750 mg/L 04/07/22 09:00 04/20/22 18:35 0.00200 0.000880 mg/L 04/07/22 09:00 04/20/22 18:35 Barium 0.124 Beryllium <0.000270 0.00100 0.000270 mg/L 04/07/22 09:00 04/20/22 18:35 0.456 0.100 0.0580 mg/L 04/07/22 09:00 04/20/22 18:35 Boron Cadmium 0.0000900 J 0.000100 0.0000550 mg/L 04/07/22 09:00 04/20/22 18:35 0.190 mg/L Calcium 0.500 04/07/22 09:00 04/20/22 18:35 231 Chromium < 0.00110 0.00500 0.00110 mg/L 04/07/22 09:00 Cobalt 0.000522 0.000500 0.000190 mg/L 04/07/22 09:00 04/20/22 18:35 0.000240 mg/L 0.000500 04/07/22 09:00 04/20/22 18:35 Lead 0.000861

0.00100 Method: 7470A - Mercury (CVAA) Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Mercury 0.000110 mg/L < 0.000110 0.000200 04/14/22 14:03 04/15/22 13:24

0.0100

0.00200

0.00500

General Chemistry Analyte Result Qualifier RL MDL Unit Analyzed Dil Fac Total Dissolved Solids 50.0 26.0 mg/L 04/07/22 16:37 934 Analyte Result Qualifier RL RL Unit Prepared Analyzed Dil Fac 6.7 HF 0.1 0.1 SU 04/06/22 14:03

Page 8 of 29

0.0254

0.0322

0.00627

< 0.000260

Eurofins Cedar Falls

Eurofins Cedar Falls

4/21/2022

		Clien	t Sample	Results	;				
lient: Omaha Public Power District			-					Job ID: 310-2	28287-1
roject/Site: Nebraska City Station Ur	nit 2 CCR/Lar	ndfill							
Client Sample ID: NC2MW3							I ah Samn	le ID: 310-22	8287-2
rate Collected: 04/04/22 14:29							Lab Samp		c: Water
ate Received: 04/05/22 17:00								Watri	c. water
ate Received, 04/03/22 17:00									
Method: 9056A - Anions, Ion Chror	natography								
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.0		5.00	2.25	mg/L			04/11/22 17:09	5
Fluoride	1.12		0.500	0.220	mg/L			04/11/22 17:09	5
Sulfate	703		20.0	8.00	mg/L			04/12/22 11:05	20
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 18:39	1
Arsenic	0.00171	J	0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 18:39	1
Barium	0.0977		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 18:39	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 18:39	1
Boron	0.198		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 18:39	1
Cadmium	0.000104		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 18:39	1
Calcium	212		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 18:39	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 18:39	1
Cobalt	0.00101		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 18:39	1
Lead	0.000288	J	0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 18:39	1
Lithium	0.0201		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 18:39	1
Molybdenum	0.00371		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 18:39	1
Selenium	0.0174		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 18:39	1
Thallium	<0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 18:39	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110		— <u>-</u>	04/14/22 14:03	04/15/22 13:27	1
•									
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1590		50.0	26.0	mg/L			04/07/22 16:37	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.1	HE	0.1	0.1	SU			04/06/22 14:02	

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Lab Sample ID: 310-228287-3

Client Sample ID: NC2MW5 Date Collected: 04/04/22 11:55

Date Received: 04/05/22 17:00

Method: 7470A - Mercury (CVAA)

Chloride

Fluoride

Matrix: Water

Job ID: 310-228287-1

Dil Fac

Method: 9056A - Anions, Ion Chromatography RL MDL Unit 5.00 2.25 mg/L 04/11/22 17:24 9.57 <0.220 0.500 0.220 mg/L 04/11/22 17:24

Sulfate	336		5.00	2.00	mg/L			04/11/22 17:24	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 18:43	1
Arsenic	0.00165	J	0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 18:43	1
Barium	0.0377		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 18:43	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 18:43	1
Boron	2.31		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 18:43	1
Cadmium	< 0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 18:43	1
Calcium	167		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 18:43	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 18:43	1
Cobalt	0.000275	J	0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 18:43	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 18:43	1
Lithium	0.00776	J	0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 18:43	1
Molybdenum	0.0291		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 18:43	1
Selenium	0.00944		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 18:43	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 18:43	1

	Analyzed	Prepared	D	Unit	MDL	RL	Qualifier	Result	Analyte
1	04/15/22 13:29	04/14/22 14:03		mg/L	0.000110	0.000200		<0.000110	Mercury
									General Chemistry
Dil Fac	Analyzed	Prepared	D	Unit	MDL	RL	Qualifier	Result	Analyte
1	04/07/22 16:37			mg/L	26.0	50.0		802	Total Dissolved Solids
Dil Fac	Analyzed	Prepared	D	Unit	RL	RL	Qualifier	Result	Analyte
1	04/06/22 14:04			SU	0.1	0.1	HF	7.5	pH
	Analyzed 04/07/22 16:37 Analyzed	Prepared		Unit mg/L Unit	MDL 26.0 RL	RL 50.0	Qualifier	Result 802 Result	General Chemistry Analyte Total Dissolved Solids Analyte

Eurofins Cedar Falls Eurofins Cedar Falls

Page 9 of 29 4/21/2022 Page 10 of 29 4/21/2022

roject/Site: Nebraska City Station Un	it 2 CCR/Lar	ndfill							
lient Sample ID: NC2MW6							Lab Samp	le ID: 310-22	8287-4
ate Collected: 04/04/22 13:12								Matrix	c: Water
ate Received: 04/05/22 17:00									
Method: 9056A - Anions, Ion Chron	natography								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.45		5.00	2.25	mg/L			04/11/22 18:11	5
Fluoride	<0.220		0.500	0.220	mg/L			04/11/22 18:11	5
Sulfate	134		5.00	2.00	mg/L			04/11/22 18:11	5
Market de Coope Market (ICD 1990)									
Method: 6020A - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00123		0.00200	0.000690	mg/L	=	04/07/22 09:00	04/20/22 19:02	1
Arsenic	0.00123	100	0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 19:02	1
Barium	0.143		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 19:02	1
Beryllium	<0.000270		0.00100	0.000270			04/07/22 09:00	04/20/22 19:02	1
Boron	2.42		0.100	0.0580	1070		04/07/22 09:00	04/20/22 19:02	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 19:02	1
Calcium	142		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 19:02	1
Chromium	0.00188	J	0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 19:02	1
Cobalt	0.000289	J	0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 19:02	1
Lead	0.00221		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 19:02	1
Lithium	0.0420		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 19:02	1
Molybdenum	0.00630		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 19:02	1
Selenium	0.00329	J	0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 19:02	1
Thallium	<0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 19:02	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/14/22 14:03	04/15/22 13:31	1
General Chemistry						_			
Analyte		Qualifier	RL 50.0	MDL		D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	600			26.0	mg/L			04/07/22 16:37	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Lab Sample ID: 310-228287-5

Client Sample ID: NC2MW7 Date Collected: 04/04/22 17:40

Date Received: 04/05/22 17:00

Analyte

Matrix: Water

Analyzed

04/11/22 18:27

04/11/22 18:27

Job ID: 310-228287-1

Method: 9056A - Anions, Ion Chromatography Result Qualifie RL MDL Unit 5.00 2.25 mg/L Chloride 7.08 Fluoride <0.220 0.500 0.220 mg/L Dil Fac

1 Idonad	·O.LLO		0.000	O.LLO					
Sulfate	6.49		5.00	2.00	mg/L			04/11/22 18:27	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 19:06	1
Arsenic	0.0487		0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 19:06	1
Barium	0.563		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 19:06	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 19:06	1
Boron	0.241		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 19:06	1
Cadmium	< 0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 19:06	1
Calcium	132		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 19:06	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 19:06	1
Cobalt	0.000422	J	0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 19:06	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 19:06	1
Lithium	0.0654		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 19:06	1
Molybdenum	0.00159	J	0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 19:06	1
Selenium	<0.000960		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 19:06	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 19:06	1

Method: 7470A - Mercury (CVAA) Analyte

Result Qualifier RL MDL Unit Mercury 0.000110 mg/L <0.000110 0.000200 04/14/22 14:03 04/15/22 13:33

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids	484		50.0	26.0	mg/L			04/07/22 16:37	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
pH	7.2	HF	0.1	0.1	SU			04/06/22 14:05	

Eurofins Cedar Falls Eurofins Cedar Falls

Page 11 of 29 4/21/2022 Page 12 of 29 4/21/2022

		Clien	t Sample	Results	;				
lient: Omaha Public Power District			•					Job ID: 310-2	28287-1
roject/Site: Nebraska City Station Ur	nit 2 CCR/Lar	ndfill							
Client Sample ID: NC2MW8							I ah Samn	le ID: 310-22	9297 6
· ·							Lab Samp		
ate Collected: 04/04/22 15:21								Watri	c: Water
ate Received: 04/05/22 17:00									
Method: 9056A - Anions, Ion Chron	matography								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.66		5.00	2.25	mg/L			04/11/22 18:42	- 5
Fluoride	<0.220		0.500	0.220	mg/L			04/11/22 18:42	5
Sulfate	9.69		5.00	2.00	mg/L			04/11/22 18:42	5
Method: 6020A - Metals (ICP/MS) Analyte	Decult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690	Qualifier	0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 19:10	Dii Fac
Arsenic	0.00887		0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 19:10	1
Barium	0.552		0.00200	0.000730	mg/L		04/07/22 09:00	04/20/22 19:10	1
Beryllium	<0.000270		0.00200	0.000270	mg/L		04/07/22 09:00	04/20/22 19:10	
Boron	0.114		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 19:10	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 19:10	1
Calcium	132		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 19:10	
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 19:10	1
Cobalt	0.00264		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 19:10	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 19:10	1
Lithium	0.0363		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 19:10	1
Molybdenum	0.00202		0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 19:10	1
Selenium	<0.000960		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 19:10	1
Thallium	<0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 19:10	1
Method: 7470A - Mercury (CVAA) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110	Quaimer	0.000200	0.000110			04/15/22 11:41	04/15/22 15:29	1
wercury	<0.000110		0.000200	0.000110	mg/L		04/15/22 11.41	04/15/22 15.29	'
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	428		50.0	26.0	mg/L			04/07/22 16:37	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3	ue .	0.1	0.1	SU			04/06/22 14:00	1

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Lab Sample ID: 310-228287-7 Client Sample ID: DUP2 Matrix: Water

Job ID: 310-228287-1

Date Collected: 04/04/22 00:00 Date Received: 04/05/22 17:00

Method: 7470A - Mercury (CVAA)

Method: 9056A - Anions, Ion Chromatography RL MDL Unit Analyzed Dil Fac 5.00 2.25 mg/L 04/11/22 18:58 Chloride 7.34 Fluoride <0.220 0.500 0.220 mg/L 04/11/22 18:58 Sulfate 6.69 5.00 2.00 mg/L 04/11/22 18:58

	100000								
Method: 6020A - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 19:14	1
Arsenic	0.0481		0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 19:14	1
Barium	0.570		0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 19:14	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 19:14	1
Boron	0.204		0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 19:14	1
Cadmium	< 0.0000550		0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 19:14	1
Calcium	130		0.500	0.190	mg/L		04/07/22 09:00	04/20/22 19:14	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 19:14	-1
Cobalt	0.000546		0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 19:14	1
Lead	<0.000240		0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 19:14	1
Lithium	0.0649		0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 19:14	1
Molybdenum	0.00151	J	0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 19:14	1
Selenium	<0.000960		0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 19:14	1
Thallium	<0.000260		0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 19:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/15/22 11:41	04/15/22 15:35	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	482	- Guarrier	50.0		mg/L	— <u>-</u>	Торигои	04/07/22 16:37	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.2	HF	0.1	0.1	SU			04/06/22 14:01	1

Eurofins Cedar Falls Eurofins Cedar Falls

Page 13 of 29 4/21/2022 Page 14 of 29 4/21/2022

Client: Omaha	Public Power District	Job ID: 310-228287-1
Project/Site: N	ebraska City Station Unit 2 CCR/Landfill	
Qualifiers		
Metals		
Qualifier	Qualifier Description	
В	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.	
General Chen	•	
Qualifier	Qualifier Description	
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
n	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 DL	Dilution Factor	
DL, RA, RE, IN	Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DL, IVA, IVL, IIV	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	

\cap C	Sam	nla F	200	ulte
ωc	Jaili	Pie i	162	uiti

Client: Omaha Public Power District Job ID: 310-228287-1
Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Method: 9056A - Anions, Ion Chromatography

< 0.400

Matrix: Water								Prep Type:	Total/NA
Analysis Batch: 349722									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.450		1.00	0.450	mg/L			04/11/22 15:03	1
Fluoride	< 0.0440		0.100	0.0440	mg/L			04/11/22 15:03	1

1.00

0.400 mg/L

mg/L

Client Sample ID: Method Blank

04/11/22 15:03

105 90 - 110

Lab Sample ID: LCS 310-349722/4 Matrix: Water Analysis Batch: 349722					Client	Sample		ontrol Sample Type: Total/NA
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10.0	10.23		mg/L		102	90 - 110	
Fluoride	2.00	1.944		mg/L		97	90 - 110	

10.55

10.0

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-349722/3

Sulfate

Sulfate

Cadmium

Calcium

Cobalt

Chromium

Lab Sample ID: MB 310-348978/1- Matrix: Water Analysis Batch: 350581	4						Client Sa	mple ID: Metho Prep Type: 1 Prep Batch:	Γotal/NA
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0009760	J	0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 17:13	1
Arsenic	<0.000750		0.00200	0.000750	ma/l		04/07/22 00:00	04/20/22 17:13	1

Analyte	Result	Qualifier RL	. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0009760	J 0.00200	0.000690	mg/L		04/07/22 09:00	04/20/22 17:13	1
Arsenic	< 0.000750	0.00200	0.000750	mg/L		04/07/22 09:00	04/20/22 17:13	1
Barium	<0.000880	0.00200	0.000880	mg/L		04/07/22 09:00	04/20/22 17:13	1
Beryllium	<0.000270	0.00100	0.000270	mg/L		04/07/22 09:00	04/20/22 17:13	1
Boron	< 0.0580	0.100	0.0580	mg/L		04/07/22 09:00	04/20/22 17:13	1
Cadmium	<0.0000550	0.000100	0.0000550	mg/L		04/07/22 09:00	04/20/22 17:13	1
Calcium	<0.190	0.500	0.190	mg/L		04/07/22 09:00	04/20/22 17:13	1
Chromium	< 0.00110	0.00500	0.00110	mg/L		04/07/22 09:00	04/20/22 17:13	1
Cobalt	< 0.000190	0.000500	0.000190	mg/L		04/07/22 09:00	04/20/22 17:13	1
Lead	<0.000240	0.000500	0.000240	mg/L		04/07/22 09:00	04/20/22 17:13	1
Lithium	< 0.00250	0.0100	0.00250	mg/L		04/07/22 09:00	04/20/22 17:13	1
Molybdenum	< 0.00120	0.00200	0.00120	mg/L		04/07/22 09:00	04/20/22 17:13	1
Selenium	<0.000960	0.00500	0.000960	mg/L		04/07/22 09:00	04/20/22 17:13	1
Thallium	< 0.000260	0.00100	0.000260	mg/L		04/07/22 09:00	04/20/22 17:13	1

Lab Sample ID: LCS 310-348978/2-A Matrix: Water					Client	Sample	ID: Lab Con	trol Samp pe: Total/I
Analysis Batch: 350581								itch: 3489
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.200	0.2182		mg/L		109	80 - 120	
Arsenic	0.200	0.2149		mg/L		107	80 - 120	
Barium	0.100	0.1072		mg/L		107	80 - 120	
Beryllium	0.100	0.1004		mg/L		100	80 - 120	
Boron	0.200	0.2060		ma/l		103	80 - 120	

0.1030

1.967

0.1018

0.1066

mg/L

mg/L

mg/L

mg/L

103

98 80 - 120

102

107

80 - 120

80 - 120

80 - 120

0.100

2.00

0.100

0.100

Eurofins Cedar Falls Eurofins Cedar Falls

Page 15 of 29 4/21/2022 Page 16 of 29 4/21/2022

00	Cam	nla	Daa	
QC	Sam	pie	ĸes	uits

QC Sample Results	
Client: Omaha Public Power District	Job ID: 310-228287-1
Project/Site: Nebraska City Station Unit 2 CCR/Landfill	
Method: 6020A - Metals (ICP/MS) (Continued)	
Lab Sample ID: LCS 310-348978/2-A	Client Sample ID: Lab Control Sample
Matrix: Mator	Pren Type: Total/NA

Matrix: Water Analysis Batch: 350581							Prep Type: Total/NA Prep Batch: 348978
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Lead	0.200	0.2128		mg/L		106	80 - 120
Lithium	0.200	0.2103		mg/L		105	80 - 120
Molybdenum	0.200	0.2063		mg/L		103	80 - 120
Selenium	0.400	0.4092		mg/L		102	80 - 120
Thallium	0.200	0.2113		mg/L		106	80 - 120

Lab Sample ID: MB 310-349871	/1-A						Client Sa	mple ID: Metho	d Blani
Matrix: Water								Prep Type:	Total/N/
Analysis Batch: 350063								Prep Batch	: 34987
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	<0.000110		0.000200	0.000110	mg/L		04/14/22 14:03	04/15/22 12:34	

Lab Sample ID: LCS 310-349871/2-A Matrix: Water					Client	Sample		ontrol Sample Type: Total/NA
Analysis Batch: 350063							Prep	Batch: 349871
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	0.00167	0.001509		mg/L		91	80 - 120	

Matrix: Water								Prep Type: 7	Γotal/NA
Analysis Batch: 350063								Prep Batch:	350018
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/15/22 11:41	04/15/22 15:20	1
_									

Lab Sample ID: MB 310-350018/1-A

Lab Sample ID: LCS 310-350018/2-A					Client	Sample	ID: Lab C	ontrol Sample
Matrix: Water							Prep '	Type: Total/NA
Analysis Batch: 350063							Prep	Batch: 350018
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	0.00167	0.001553		mg/L		93	80 - 120	

Lab Sample ID: 310-228287-6 M	S							Cli	ent Sampl	e ID: NC2M	W8
Matrix: Water									Prep '	Type: Total/	NΑ
Analysis Batch: 350063									Prep	Batch: 3500)18
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Mercury	<0.000110		0.00167	0.001549		mg/L		93	80 - 120		_

Lab Sample ID: 310-228287-6 M	SD							CI	ient Sample	ID: NC	2MW8
Matrix: Water									Prep 1	Гуре: То	tal/NA
Analysis Batch: 350063									Prep	Batch: 3	50018
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000110		0.00167	0.001559		mg/L		94	80 - 120	1	20

QC Sample Results

Client: Omaha Public Power District Job ID: 310-228287-1
Project/Site: Nebraska City Station Unit 2 CCR/Landfill

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

 Lab Sample ID: MB 310-349178/1

 Client Sample ID: Method Blank Matrix: Water

 Analysis Batch: 349178

 MB MB

 Analyte
 Result Qualifier
 RL
 MD
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total Dissolved Solids
 < 26.0</td>
 50.0
 26.0
 mg/L
 04/07/22 16:37
 1

Client Sample ID: Lab Control Sample

l	Matrix: Water							Prep '	Type: Total/NA
l	Analysis Batch: 349178								
l		Spike	LCS	LCS				%Rec	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
l	Total Dissolved Solids	1000	940.0	7.	mg/L		94	90 - 110	

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-349178/2

8

Client Sample ID: Method Blank

Lab Sample ID: LCS 310-348982/1 Matrix: Water					Client	Sample		ontrol Sample Type: Total/NA
Analysis Batch: 348982								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
pН	7.00	7.0		SU		100	98 - 102	

Eurofins Cedar Falls

Eurofins Cedar Falls

Page 17 of 29 4/21/2022 Page 18 of 29 4/21/2022

	QC A	ssociation Summar	У		
Client: Omaha Public Po				Job I	D: 310-228287-1
IPLC/IC	City Station Unit 2 CCR/Landfill				
nalysis Batch: 34972	2				
•					
Lab Sample ID 310-228287-1	Client Sample ID NC2MW2	Prep Type Total/NA	Matrix Water	Method 9056A	Prep Batch
310-228287-2	NC2MW3	Total/NA	Water	9056A	
310-228287-2	NC2MW3	Total/NA	Water	9056A 9056A	
310-228287-2					
310-228287-3 310-228287-4	NC2MW5 NC2MW6	Total/NA Total/NA	Water	9056A 9056A	
310-228287-4 310-228287-5	NC2MW7	Total/NA	Water	9056A 9056A	
310-228287-5	NC2MW7 NC2MW8	Total/NA	Water	9056A 9056A	
310-228287-6	DUP2	Total/NA	Water	9056A 9056A	
310-228287-7 MB 310-349722/3	Method Blank	Total/NA	Water	9056A 9056A	
CS 310-349722/4	Lab Control Sample	Total/NA	Water	9056A 9056A	
.00 010-049122/4	Lab Control Gample	IOIainvA	vvater	3030A	
etals					
rep Batch: 348978					
ab Sample ID	Client Sample ID	D T	Matrix	Method	Prep Batch
10-228287-1	NC2MW2	Prep Type Total/NA	Water	3005A	Prep Batch
10-228287-2	NC2MW3	Total/NA	Water	3005A	
10-228287-3	NC2MW5	Total/NA	Water	3005A	
10-228287-4	NC2MW6	Total/NA	Water	3005A	
10-228287-5	NC2MW7	Total/NA	Water	3005A	
310-228287-6	NC2MW8	Total/NA	Water	3005A	
310-228287-7	DUP2	Total/NA	Water	3005A	
MB 310-348978/1-A	Method Blank	Total/NA	Water	3005A	
_CS 310-348978/2-A	Lab Control Sample	Total/NA	Water	3005A	
rep Batch: 349871					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-1	NC2MW2	Total/NA	Water	7470A	
110-228287-2	NC2MW3	Total/NA	Water	7470A	
310-228287-3	NC2MW5	Total/NA	Water	7470A	
310-228287-4	NC2MW6	Total/NA	Water	7470A	
310-228287-5	NC2MW7	Total/NA	Water	7470A	
/IB 310-349871/1-A	Method Blank	Total/NA	Water	7470A	
CS 310-349871/2-A	Lab Control Sample	Total/NA	Water	7470A	
rep Batch: 350018					
_ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-6	NC2MW8	Total/NA	Water	7470A	
310-228287-7	DUP2	Total/NA	Water	7470A	
/IB 310-350018/1-A	Method Blank	Total/NA	Water	7470A	
CS 310-350018/2-A	Lab Control Sample	Total/NA	Water	7470A	
	p				

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

310-228287-6 MS

310-228287-6 MSD

310-228287-1

310-228287-2

310-228287-3

310-228287-4

310-228287-5

Analysis Batch: 350063 Lab Sample ID

NC2MW8

NC2MW8

NC2MW2

NC2MW3

NC2MW5

NC2MW6

NC2MW7

Client Sample ID

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-1

Metals (Continued)

Analysis Batch: 350063 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-6	NC2MW8	Total/NA	Water	7470A	350018
310-228287-7	DUP2	Total/NA	Water	7470A	350018
MB 310-349871/1-A	Method Blank	Total/NA	Water	7470A	349871
MB 310-350018/1-A	Method Blank	Total/NA	Water	7470A	350018
LCS 310-349871/2-A	Lab Control Sample	Total/NA	Water	7470A	349871
LCS 310-350018/2-A	Lab Control Sample	Total/NA	Water	7470A	350018
310-228287-6 MS	NC2MW8	Total/NA	Water	7470A	350018
310-228287-6 MSD	NC2MW8	Total/NA	Water	7470A	350018

Analysis Batch: 350581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-1	NC2MW2	Total/NA	Water	6020A	348978
310-228287-2	NC2MW3	Total/NA	Water	6020A	348978
310-228287-3	NC2MW5	Total/NA	Water	6020A	348978
310-228287-4	NC2MW6	Total/NA	Water	6020A	348978
310-228287-5	NC2MW7	Total/NA	Water	6020A	348978
310-228287-6	NC2MW8	Total/NA	Water	6020A	348978
310-228287-7	DUP2	Total/NA	Water	6020A	348978
MB 310-348978/1-A	Method Blank	Total/NA	Water	6020A	348978
LCS 310-348978/2-A	Lab Control Sample	Total/NA	Water	6020A	348978

General Chemistry

Analysis Batch: 348982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-1	NC2MW2	Total/NA	Water	SM 4500 H+ B	
310-228287-2	NC2MW3	Total/NA	Water	SM 4500 H+ B	
310-228287-3	NC2MW5	Total/NA	Water	SM 4500 H+ B	
310-228287-4	NC2MW6	Total/NA	Water	SM 4500 H+ B	
310-228287-5	NC2MW7	Total/NA	Water	SM 4500 H+ B	
310-228287-6	NC2MW8	Total/NA	Water	SM 4500 H+ B	
310-228287-7	DUP2	Total/NA	Water	SM 4500 H+ B	
LCS 310-348982/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-348982/27	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 349178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-1	NC2MW2	Total/NA	Water	SM 2540C	
310-228287-2	NC2MW3	Total/NA	Water	SM 2540C	
310-228287-3	NC2MW5	Total/NA	Water	SM 2540C	
310-228287-4	NC2MW6	Total/NA	Water	SM 2540C	
310-228287-5	NC2MW7	Total/NA	Water	SM 2540C	
310-228287-6	NC2MW8	Total/NA	Water	SM 2540C	
310-228287-7	DUP2	Total/NA	Water	SM 2540C	
MB 310-349178/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-349178/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins Cedar Falls

Prep Batch

349871

349871

349871

349871

7470A

7470A

7470A

7470A

7470A

7470A

7470A

Water

Water

Matrix

Water

Water

Water

Water

Water

Eurofins Cedar Falls

Page 19 of 29 4/21/2022 Page 20 of 29 4/21/2022





Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Client Sample ID: NC2MW2

Date Collected: 04/04/22 16:00

Date Received: 04/05/22 17:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 16:53	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 18:35	SAP	TAL CF
Total/NA	Prep	7470A			349871	04/14/22 14:03	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 13:24	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 14:03	JAJ	TAL CF

Client Sample ID: NC2MW3 Date Collected: 04/04/22 14:29 Date Received: 04/05/22 17:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 17:09	JNR	TAL CF
Total/NA	Analysis	9056A		20	349722	04/12/22 11:05	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 18:39	SAP	TAL CF
Total/NA	Prep	7470A			349871	04/14/22 14:03	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 13:27	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 14:02	JAJ	TAL CF

Client Sample ID: NC2MW5 Date Collected: 04/04/22 11:55

Date Received: 04/05/22 17:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 17:24	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 18:43	SAP	TAL CF
Total/NA	Prep	7470A			349871	04/14/22 14:03	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 13:29	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 14:04	JAJ	TAL CF

Client Sample ID: NC2MW6 Date Collected: 04/04/22 13:12

Date Received: 04/05/22 17:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 18:11	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 19:02	SAP	TAL CF

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Analysis

Client Sample ID: NC2MW6 Date Collected: 04/04/22 13:12

Job ID: 310-228287-1

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 310-228287-1

Lab Sample ID: 310-228287-2

Lab Sample ID: 310-228287-3

Lab Sample ID: 310-228287-4

Date Received: 04/05/22 17:00

Batch Dilution Batch Prepared Prep Type Туре Method Factor Number or Analyzed Lab Total/NA 7470A 04/14/22 14:03 EAM TAL CF Prep 349871 Total/NA 7470A 350063 04/15/22 13:31 EAM Analysis TAL CF Total/NA Analysis SM 2540C 349178 04/07/22 16:37 ARG TAL CF

Dilution

348982 04/06/22 14:16 JAJ

Prepared

Batch

Client Sample ID: NC2MW7 Date Collected: 04/04/22 17:40

Date Received: 04/05/22 17:00

Total/NA

10

	Batch	Batch		
гер Туре	Туре	Method	Run	
otal/NA	Analysis	9056A		

SM 4500 H+ B

Factor or Analyzed Tot 04/11/22 18:27 JNR TAL CE 349722 Total/NA 348978 04/07/22 09:00 ACM2 TAL CF Prep 3005A Total/NA Analysis 6020A 350581 04/20/22 19:06 SAP TAL CF Total/NA Prep 7470A 349871 04/14/22 14:03 EAM TAL CF Total/NA 7470A 350063 04/15/22 13:33 EAM Analysis TAL CF Total/NA Analysis SM 2540C 349178 04/07/22 16:37 ARG TAL CF Total/NA SM 4500 H+ B 348982 04/06/22 14:05 JAJ TAL CF Analysis

Client Sample ID: NC2MW8 Date Collected: 04/04/22 15:21

Date Received: 04/05/22 17:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 18:42	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 19:10	SAP	TAL CF
Total/NA	Prep	7470A			350018	04/15/22 11:41	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 15:29	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 14:00	JAJ	TAL CF

Client Sample ID: DUP2 Date Collected: 04/04/22 00:00 Date Received: 04/05/22 17:00

Lab Sample ID: 310-228287-7

Matrix: Water

Eurofins Cedar Falls

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	349722	04/11/22 18:58	JNR	TAL CF
Total/NA	Prep	3005A			348978	04/07/22 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	350581	04/20/22 19:14	SAP	TAL CF
Total/NA	Prep	7470A			350018	04/15/22 11:41	EAM	TAL CF
Total/NA	Analysis	7470A		1	350063	04/15/22 15:35	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	349178	04/07/22 16:37	ARG	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	348982	04/06/22 14:01	JAJ	TAL CF

Eurofins Cedar Falls

Page 21 of 29 4/21/2022 Page 22 of 29 4/21/2022

Job ID: 310-228287-1

Lab Sample ID: 310-228287-4

TAL CF

Matrix: Water

Lab Sample ID: 310-228287-5 Matrix: Water

Lab Sample ID: 310-228287-6

Matrix: Water

Lab Chronicle

Page 23 of 29

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Laboratory References:

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

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Job ID: 310-228287-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-22
Georgia	State	IA100001 (OR)	09-29-22
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-21 *
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	04-06-23
North Dakota	State	R-186	09-29-22
Oregon	NELAP	IA100001	09-29-22

Accreditation/Certification Summary

Eurofins Cedar Falls

Page 24 of 29



4/21/2022

4/21/2022

Job ID: 310-228287-1

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cedar Falls

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL CF
6020A	Metals (ICP/MS)	SW846	TAL CF
7470A	Mercury (CVAA)	SW846	TAL CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 H+ B	pH	SM	TAL CF
3005A	Preparation, Total Metals	SW846	TAL CF
7470A	Preparation, Mercury	SW846	TAL 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

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



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Citerit information				
Client Omaha Pub	olic Power	Dirtrict		
1 CITY	aha	STATE VE	Project	
Receipt Information				
Date/Time DA	ATE	TIME	D 1 1D	
Received	4-5-22	1700	Received By HED	
Delivery Type UPS	☐ FedE>			☐ Spee-Dee
X Lab C	Courier 📙 Lab Fi	eld Services	Client Drop-off Other:	
Condition of Cooler/Conta	alners			
Sample(s) received in Co	ooler? XYes	□ No	If yes Cooler ID	
Multiple Coolers?	⊠ Yes	☐ No	If yes Cooler # _ I _ of _ Z	
Cooler Custody Seals Pr No	esent? Yes	⊠ No	If yes Cooler custody seals intact?	Yes 🗌
Sample Custody Seals P No	resent? Yes	Ø No	If yes Sample custody seals intact?	Yes 🗌
Trip Blank Present?	☐ Yes	⊠ No	If yes Which VOA samples are in coole	r? ↓
Temperaturé Record				
Coolant Wet ice	☐ Blue ice	☐ Dry ice	Other: NON	IE
Thermometer ID N			Correction Factor (°C) 0	
 Temp Blank Temperature 	e – If no temp blank,	or temp blank ter	perature above criteria, proceed to Sample Contain	er Temperature
Uncorrected Temp (°C)	4.3		Corrected Temp (°C) 4.3	
 Sample Container Tempe 				
Container(s) used	CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C)				
Corrected Temp (°C)				
Exceptions Noted			, ,	
			ved same day of sampling? Yes s began? Yes	□ No □ No
2) If temperature is <0°0 (e g , bulging septa, i			the integrity of sample containers is compr solid?)	romised?
NOTE If yes, contact P	M before proceedir	ng If no, proce	ed with login	
Nc2Mw8, Nc2M	WG, NC2MM	3		
NC2MWSA		1		
mwi4				

Document: CED-P-SAM-FRM45521 Revision 26

Date: 27 Jan 2022

Eurofins Cedar Falls Page 26 of 29 General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

Eurofins Cedar Falls

Page 25 of 29 4/21/2022

2

3

7

9

1

14



Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client information						
Client Omnher	Public Po		torrest			
City/State CITY o mul	n	STATE	Project			
Receipt Information						
Date/Time DA Received	4-5-22	1700	Received B	y HED		
Delivery Type UPS	☐ FedE:	x	☐ FedEx Gr	-	US Mail	☐ Spee-Dee
⊠ Lab C	ourier 🗌 Lab F	ield Services	☐ Client Dro	p-off] Other:	
Condition of Cooler/Conta	iners					
Sample(s) received in Co	oler? Yes	i □ No	If yes Coo	oler ID		,
Multiple Coolers?	Yes			oler#2_		
Cooler Custody Seals Pro	esent?	s ⊠No	,	,	seals intact?	
Sample Custody Seals P No	resent? Yes	s ⊠ No	<i>If yes</i> Sar	nple custody	seals intact?] Yes
Trip Blank Present?	☐ Yes	s ⊠ No	If yes Wh	ich VOA sam	ples are in coo	oler? ↓
Temperaturé Record			•			
Coolant Wet ice	☐ Blue ice	☐ Dry ice	Other		DN	ONE
Thermometer ID N			Correction	, ,	0	
Temp Blank Temperature	- If no temp blank,	or temp blank te	mperature above	e criteria, procee	d to Sample Cont	alner Temperature
Uncorrected Temp (°C)			Corrected 7	Temp (°C)		
Sample Container Temper						
Container(s) used	CONTAINER 1 NC2MW5	250ml N	litric	CONTAINER	2	
Uncorrected Temp	2.9	200400 1				
(°C)	2.9					
Corrected Temp (°C) Exceptions Noted	6.1			L		
If temperature exceed a) If yes is there ev				y of sampling	g?	□ No □ No
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?)						
NOTE If yes, contact P	M before proceedi	ng If no, proc	eed with login			
Additional Comments						
NCSWM2 NC	MWZ, DUPZ	, NCZMW7				

Document: CED-P-SAM-FRM45521 Revision 26 Date 27 Jan 2022

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C **TestAmerica** TestAmerica Omaha SC 268 2540C TDS, 9056A Chloride, Fluoride, Sulfate Chain of Custody Record Perform MS/MSD (Yes or No) 14:29 13:12 17:40 15:21 Date Time: 2012 4/4/22 4/4/22 Poison B 4/4/22

4/21/2022

estAmerica Cedar Falls

13 14

Login Sample Receipt Checklist

Comment

Answer

N/A

True

N/A

True

Client: Omaha Public Power District Job Number: 310-228287-1 SDG Number:

List Source: Eurofins Cedar Falls

Login Number: 228287 List Number: 1 Creator: Homolar, Dana J

Cooler Temperature is acceptable.

Appropriate sample containers are used.

Cooler Temperature is recorded.

COC is present.

Question

Radioactivity wasn't checked or is </= background as measured by a survey The cooler's custody seal, if present, is intact. Sample custody seals, if present, are intact. The cooler or samples do not appear to have been compromised or tampered with. Samples were received on ice.

COC is filled out in ink and legible. COC is filled out with all pertinent information. Is the Field Sampler's name present on COC? There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate Sample containers have legible labels Containers are not broken or leaking. Sample collection date/times are provided.

Sample bottles are completely filled. Sample Preservation Verified. There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). Multiphasic samples are not present.

True Samples do not require splitting or compositing. True Residual Chlorine Checked N/A

14



The

www.eurofinsus.com/Env

Visit us at:

Expert



ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-228287-2

Client Project/Site: Nebraska City Station Unit 2 CCR/Landfill

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

Attn: Kyle Uhing

Authorized for release by: 5/10/2022 10:45:22 AM

Shawn Hayes, Senior Project Manager (319)229-8211

Shawn.Hayes@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Laboratory Job ID: 310-228287-2

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	12
QC Sample Results	13
QC Association	15
Chronicle	16
Certification Summary	18
Method Summary	19
Chain of Custody	20
Receipt Checklists	24
Tracer Carrier Summary	26

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

Job ID: 310-228287-2

Laboratory: Eurofins Cedar Falls

Narrative

Ivaliative

Job Narrative 310-228287-2

Comments

No additional comments.

Recei

The samples were received on 4/5/2022 5:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 4.3° C.

DΛ

Method PrecSep 0: Radium-228 Prep Batch 160-559628

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW2 (310-228287-1), NC2MW3 (310-228287-2), NC2MW5 (310-228287-3), NC2MW6 (310-228287-4), NC2MW7 (310-228287-5), NC2MW8 (310-228287-6) and DUP2 (310-228287-7).

Method PrecSep-21: Radium-226 Prep Batch 160-559626

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW2 (310-228287-1), NC2MW3 (310-228287-2), NC2MW5 (310-228287-3), NC2MW6 (310-228287-4), NC2MW7 (310-228287-5), NC2MW8 (310-228287-6) and DUP2 (310-228287-7).

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

Eurofins Cedar Falls 5/10/2022

Page 3 of 26

5/10/2022

Page 2 of 26

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-228287-1	NC2MW2	Water	04/04/22 16:00	04/05/22 17:00
310-228287-2	NC2MW3	Water	04/04/22 14:29	04/05/22 17:00
310-228287-3	NC2MW5	Water	04/04/22 11:55	04/05/22 17:00
310-228287-4	NC2MW6	Water	04/04/22 13:12	04/05/22 17:00
310-228287-5	NC2MW7	Water	04/04/22 17:40	04/05/22 17:00
310-228287-6	NC2MW8	Water	04/04/22 17:40	04/05/22 17:00
310-228287-7	DUP2	Water	04/04/22 10:21	04/05/22 17:00

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Lab Sample ID: 310-228287-1 Client Sample ID: NC2MW2 Matrix: Water

Job ID: 310-228287-2

Date Collected: 04/04/22 16:00 Date Received: 04/05/22 17:00

Method: 9315 - Radium-226 (GFPC) Total Uncert. Uncert. Analyte (20+/-) (2σ+/-) MDC Unit Dil Fac Result Qualifier Prepared Analyzed Radium-226 0.176 U 0.174 0.275 pCi/L 04/11/22 12:07 05/06/22 17:59

Carrier %Yield Qualifier Limits Analyzed Ba Carrier 78.6 40 - 110 04/11/22 12:07 05/06/22 17:59

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier (2σ+/-) (2σ+/-) MDC Unit Dil Fac Prepared Analyzed Radium-228 0.914 0.404 0.413 1.00 0.570 pCi/L 04/11/22 12:30 05/03/22 12:45

Carrier %Yield Qualifier Limits Prepared Analyzed Ba Carrier 78.6 40 - 110 04/11/22 12:30 05/03/22 12:45 Y Carrier 85.2 40 - 110 04/11/22 12:30 05/03/22 12:45

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228 Uncert. Uncert. Result Qualifier (2σ+/-) (2σ+/-) MDC Unit Analyte RL Prepared Analyzed Dil Fac 1.09 0.440 0.449 5.00 0.570 pCi/L 05/09/22 22:46 226 + 228

5/10/2022

Eurofins Cedar Falls

			Clie	nt Samp	le Resu	ılts					
lient: Omaha Public P	Power District	t		•					Job ID: 310-2	28287-2	
Project/Site: Nebraska	City Station	Unit 2 CCR	/Landfill								
Client Sample ID: I	NC2MW3							Lab Samp	le ID: 310-22	8287-2	6
Date Collected: 04/04/	22 14:29								Matri	x: Water	
ate Received: 04/05/2	22 17:00										/
Method: 9315 - Radiu	um-226 (GFF	ec)									
metriou. 3010 - Radio	um 220 (Or 1	0)	Count	Total							5
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.180	U	0.179	0.179	1.00	0.282	pCi/L	04/11/22 12:07	05/06/22 19:52	1	
Carrier	(8,000,000,000	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	74.9		40 - 110					04/11/22 12:07	05/06/22 19:52	1	(0
enanto presentation		2.22									L.º
Method: 9320 - Radio	um-228 (GFF	PC)									10
			Count	Total							
			Uncert.	Uncert.							
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac	
Radium-228	0.775		0.406	0.412	1.00	0.598	pCi/L	04/11/22 12:30	05/03/22 12:45	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	74.9		40 - 110					04/11/22 12:30	05/03/22 12:45		
Y Carrier	86.4		40 - 110					04/11/22 12:30	05/03/22 12:45	1	
Method: Ra226_Ra22	28 - Combin	ed Radium-	226 and Rad	ium-228							Ш
			Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Combined Radium	0.955		0.444	0.449	5.00	0.598	pCi/L		05/09/22 22:46	1	
226 + 228											

			•	• ap							
Client: Omaha Pub	lic Power Distric	t							Job ID: 310-2	28287-2	Н
Project/Site: Nebras	ska City Station	Unit 2 CCR	/Landfill								
Client Sample I	D: NC2MW5							Lab Samp	le ID: 310-22	8287-3	
Date Collected: 04	/04/22 11:55								Matrix	c: Water	
Date Received: 04/	/05/22 17:00										
Method: 9315 - R	adium-226 (GFF	PC)									ı
	4.	(4	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	-0.0293	U	0.113	0.113	1.00	0.244	pCi/L	04/11/22 12:07	05/06/22 19:51	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	3
Ba Carrier	83.1	-	40 - 110					04/11/22 12:07	05/06/22 19:51	1	1

Ba Carrier	83.1		40 - 110					04/11/22 12:07	05/06/22 19:51	1
Method: 9320 - Ra	adium-228 (GFF	PC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.193	U	0.315	0.316	1.00	0.534	pCi/L	04/11/22 12:30	05/03/22 12:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		40 - 110					04/11/22 12:30	05/03/22 12:45	
Y Carrier	86.7		40 - 110					04/11/22 12:30	05/03/22 12:45	1

Method: Ra226_Ra2	28 - Combin	ed Radium	-226 and Rad	ium-228						
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.163	U	0.335	0.336	5.00	0.534	pCi/L		05/09/22 22:46	1

Eurofins Cedar Falls Eurofins Cedar Falls

Page 6 of 26 Page 7 of 26 5/10/2022 5/10/2022

			Clie	nt Samp	ie Kesi	IITS					
lient: Omaha Public F		-							Job ID: 310-2	28287-2	
roject/Site: Nebraska	City Station	Unit 2 CCR/	Landfill								
Client Sample ID:	NC2MW6							Lab Samp	le ID: 310-22	8287-4	
ate Collected: 04/04/										c: Water	
ate Received: 04/05/											
town measures and		ale									-
Method: 9315 - Radio	um-226 (GFF	C)									!
			Count	Total							
Analyte	Pac::lt	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226										Dil Fac	
Radium-226	0.0910	U	0.191	0.191	1.00	0.336	pCi/L	04/11/22 12:07	05/06/22 19:51	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	Ц
Ba Carrier	83.3		40 - 110					04/11/22 12:07	05/06/22 19:51		7
											R
Method: 9320 - Radio	um-228 (GFF	PC)									
			Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier		Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Analyte Radium-228	Result 0.687	Qualifier	Uncert.		RL 1.00		Unit pCi/L	Prepared 04/11/22 12:30	Analyzed 05/03/22 12:45	Dil Fac	1
Radium-228	0.687		Uncert. (2σ+/-) 0.360	(2σ+/-)				04/11/22 12:30	05/03/22 12:45	1	1
Radium-228 Carrier	0.687 %Yield		Uncert. (2σ+/-) 0.360 Limits	(2σ+/-)				04/11/22 12:30 Prepared	05/03/22 12:45 Analyzed	1 Dil Fac	1
Radium-228 Carrier Ba Carrier	0.687 %Yield 83.3		Uncert. (2σ+/-) 0.360 Limits 40 - 110	(2σ+/-)				04/11/22 12:30 Prepared 04/11/22 12:30	05/03/22 12:45 Analyzed 05/03/22 12:45	1	1
Radium-228 Carrier	0.687 %Yield		Uncert. (2σ+/-) 0.360 Limits	(2σ+/-)				04/11/22 12:30 Prepared	05/03/22 12:45 Analyzed	1 Dil Fac	1
Radium-228 Carrier Ba Carrier Y Carrier	0.687 %Yield 83.3 87.9	Qualifier	Uncert. (2σ+/-) 0.360 Limits 40 - 110 40 - 110	(2 0+/-) 0.366				04/11/22 12:30 Prepared 04/11/22 12:30	05/03/22 12:45 Analyzed 05/03/22 12:45	1 Dil Fac	1 1 1
Radium-228 Carrier Ba Carrier	0.687 %Yield 83.3 87.9	Qualifier	Uncert. (2σ+/-) 0.360 Limits 40 - 110 40 - 110	(2 0+/-) 0.366				04/11/22 12:30 Prepared 04/11/22 12:30	05/03/22 12:45 Analyzed 05/03/22 12:45	1 Dil Fac	1 1 1
Radium-228 Carrier Ba Carrier Y Carrier	0.687 %Yield 83.3 87.9	Qualifier	Uncert. (2σ+/-) 0.360 Limits 40 - 110 40 - 110 226 and Radi	(2σ+/-) 0.366				04/11/22 12:30 Prepared 04/11/22 12:30	05/03/22 12:45 Analyzed 05/03/22 12:45	1 Dil Fac	1 1 1 1
Radium-228 Carrier Ba Carrier Y Carrier	0.687 %Yield 83.3 87.9 28 - Combine	Qualifier	Uncert. (2σ+/-) 0.360 Limits 40 - 110 40 - 110	(2 0+/-) 0.366			pCi/L	04/11/22 12:30 Prepared 04/11/22 12:30	05/03/22 12:45 Analyzed 05/03/22 12:45	1 Dil Fac	1 1 1
Radium-228 Carrier Ba Carrier Y Carrier Method: Ra226_Ra2	0.687 %Yield 83.3 87.9 28 - Combine	Qualifier ed Radium-	Uncert. (2σ+/-) 0.360 Limits 40 - 110 40 - 110 226 and Radi Count Uncert.	(2σ+/-) 0.366 0.366 0.366	1.00	0.528	pCi/L	04/11/22 12:30 Prepared 04/11/22 12:30 04/11/22 12:30	05/03/22 12:45 Analyzed 05/03/22 12:45 05/03/22 12:45	Dil Fac	1 1 1

RL MDC Unit Prepared Analyzed Dil Fac	lient Sample ID: I	NC2MW7							Lab Samp	le ID: 310-22	8287-5
1.00 0.227 pCi/L 04/11/22 12:07 05/07/22 13:44 1 Prepared Analyzed Dil Fac	ate Collected: 04/04/	22 17:40								Matrix	c: Water
1.00 0.227 pCi/L 04/11/22 12:07 05/07/22 13:44 1 Prepared Analyzed Dil Fac	Date Received: 04/05/2	22 17:00									
1.00 0.227 pCi/L 04/11/22 12:07 05/07/22 13:44 1 Prepared Analyzed Dil Fac	Method: 9315 - Radiu	um-226 (GFF	PC)								
1.00 0.227 pCi/L 04/11/22 12:07 05/07/22 13:44 1 Prepared Analyzed Dil Fac				Count	Total						
1.00 0.227 pCi/L 04/11/22 12:07 05/07/22 13:44 1 Prepared Analyzed Dil Fac				Uncert.	Uncert.						
Prepared Analyzed Dil Fac	Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Radium-226	0.397		0.186	0.189	1.00	0.227	pCi/L	04/11/22 12:07	05/07/22 13:44	1
	Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
	Ba Carrier	93.8		40 - 110					St. 11-32 (C. 11-11-11-11-11-11-11-11-11-11-11-11-11-	57/05/037/100/05/15/05/1	1
			<u> </u>								
	Method: 9320 - Radii	ım-228 (GFF	C)	Count	Total						
RL MDC Unit Prepared Analyzed Dil Fac	Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
1.00 0.476 pCi/L 04/11/22 12:30 05/03/22 12:46 1	Radium-228	0.350	U	0.298	0.300	1.00	0.476	pCi/L	04/11/22 12:30	05/03/22 12:46	1
B			Qualifier								
Prepared Analyzed Dil Fac											,
	Radium-228 Carrier Ba Carrier		Qualifier	0.298 Limits 40 - 110					04/11/22 12:30 Prepared 04/11/22 12:30	05/03/22 12:46 Analyzed 05/03/22 12:46	_
Prepared Analyzed Dil Fac	Ba Carrier	93.8		40 - 110					04/11/22 12:30	05/03/22 12:46	
	Y Carrier	90.1		40 - 110					04/11/22 12:30	05/03/22 12:46	1
04/11/22 12:30 05/03/22 12:46 1	- Method: Ra226 Ra22	28 - Combine	ed Radium-	226 and Rad	ium-228						
04/11/22 12:30 05/03/22 12:46 1				Count	Total						
04/11/22 12:30 05/03/22 12:46 1				Uncert.	Uncert.						
04/11/22 12:30 05/03/22 12:46 1	Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
04/11/22 12:30 05/03/22 12:46 1 04/11/22 12:30 05/03/22 12:46 1	Combined Radium	0.747		0.351	0.355	5.00	0.476	pCi/L		05/09/22 22:46	1

Eurofins Cedar Falls Eurofins Cedar Falls

Page 8 of 26 5/10/2022 Page 9 of 26 5/10/2022

226 + 228

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public Po	ower District	t		-					Job ID: 310-2	28287-2
roject/Site: Nebraska (City Station	Unit 2 CCR	/Landfill							
lient Sample ID: N	NC2MW8							Lab Samp	le ID: 310-22	8287-6
ate Collected: 04/04/2	22 15:21								Matrix	c: Water
ate Received: 04/05/2	22 17:00									
Method: 9315 - Radiu	ım-226 (GEE	C)								
Wethou. 5515 - Raulu	IIII-220 (GFF	C)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.557		0.206	0.212	1.00	0.218	pCi/L	04/11/22 12:07	05/07/22 13:44	1
		Qualifier	Limits					Prepared	Analyzed	Dil Fac
Carrier	10/2/0/10/00	Quaimer	2000010000000							
Ba Carrier	91.3	Quaimer	40 - 110					04/11/22 12:07	05/07/22 13:44	1
Ba Carrier	91.3		2000010000000					04/11/22 12:07	05/07/22 13:44	1
2000.1070	91.3		40 - 110	Total				04/11/22 12:07	05/07/22 13:44	1
Ba Carrier	91.3		40 - 110 Count	Total				04/11/22 12:07	05/07/22 13:44	1
Ba Carrier Method: 9320 - Radiu	91.3 um-228 (GFP		40 - 110 Count Uncert.	Uncert.	RL	MDC	Unit			1 Dil Fac
Ba Carrier	91.3 um-228 (GFP	C) Qualifier	40 - 110 Count		RL 1.00			04/11/22 12:07 Prepared 04/11/22 12:30	05/07/22 13:44 Analyzed 05/03/22 12:46	·
Ba Carrier Method: 9320 - Radiu Analyte	91.3 um-228 (GFF Result	C) Qualifier	40 - 110 Count Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Analyzed	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier	91.3 um-228 (GFF Result 0.356 %Yield	C) Qualifier	Count Uncert. (2σ+/-) 0.340	Uncert. (2σ+/-)				Prepared 04/11/22 12:30 Prepared	Analyzed 05/03/22 12:46 Analyzed	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228	91.3 um-228 (GFP Result 0.356 %Yield 91.3	Qualifier	Count Uncert. (2σ+/-) 0.340 Limits 40 - 110	Uncert. (2σ+/-)				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier	91.3 um-228 (GFF Result 0.356 %Yield	Qualifier	Count Uncert. (2σ+/-) 0.340	Uncert. (2σ+/-)				Prepared 04/11/22 12:30 Prepared	Analyzed 05/03/22 12:46 Analyzed	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier	91.3 Im-228 (GFF Result 0.356 %Yield 91.3 80.7	Qualifier U Qualifier	Count Uncert. (20+1-) 0.340 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.342				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	Dil Fac Dil Fac 1
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier	91.3 Im-228 (GFF Result 0.356 %Yield 91.3 80.7	Qualifier U Qualifier	Count Uncert. (20+1-) 0.340 Limits 40 - 110 40 - 110 - 226 and Radi	Uncert. (2σ+/-) 0.342				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	Dil Fac Dil Fac 1
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier	91.3 Im-228 (GFF Result 0.356 %Yield 91.3 80.7	Qualifier U Qualifier	Count Uncert. (2σ+1-) 0.340 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.342				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	Dil Fac Dil Fac 1
Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier Method: Ra226_Ra22	91.3 um-228 (GFF Result 0.356 %Yield 91.3 80.7 28 - Combine	Qualifier U Qualifier	Count Uncert. (20+1-) 0.340 Limits 40 - 110 40 - 110 - 226 and Radi	Uncert. (2σ+/-) 0.342 ium-228 Total Uncert.		0.550		Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46 05/03/22 12:46	Dil Fac Dil Fac 1
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier	91.3 um-228 (GFF Result 0.356 %Yield 91.3 80.7 28 - Combine	Qualifier U Qualifier	Count Uncert. (20+1-) 0.340 Limits 40 - 110 40 - 110 -226 and Radi Count Uncert.	Uncert. (2σ+/-) 0.342	1.00	0.550	pCi/L	Prepared 04/11/22 12:30 Prepared 04/11/22 12:30 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	Dil Fac 1 Dil Fac 1 1

lient Sample ID:	DUP2							Lab Samp	le ID: 310-22	8287-7
ate Collected: 04/04	1/22 00:00								Matrix	c: Water
ate Received: 04/05	5/22 17:00									
Method: 9315 - Rad	ium-226 (GFF	PC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.196	U	0.165	0.166	1.00	0.251	pCi/L	04/11/22 12:07	05/07/22 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier								N. 1/30/5/5/5/5/5/		
Method: 9320 - Rad	92.5 lium-228 (GFF	PC)	40 - 110	Total				04/11/22 12:07	05/07/22 13:44	7
Method: 9320 - Rad	lium-228 (GFF		Count Uncert.	Uncert.						7
Method: 9320 - Rad	lium-228 (GFF	Qualifier	Count Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac
professional Addition to the Administration	lium-228 (GFF		Count Uncert.	Uncert.	RL 1.00	MDC 0.462				Dil Fac
Method: 9320 - Rad	Result 0.539		Count Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Analyzed	Dil Fac
Method: 9320 - Rad Analyte Radium-228	Result 0.539	Qualifier	Count Uncert. (2σ+/-) 0.311	Uncert. (2σ+/-)				Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46	1
Method: 9320 - Rad Analyte Radium-228 Carrier	Result 0.539	Qualifier	Count Uncert. (2σ+/-) 0.311 Limits	Uncert. (2σ+/-)				Prepared 04/11/22 12:30 Prepared	Analyzed 05/03/22 12:46 Analyzed	1 Dil Fac
Method: 9320 - Rad Analyte Radium-228 Carrier Ba Carrier	Result 0.539 **Yield 92.5 83.0	Qualifier Qualifier	Count Uncert. (2σ+/-) 0.311 Limits 40 - 110	Uncert. (2σ+/-) 0.315				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	Dil Fac
Method: 9320 - Rad Analyte Radium-228 Carrier Ba Carrier Y Carrier	Result 0.539 **Yield 92.5 83.0	Qualifier Qualifier	Count Uncert. (2σ+/-) 0.311 Limits 40 - 110	Uncert. (2σ+/-) 0.315				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	1 Dil Fac
Method: 9320 - Rad Analyte Radium-228 Carrier Ba Carrier Y Carrier	Result 0.539 **Yield 92.5 83.0	Qualifier Qualifier	Count Uncert. (2σ+/-) 0.311 Limits 40 - 110 40 - 110 226 and Radi	Uncert. (2σ+/-) 0.315				Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	1 Dil Fac
Method: 9320 - Rad Analyte Radium-228 Carrier Ba Carrier Y Carrier	Result 0.539 **Yield 92.5 83.0 228 - Combin	Qualifier Qualifier	Count Uncert. (2σ+l-) 0.311 Limits 40 - 110 40 - 110 226 and Radi Count	Uncert. (2σ+/-) 0.315			pCi/L	Prepared 04/11/22 12:30 Prepared 04/11/22 12:30	Analyzed 05/03/22 12:46 Analyzed 05/03/22 12:46	1 Dil Fac

Eurofins Cedar Falls Eurofins Cedar Falls

Page 10 of 26 5/10/2022 Page 11 of 26 5/10/2022

Definitions/Glossary

Client: Omaha Public Power District Job ID: 310-228287-2
Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Qualifiers

Rad	
Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

-	· · · · · · · · · · · · · · · · · · ·
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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

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

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: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

04/11/22 12:07

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-559626/23-A Matrix: Water Analysis Batch: 564353 Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 559626

05/07/22 13:46

MR MR Uncert. Uncert (2σ+/-) MDC Unit Analyte Result Qualifier (20+/-) Prepared Analyzed Dil Fac Radium-226 0.009138 U 0.0765 0.0766 0.152 pCi/L 04/11/22 12:07 05/07/22 13:46 MB MB %Yield Qualifier Carrier Dil Fac Limits Prepared Analyzed

Total

Lab Sample ID: LCS 160-559626/1-A

Matrix: Water Analysis Batch: 563515

Ba Carrier

Total

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 559626

%Rec LCS LCS Uncert. Analyte Limits Added Result Qual $(2\sigma + / -)$ RI MDC Unit %Rec Radium-226 11.3 10.56 1.26 1.00 0.203 pCi/L 93

 Carrier
 %Yield Ba Carrier
 Qualifier 40 - 110
 Limits 40 - 110

Lab Sample ID: LCSD 160-559626/2-A Matrix: Water Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 559626

%Rec

Limits

75 - 125

RER Limit

0.13

%Rec

Total LCSD LCSD Spike Uncert. Analyte Added Result Qual (2g+/-) RI MDC Unit Radium-226 11.3 10.23 1.23 1.00 0.217 pCi/L

Count

40 - 110

 Carrier
 %Yield Plant
 Qualifier Plant
 Limits Plant

 Ba Carrier
 88.3
 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-559628/23-A Matrix: Water Analysis Batch: 563488

Analysis Batch: 563515

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 559628

мв мв Uncert. Uncert. Analyte Result Qualifier (2σ+/-) (2σ+/-) RL MDC Unit Analyzed Dil Fac Radium-228 -0.07525 U 0.233 0.233 1.00 0.428 pCi/L 04/11/22 12:30 05/03/22 12:49

Total

 Carrier
 MB
 MB

 Ba Carrier
 \$91.0
 Qualifier
 Limits

 Y Carrier
 \$91.0
 40 - 110

 Y Carrier
 88.2
 40 - 110

 Prepared
 Analyzed
 Dil

 04/11/22 12:30
 05/03/22 12:49

 04/11/22 12:30
 05/03/22 12:49

Eurofins Cedar Falls

Eurofins Cedar Falls

Page 12 of 26

5/10/2022

Page 13 of 26

5/10/2022

oject/Site: Ne	Public Pow braska City		t 2 CCR/Lan	dfill							Job ID: 3	10-220	201-2
lethod: 932	0 - Radiu	ım-228 (GI	FPC) (Con	tinued)									
Lab Sample I	D: LCS 160)-559628/1- <i>A</i>	\						Clien	t Sample I	D: Lab Co	ntrol S	ample
Matrix: Water											Prep Ty	ype: To	tal/NA
Analysis Bate	ch: 563489										Prep B	atch: 5	59628
						Total							
			Spike	LCS		Uncert.					%Rec		
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	0-01000	%Rec	Limits	so	
Radium-228			8.65	9.320		1.11	1.00	0.410	pCi/L	108	75 - 125		
	LCS	LCS											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	87.3		40 - 110										
Y Carrier	82.6		40 - 110										
								-					-
Lab Sample I		60-559628/2	-A					Cli	ent San	nple ID: La	ab Control		
Matrix: Water											Prep Ty		
Analysis Bate	JII. 303409					Total					Prep B	atti. 5	39020
			Spike	LCSD	LCSD	Uncert.					%Rec		RER
Analyte			Added	Result		(2σ+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
			8.65	8.716		1.10	1.00	0.447	pCi/L	101	75 - 125	0.27	1
Radium-228	1.000	LCSD											
Radium-228			Limits										
Radium-228 Carrier Ba Carrier	%Yield 88.3	Qualifier	40 - 110										

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

Rad

Prep Batch: 559626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-1	NC2MW2	Total/NA	Water	PrecSep-21	
310-228287-2	NC2MW3	Total/NA	Water	PrecSep-21	
310-228287-3	NC2MW5	Total/NA	Water	PrecSep-21	
310-228287-4	NC2MW6	Total/NA	Water	PrecSep-21	
310-228287-5	NC2MW7	Total/NA	Water	PrecSep-21	
310-228287-6	NC2MW8	Total/NA	Water	PrecSep-21	
310-228287-7	DUP2	Total/NA	Water	PrecSep-21	
MB 160-559626/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-559626/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-559626/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 559628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-228287-1	NC2MW2	Total/NA	Water	PrecSep_0	
310-228287-2	NC2MW3	Total/NA	Water	PrecSep_0	
310-228287-3	NC2MW5	Total/NA	Water	PrecSep_0	
310-228287-4	NC2MW6	Total/NA	Water	PrecSep_0	
310-228287-5	NC2MW7	Total/NA	Water	PrecSep_0	
310-228287-6	NC2MW8	Total/NA	Water	PrecSep_0	
310-228287-7	DUP2	Total/NA	Water	PrecSep_0	
MB 160-559628/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-559628/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-559628/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Eurofins Cedar Falls Eurofins Cedar Falls

Page 14 of 26 5/10/2022 Page 15 of 26 5/10/2022

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Job ID: 310-228287-2

Client Sample ID: NC2MW2 Date Collected: 04/04/22 16:00

Lab Sample ID: 310-228287-1 Matrix: Water

Lab Sample ID: 310-228287-2

Client Sample ID: NC2MW7 Date Collected: 04/04/22 17:40 Date Received: 04/05/22 17:00

Lab Sample ID: 310-228287-5

TAL SL

TAL SL

TAL SL

TAL SI

TAL SL

Date Received: 04/05/22 17:00

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559626	04/11/22 12:07	HRT	TAL SL
Total/NA	Analysis	9315		1	564085	05/06/22 17:59	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559628	04/11/22 12:30	HRT	TAL SL
Total/NA	Analysis	9320		1	563489	05/03/22 12:45	FLC	TAL SL
Total/NA	Analysis	Da226 Da229			564727	05/00/22 22:46	EMI	TAL SI

Batch Dilution Batch Prepared Prep Type Туре Method Number or Analyzed 04/11/22 12:07 HRT Total/NA PrecSen-21 Prep 559626 Total/NA Analysis 9315 564351 05/07/22 13:44 FLC Total/NA Prep PrecSep_0 04/11/22 12:30 HRT Total/NA Analysis 9320 563489 05/03/22 12:46 FLC Total/NA Analysis Ra226 Ra228 564727 05/09/22 22:46 EMH

Client Sample ID: NC2MW8 Date Collected: 04/04/22 15:21

Lab Sample ID: 310-228287-6

Ra226_Ra228

Matrix: Water

9

Date Received: 04/05/22 17:00

Matrix: Water

Client Sample ID: NC2MW3 Date Collected: 04/04/22 14:29 Date Received: 04/05/22 17:00

Batch Dilution Prep Type Туре Method Factor Number or Analyzed Analyst Total/NA PrecSep-21 559626 04/11/22 12:07 HRT TAL SL Pren Total/NA 05/06/22 19:52 FLC Analysis Total/NA Prep PrecSep 0 04/11/22 12:30 HRT TAL SI 559628 Total/NA Analysis 9320 563489 05/03/22 12:45 FLC TAL SL

Batch Dilution Prep Type Туре Method Factor Number or Analyzed Analyst Total/NA Pren PrecSep-21 559626 04/11/22 12:07 HRT TAL SL Total/NA Analysis 05/07/22 13:44 FLC TAL SL Total/NA Prep PrecSep 0 559628 04/11/22 12:30 HRT TAL SI Total/NA Analysis 9320 563489 05/03/22 12:46 FLC TAL SL Total/NA Analysis Ra226_Ra228 564727 05/09/22 22:46 EMH TAL SL

Lab Chronicle

Client Sample ID: NC2MW5

Analysis

Lab Sample ID: 310-228287-3 Matrix: Water

Client Sample ID: DUP2 Date Collected: 04/04/22 00:00 Lab Sample ID: 310-228287-7

Date Collected: 04/04/22 11:55

Total/NA

Date Received: 04/05/22 17:00

Date Received: 04/05/22 17:00

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559626	04/11/22 12:07	HRT	TAL SL
Total/NA	Analysis	9315		1	564108	05/06/22 19:51	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559628	04/11/22 12:30	HRT	TAL SL
Total/NA	Analysis	9320		1	563489	05/03/22 12:45	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	564727	05/09/22 22:46	EMH	TAL SL

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559626	04/11/22 12:07	HRT	TAL SL
Total/NA	Analysis	9315		1	564351	05/07/22 13:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559628	04/11/22 12:30	HRT	TAL SL
Total/NA	Analysis	9320		1	563489	05/03/22 12:46	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	564727	05/09/22 22:46	EMH	TAL SL

Client Sample ID: NC2MW6 Date Collected: 04/04/22 13:12

Lab Sample ID: 310-228287-4

Matrix: Water

Date Received: 04/05/22 17:00

564727 05/09/22 22:46 EMH

Date Received.	04/03/22 17.00	
	Batch	J

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			559626	04/11/22 12:07	HRT	TAL SL
Total/NA	Analysis	9315		1	564108	05/06/22 19:51	FLC	TAL SL
Total/NA	Prep	PrecSep_0			559628	04/11/22 12:30	HRT	TAL SL
Total/NA	Analysis	9320		1	563489	05/03/22 12:45	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	564727	05/09/22 22:46	EMH	TAL SL

Laboratory References:

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

Eurofins Cedar Falls Eurofins Cedar Falls

Page 16 of 26 5/10/2022 Page 17 of 26 5/10/2022

Accreditation/Certification Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

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	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	07-01-22
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
lowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill Job ID: 310-228287-2

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

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

Eurofins Cedar Falls Eurofins Cedar Falls

eurofins

Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information						
	olic Power	Dirtric	+			
City/State CITY	ann	STATE	Project			
Receipt Information						
	4-5-22	1700	Received By	HED		
Delivery Type UPS	☐ FedEx	Κ.	☐ FedEx Gro	und 🔲 U	S Mail	☐ Spee-Dee
Lab (Courier 🗌 Lab F	ield Services	Client Drop	-off □ C	ther:	
Condition of Cooler/Conta	ainers					
Sample(s) received in Co	ooler? XYes	□ No	If yes Coole	er ID		
Multiple Coolers?	⊠ Yes	☐ No	If yes Coole	er#lof	2_	
Cooler Custody Seals Pr	esent? Yes	⊠ No	If yes Coole	er custody sea	s intact?	Yes 🗌
Sample Custody Seals F	Present? Yes	Z No	If yes Samp	ole custody sea	als intact?	Yes 🗌
Trip Blank Present?	Yes	⊠ No	If yes Whic	h VOA sample	s are in co	oler? ↓
Temperaturé Record				-/		
Coolant Wet ice	☐ Blue ice	☐ Dry ice	Other:		_ DN	ONE
Thermometer ID N			Correction Fa	` '		
Temp Blank Temperatur	e – If no temp blank,	or temp blank te	mperature above o	riteria, proceed to	Sample Cont	ainer Temperature
Uncorrected Temp (°C)	4.3		Corrected Te	mp (°C) 4.3		
 Sample Container Temp 						
Container(s) used	CONTAINER 1			CONTAINER 2		
Uncorrected Temp (°C)						
Corrected Temp (°C)						
Exceptions Noted	L					
If temperature exceed a) If yes is there exceed				of sampling?	☐ Yes ☐ Yes	□ No □ No
2) If temperature is <0° (e g , bulging septa,				f sample conta	iners is cor	npromised?
Note If yes, contact P	M before proceedi	ng If no, proc	eed with login			
NC2MWB, NC2M	W6, NC2MW-	3,				
NC2MWSE	1					
MW14						

Eurofins Cedar Falls

Page 20 of 26

Document: CED-P-SAM-FRM45521 Revision 26 Date: 27 Jan 2022

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

eurofins

Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information					
	Public Por		istrict		
City/State CITY o nul		STATE	Project		
Receipt Information			,		
Date/Time DA Received	TE 4-5-22	1700	Received By	HED	
Delivery Type UPS	☐ FedEx	<	☐ FedEx Gro	ound US	S Mail Spee-Dee
	ourier 🗌 Lab F	ield Services	Client Dro	o-off Ot	her:
Condition of Cooler/Conta	iners		,		
Sample(s) received in Co	oler? 🛛 Yes	☐ No	If yes Coo	ler ID	
Multiple Coolers?	✓ Yes			ler# _2_ of _	
Cooler Custody Seals Pre	esent? 🔲 Yes	⊠ No	If yes Coo	ler custody seals	intact? Yes
Sample Custody Seals Pi No	resent?	⊠ No	<i>If yes</i> Sam	ple custody sea	ls intact? Yes
Trip Blank Present?	☐ Yes	No No	If yes Whi	ch VOA samples	are in cooler? ↓
Temperaturé Record					
Coolant [*] Wet ice	☐ Blue ice	☐ Dry ice	e 🔲 Other.		NONE
Thermometer ID N			Correction F	. , ,	
Temp Blank Temperature	- If no temp blank,	or temp blank te	mperature above	criteria, proceed to S	Sample Container Temperature
Uncorrected Temp (°C)	,		Corrected T	emp (°C)	
Sample Container Tempe				OCUPANIED O	
Container(s) used	CONTAINER 1 NC2MW5	250ml N	litric	CONTAINER 2	
Uncorrected Temp	2.9				
(°C) Corrected Temp (°C)	2.9				
Exceptions Noted					· · · · · · · · · · · · · · · · · · ·
If temperature exceed a) If yes is there ev	•			y of sampling?	Yes No
2) If temperature is <0°0 (e.g., bulging septa, b	C, are there obvious are there obvious are there obvious are the contracted by the c	ous signs tha oottles, frozer	t the integrity on solid?)	of sample contain	ners is compromised?
NOTE If yes, contact P	M before proceedi	ng If no, proc	eed with login		
	MINIZ DUOZ	NET MANT		<u> </u>	
NCSWM2 NCJ	MANC DALT	NOUNT			

Document: CED-P-SAM-FRM45521 Revision 26 Date 27 Jan 2022

Eurofins Cedar Falls Page 21 of 26

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C

5/10/2022

5/10/2022

TestAmerica TestAmerica Omaha SC 268 Chain of Custody Record TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, 1A 50613
Phone (319) 277-2401 Fax (319) 277-2425

Client Information	Kyle K. Uhing			Hayes,	s, Shawn	Σ		20 20 20 20 20 20 20 20 20 20 20 20 20 2	Т			Bases		_
cyle Uhing	(531) 226-2515			shaw	hayes	testam	@testamericainc.com	mos	_			#		_
Omaha Public Power District	Due Date Request	;pe			F		4	Analysis	Request	9	F	Preservation C	;odes:	_
ourses. 44 South 16th Street Mali 9E/EP1	Due Date Kequesa											Preservation C	odes: M Hexane	
ily; Omerican	TAT Requested (da	ays):			82268							8 NaOH C Zn Acetate	N None	
HE, 68102-2247					a bas a	neM A	elate					E NaHSO4	P Na204S Q Na2SO3 R Na2S2SO3	
Thorie: 231, 226-2515	# 04)\#\ \\	luč ,eb					G Amchlor H Ascorbic Acid	S H2SO4	
nnan. <u>kkuhing@oppd.com</u>	ii O				(on	bns II	houli						V MCAA	
70jest Name: Vebraska City Station Unit 2 CCR / Landfill	TestAmerica Project #: 31007559	#			JO 80,	l xibne	loride,						Z other (specify)	
ne. Vebraska City Station Unit 2	SSCW#:		ŀ	Т) asv	ddy 90	26A CF					02.10		_
			Sample Type	Matrix (www.	Filtered rm MS/I	8050V C	08,80T				- denil	edmuN		
Sample Identification	Sample Date	Sample	(C=comp, G=grab) er	3	ьецо	Total	2540C				101	Special	Instructions/Note:	_
COMMO	V 14/23	ر ۋ	Preservation	n Code:	^ }	٥ >	-	1				CCR Appendix	III and IV Constituents	
VC2MW3	4/4/22	14:29	0		+	-	_		+		Ŧ		SCR Appendix III and IV Constituents	_
4C2MW5	4/4/22	11:55	ø		+	-	-	L	F		Ť	CCR Appen	dix III and IV Constituents	_
VOZMW6	4/4/22	13:12	g	3	×	-	×				Ť	4 CCR Appendix I	CCR Appendix III and IV Constituents	_
UC2MW7	4/4/22	17:40	Ø	Т	×	×	×				Ė	4 CCR Appendix III and IV Con	III and IV Constituents	_
VC2MW8	4/4/22	15:21	Ø	Г	×	_	-				Ė		dix III and IV Constituents	_
OUP2	4/4/22	I	ø	T		-	_				Ť		CCR Appendix III and IV Constituents	_
							Н							
The second secon					#		+							_
					+		+				+			_
Identification] [[1	Sample L	e Disp) Jes	ral (A fee may be a	be assessed if	d if samples	are retain	ined longer than 1 month)	1 month)	_
Flammable Skin Irritant L	Poison B Unknown		Radiological		Specia	Return	To Clien	C Require	Dispos	By Lab]	hive For	Months	_
ishe		Date:		ľ	Lime:				Ì	ethod of Shipmer	ų			
ilinquished by:	Date(Time:			1	Re	aived by			A	Date/T	, C	3100	Company	_
elinquished by:	Date Ime.	1 .	3	Company	æ	aived by	1	1	M	Date	Date/Time:		Company	_
sinquished bý:	ije ije	`.)	mpany mpany	8	aived by	1	(í	Date/T	же:	- 1	Cempany	_
Custody Seals Intact: Custody Seal No.				ŀ	8	ler Temp	grature(s)	//w/ r Temperature(s) °C and Oth	Pr Remarks:	7	12-5-h	1200		_
Δ 785 Δ NO						4	1	1	1	9	7	6	3	-
						1	3	2						
Eurofins Cedar Falls 3019 Venture Way	J	Chain c	Chain of Custody Record	odv Re	Score	-						🔆 eurofins	S Environment Testing	
one, 319-277-2401 Fax; 319-277-2425	Sampler			Lab PN					Carrier	racking No(s).		COC No	America	_
Client Information (Sub Contract Lab)	Phone			Haye:	Hayes, Shawn M E-Mail	2			State of	Origin		310-48332.1 Page		_
ipping/Receiving mpany				Shaw	n.Hayes@et.eurofinsus.com Accreditations Required (See note):	et.eur	ofinsus.c	com ote):	Nebra	ska		Page 1 of 1		_
l estAmerica Laboratories, Inc.	Due Date Request	:pa										310-228287-2 Preservation Co	odes:	_
775 Rider Trail North,	5/10/2022 TAT Requested (da	ays):			A	L	Ĭ.	Analysis	Requested	9		A - HCL B - NaOH	M · Hexane	
Earm City State 2 pp MO 6 2 pp					p 12 - (301-300-			C - Zn Acetate D - Nitro Acid	O - AsnaO2 P - Na2O4S	
1	# Od			T	GFPC							F - MeOH G - Amchlor	G : Na2SO3 R - Na2S2O3 S - H2SO4	
14-298-8566(1e)) 314-298-8757(Fax)	# OM				(H - Ascorbic Acid	T - TSP Dodecahydrate U - Acetone	
oject Name.	Project #			T	N 10					_	eneul	K - EDTA	V - MCAA W - pH 4-5 Z - other (specify)	
Action of the Control	SSOW#				D (Yes						atuos i	Other:		
			Sample Type	Matrix (www.ater.	Filtered Samm Filtered Samma Razze/Prec	3228/Prec	R≥228_GFF				o redmin	o sedmuk		
ample Identification - Client ID (Lab ID)	Sample Date	Sample	(C=comp, G=grab) sr	. 3	9312 E		Radiur	0.00			letoT		Special Instructions/Note:	_
C2MW2 (310-228287-1)	414122	/		Water	×	×	×				1			
VC2MW3 (310-228287-2)	4/4/22	14:29 Central		Water	×	×	×							_
NC2MW5 (310-228287-3)	4/4/22	11:55 Central		Water	×	×	×							_
NC2MW6 (310-228287-4)	4/4/22	Central Central		Water	×	×	×		1		.4			
NC2MW7 (310-228287-5)	4/4/22	Central 15:21		Water	×	\rightarrow	×		7					
NC2MW8 (310-228287-6)	4/4/22	Central		Water	×	\rightarrow	×		-	+	~			
DUF2 (310-22828 <i>1-1</i>)	4/4/22	Central		Water	×	×	×							
or Since aboratory acreditators are subject to change. Eurofins Environment Testing North Central, LLC places the ownership of method, order on or currently maintain accreditation in the State of Organ isted above for avalyacisticisticismust being avalyzed, the samplese may creditation status should be trought to Eurofins Environment Testing North Central, LLC attention minedately. If all requested accreditations	Int Testing North Centra bove for analysis/tests intral, LLC attention im	at, LLC places the matrix being an mediately. If all	ne ownership of alyzed, the sam requested accr	method, analy ples must be s editations are o	e & accred hipped bac	ation cor to the E	npliance u profins En	pon out sub vironment T d Chain of G	contract labor esting North C	atones. This sam eniral, LLC labor ng to said compli-	ple shipmen atory or othe cance to Eur	it is forwarded under in structions will be golins Environment Te	under chain of-custody if the will be provided. Any changes to ment Testing North Central, LLC.	
ossible Hazard Identification					Samp	e Disp	Sample Disposal (A fee	fee may	be assess	may be assessed if samples are retained longer	are retain	ned longer than	than 1 month)	_
eliverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Rank: 2			Specia	cial Instruction	tions/Q	C Require	ments:	ו בא רפנו	AIC	mve ror	Months	_
mpty Kit Relinquished by:	Date/Time	Date:		mpany	Time:	od bevie			2	Sthod of Shipmer	1			
finanshed by	19 (2.1	1205		nosom	ď	camon hou		Ü.	FED EX				Company	_
EED EX	Date/Time:		ŏ	mpany	- Se	eceived by	3	Wedhin		gto APP	207	APR 0 7 2022 0965	5 CTASR Company	_
Custody Seals Intact: Custody Seal No.:					Š	ler Temp	erature(s)	°C and Oth	er Remarks:	+				_
No.					_			-						_

Page 22 of 26 5/10/2022 Page 23 of 26 5/10/2022

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-228287-2 SDG Number:

List Source: Eurofins Cedar Falls

Login Number: 228287 List Number: 1

Creator: Homolar, Dana J

Residual Chlorine Checked.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-228287-2 SDG Number:

List Source: Eurofins St. Louis

List Creation: 04/07/22 12:06 PM

List Number: 2 Creator: Worthington, Sierra M

Residual Chlorine Checked.

Login Number: 228287

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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	

N/A

 Eurofins Cedar Falls
 Eurofins Cedar Falls
 Fage 24 of 26
 5/10/2022
 Page 25 of 26
 5/10/2022

Tracer/Carrier Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 2 CCR/Landfill

Job ID: 310-228287-2

Method: 9315 - Radium-226 (GFPC)

Prep Type: Total/NA Matrix: Water

		Percent Yield (Acceptance Limits)
	Ва	
Client Sample ID	(40-110)	
NC2MW2	78.6	
NC2MW3	74.9	
NC2MW5	83.1	
NC2MW6	83.3	
NC2MW7	93.8	
NC2MW8	91.3	
DUP2	92.5	
Lab Control Sample	87.3	
Lab Control Sample Dup	88.3	
Method Blank	91.0	
	NC2MW2 NC2MW3 NC2MW5 NC2MW6 NC2MW6 NC2MW7 NC2MW8 DUP2 Lab Control Sample Lab Control Sample	Client Sample ID (40-110) NC2MW2 78.6 NC2MW3 74.9 NC2MW5 83.1 NC2MW6 83.3 NC2MW7 93.8 NC2MW8 91.3 DUP2 92.5 Lab Control Sample 87.3 Lab Control Sample Dup 88.3

Method: 9320 - Radium-228 (GFPC)

Matrix: Water Prep Type: Total/NA

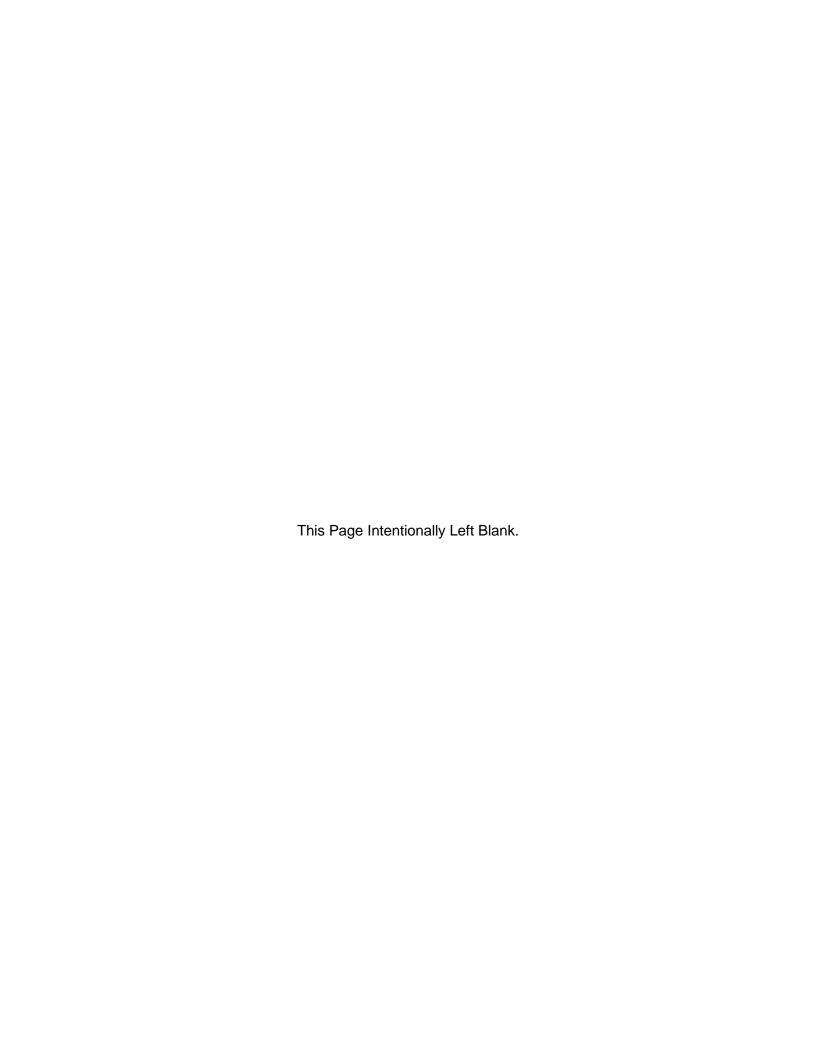
				Percent Yield (Acceptance Limits)
		Ва	Y	
Lab Sample ID	Client Sample ID	(40-110)	(40-110)	
310-228287-1	NC2MW2	78.6	85.2	
310-228287-2	NC2MW3	74.9	86.4	
310-228287-3	NC2MW5	83.1	86.7	
310-228287-4	NC2MW6	83.3	87.9	
310-228287-5	NC2MW7	93.8	90.1	
310-228287-6	NC2MW8	91.3	80.7	
310-228287-7	DUP2	92.5	83.0	
LCS 160-559628/1-A	Lab Control Sample	87.3	82.6	
LCSD 160-559628/2-A	Lab Control Sample Dup	88.3	82.6	
MB 160-559628/23-A	Method Blank	91.0	88.2	

Tracer/Carrier Legend

Ba = Ba Carrier Y = Y Carrier

Eurofins Cedar Falls

Page 26 of 26 5/10/2022





Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-241714-1

Client Project/Site: Nebraska City Unit 2 CCR

For:

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

Attn: Kyle Uhing

RCH

Authorized for release by: 10/21/2022 4:54:06 PM Brian Graettinger, Lab Director (319)595-2012 Brian.Graettinger@et.eurofinsus.com

Designee for

Shirley Thompson, Client Service Manager (319)277-2401

Shirley.Thompson@et.eurofinsus.com

Review your project results through



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR

Laboratory Job ID: 310-241714-1

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	7
Definitions	14
QC Sample Results	15
QC Association	18
Chronicle	20
Certification Summary	22
Method Summary	23
Chain of Custody	24
Receipt Checklists	27

Eurofins Cedar Falls 10/21/2022

Page 2 of 27

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR	Job ID: 310-241714-1
Tojeci olie. Nebraska oliy onii 2 ook	
Job ID: 310-241714-1	
Laboratory: Eurofins Cedar Falls	
Narrative	
Job Narrative 310-241714-1	
2	
Comments No additional comments.	
Receipt	
The samples were received on 10/5/2022 4:50 PM. Unless otherwise noted below, the samples arrive required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0° (
	Sand 1.1 C.
Receipt Exceptions The following container was received with only 125mL in the container. NC2MW2 (310-241714-1), NC2MW3 (310-241714-2), NC2MW (310-241714-3), NC2MW6 (310-241714-4), NC2MW7 (310-241714-5), NC2MW8 (310-241714-6) and DUP2 (310-241714-7)	
Method 9056A: The following samples were diluted due to the nature of the sample matrix: NC2MW5 (310-241714-4), NC2MW7 (310-241714-5), NC2MW8 (310-241714-6) and DUP2 (310-241714-7). Ele	
provided.	,
No additional analytical or quality issues were noted, other than those described above or in the Defini	itions/Glossary page.
Metals	
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page	э.
General Chemistry	
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page	Э.

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-241714-1	NC2MW2	Water	10/03/22 15:20	10/05/22 16:50
310-241714-2	NC2MW3	Water	10/03/22 13:17	10/05/22 16:50
310-241714-3	NC2MW5	Water	10/04/22 08:36	10/05/22 16:50
310-241714-4	NC2MW6	Water	10/04/22 08:47	10/05/22 16:50
310-241714-5	NC2MW7	Water	10/03/22 16:10	10/05/22 16:50
310-241714-6	NC2MW8	Water	10/03/22 14:39	10/05/22 16:50
310-241714-7	DUP2	Water	10/03/22 00:00	10/05/22 16:50

8

10 11

13

14

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CO		ection Su	mmary		Job ID: 310-241714-1		Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 C	1	ection Su	mmary		Job I	ID: 310-241714
Client Sample ID: NC2MW2				Lab Sample	ID: 310-241714-1	3	Client Sample ID: NC2MW6 (Continued)			Lab	Sample ID:	310-241714
Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type		Analyte	Result Qualifier	RL	MDL Unit	Dil Fac	D Method	Prep Type
Chloride	11.3	5.00	2.25 mg/L	5 9056A	Total/NA		Barium	0.146	0.00200	0.000880 mg/L	1	6020A	Total/NA
Fluoride	0.330 J	0.500	0.220 mg/L	5 9056A	Total/NA		Boron	2.33	0.100	0.0580 mg/L	1	6020A	Total/NA
Sulfate	319	5.00	2.00 mg/L	5 9056A	Total/NA	5	Calcium	120	0.500	0.190 mg/L	1	6020A	Total/NA
Antimony	0.00298	0.00200	0.000690 mg/L	1 6020A	Total/NA		Cobalt	0.000724	0.000500	0.000190 mg/L	1	6020A	Total/NA
Arsenic	0.00104 J	0.00200	0.000750 mg/L	1 6020A	Total/NA		Lead	0.000568	0.000500	0.000240 mg/L	1	6020A	Total/NA
Barium	0.108	0.00200	0.000880 mg/L	1 6020A	Total/NA		Lithium	0.0387	0.0100	0.00250 mg/L		6020A	Total/NA
Boron	0.559	0.100	0.0580 mg/L	1 6020A	Total/NA		Molybdenum	0.0137	0.00200	0.00120 mg/L	1	6020A	Total/NA
Cadmium	0.000206	0.000100	0.0000550 mg/L	1 6020A	Total/NA		Total Dissolved Solids	566	50.0	26.0 mg/L	1	SM 2540C	Total/NA
Calcium Cobalt	241 0.000713	0.500	0.190 mg/L 0.000190 mg/L	1 6020A 1 6020A	Total/NA Total/NA	3 c	Client Sample ID: NC2MW7				Lab	Sample ID:	310-241714-
Lead	0.000713	0.000500	0.000190 mg/L 0.000240 mg/L	1 6020A 1 6020A	Total/NA		-						
Lithium	0.000653	0.000500	0.000240 mg/L 0.00250 mg/L	1 6020A 1 6020A	Total/NA		Analyte	Result Qualifier	RL	MDL Unit		D Method	Prep Type
Molybdenum	0.0354	0.00200	0.00120 mg/L	1 6020A	Total/NA		Chloride	8.88	5.00	2.25 mg/L	5	9056A	Total/NA
Total Dissolved Solids	1030	50.0	26.0 mg/L	1 SM 2540			Arsenic	0.0478	0.00200	0.000750 mg/L	1	6020A	Total/NA
	· · · · · · · · · · · · · · · · · · ·						Barium	0.607	0.00200	0.000880 mg/L		6020A	Total/NA
Client Sample ID: NC2MW3				Lab Sample	ID: 310-241714-2		Boron Calcium	0.249	0.100	0.0580 mg/L	1	6020A 6020A	Total/NA Total/NA
Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type		Cobalt	117 0.000236 J	0.500	0.190 mg/L 0.000190 mg/L	1	6020A 6020A	Total/NA
Chloride	12.1 Qualifier	5.00	2.25 mg/L	5 9056A	Total/NA		Lithium	0.00236 3	0.0100	0.000190 mg/L		6020A	Total/NA
Fluoride	1.17	0.500	0.220 mg/L	5 9056A	Total/NA	_	Molybdenum	0.00186 J	0.00200	0.00230 mg/L		6020A	Total/NA
Sulfate	563	20.0	8.00 mg/L	20 9056A	Total/NA	16.1	Total Dissolved Solids	482	50.0	26.0 mg/L	1	SM 2540C	Total/NA
Arsenic	0.00344	0.00200	0.000750 mg/L	1 6020A	Total/NA		-	102		20.0 mg/2	· ·	0111 20100	Totalitet
Barium	0.0718	0.00200	0.000880 mg/L	1 6020A	Total/NA	4 0	Client Sample ID: NC2MW8				Lab	Sample ID:	310-241714-
Boron	0.468	0.100	0.0580 mg/L	1 6020A	Total/NA		-						
Calcium	194	0.500	0.190 mg/L	1 6020A	Total/NA		Analyte Chloride	Result Qualifier 9.91	RL 5.00	MDL Unit 2.25 mg/L	Dil Fac	D Method 9056A	Prep Type Total/NA
Cobalt	0.00328	0.000500	0.000190 mg/L	1 6020A	Total/NA	1 1	Sulfate	13.3	5.00	2.25 mg/L 2.00 mg/L	5	9056A 9056A	Total/NA
Lithium	0.0234	0.0100	0.00250 mg/L	1 6020A	Total/NA	1 1	Arsenic	0.0181	0.00200	0.000750 mg/L	1	6020A	Total/NA
Molybdenum	0.00250	0.00200	0.00120 mg/L	1 6020A	Total/NA		Barium	0.618	0.00200	0.000880 mg/L		6020A	Total/NA
Total Dissolved Solids	1440	50.0	26.0 mg/L	1 SM 2540	OC Total/NA	1 1 1	Boron	0.153	0.100	0.0580 mg/L	1	6020A	Total/NA
Client Sample ID: NC2MW5				I ah Samnlo	ID: 310-241714-3		Calcium	125	0.500	0.190 mg/L	1	6020A	Total/NA
				Lab Gampie	7 ID. 010-2417 14-0		Cobalt	0.00230	0.000500	0.000190 mg/L	1	6020A	Total/NA
Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type		Lead	0.000321 J	0.000500	0.000240 mg/L	1	6020A	Total/NA
Chloride	7.59	5.00	2.25 mg/L	5 9056A	Total/NA		Lithium	0.0364	0.0100	0.00250 mg/L	1	6020A	Total/NA
Sulfate	202	5.00	2.00 mg/L	5 9056A	Total/NA		Molybdenum	0.00184 J	0.00200	0.00120 mg/L	1	6020A	Total/NA
Arsenic	0.00225	0.00200	0.000750 mg/L	1 6020A	Total/NA		Total Dissolved Solids	492	50.0	26.0 mg/L	1	SM 2540C	Total/NA
Barium	0.0548	0.00200	0.000880 mg/L	1 6020A	Total/NA	-	Client Sample ID: DUP2				Lab	Sample ID:	310-241714-7
Boron	3.81	0.100	0.0580 mg/L	1 6020A	Total/NA	=	Silent Sample ID. DOF2				Lab	Sample ID.	310-241714-
Cadmium	0.0000700 J	0.000100	0.0000550 mg/L	1 6020A	Total/NA		Analyte	Result Qualifier	RL	MDL Unit	Dil Fac	D Method	Prep Type
Calcium Cobalt	169 0.000306 J	0.500 0.000500	0.190 mg/L	1 6020A 1 6020A	Total/NA Total/NA		Chloride	8.99	5.00	2.25 mg/L	5	9056A	Total/NA
Lead	0.000306 3	0.000500	0.000190 mg/L 0.000240 mg/l	1 6020A 1 6020A	Total/NA		Arsenic	0.0533	0.00200	0.000750 mg/L	1	6020A	Total/NA
Lithium	0.0142	0.0100	0.000240 mg/L 0.00250 mg/L	1 6020A	Total/NA		Barium	0.653	0.00200	0.000880 mg/L	1	6020A	Total/NA
Molybdenum	0.0356	0.00200	0.00230 mg/L	1 6020A	Total/NA		Boron	0.188	0.100	0.0580 mg/L	1	6020A	Total/NA
Total Dissolved Solids	832	50.0	26.0 mg/L	1 SM 2540		1 1 1	Calcium	115	0.500	0.190 mg/L	1	6020A	Total/NA
						1 1	Cobalt	0.000259 J	0.000500	0.000190 mg/L		6020A	Total/NA
Client Sample ID: NC2MW6				Lab Sample	ID: 310-241714-4	1 1 1	Lithium	0.0572	0.0100	0.00250 mg/L	1	6020A	Total/NA
Analysis	Beent C. III	-	MDI III	Diller B W.C.	D	1 1	Molybdenum Total Discolated Calida	0.00156 J	0.00200	0.00120 mg/L	1	6020A	Total/NA
Analyte Chloride	Result Qualifier 6.05	5.00	2.25 Unit mg/L	<u>Dil Fac</u> <u>D</u> <u>Method</u> 5 <u>9056A</u>	Prep Type Total/NA		Total Dissolved Solids	478	50.0	26.0 mg/L	1	SM 2540C	Total/NA
Sulfate	97.9	5.00	2.25 mg/L 2.00 mg/L	5 9056A 5 9056A	Total/NA								
Arsenic	0.00123 J	0.00200	0.000750 mg/L	1 6020A	Total/NA								
This Detection Summary does not include rad	diochemical test results.					Т	his Detection Summary does not include rad	diochemical test results.					
					Eurofins Cedar Falls							Eur	rofins Cedar Falls
		Page 5 of	27		10/21/2022				Page 6 of	27			10/21/2022

5

Client Sample Results Client: Omaha Public Power District Job ID: 310-241714-1 Project/Site: Nebraska City Unit 2 CCR Client Sample ID: NC2MW2 Lab Sample ID: 310-241714-1 Date Collected: 10/03/22 15:20 Matrix: Water Date Received: 10/05/22 16:50 Method: SW846 9056A - Anions, Ion Chromatography Result Qualifier MDL Unit Analyte Analyzed Dil Fac 5.00 2.25 mg/L 10/21/22 02:08 Chloride 11.3 Fluoride 0.330 J 0.500 0.220 mg/L 10/21/22 02:08 6 2.00 mg/L 10/21/22 02:08 5.00 5 Sulfate 319 Method: SW846 6020A - Metals (ICP/MS) RL MDL Unit Prepared Dil Fac Analyte Result Qualifier Analyzed Antimony 0.00298 0.00200 0.000690 mg/L 10/07/22 09:45 10/17/22 21:06 10/07/22 09:45 10/17/22 21:06 0.00200 0.000750 mg/l Arsenic 0.00104 .1 Barium 0.108 0.00200 0.000880 mg/L 10/07/22 09:45 10/17/22 21:06 0.000270 mg/L 10/07/22 09:45 <0.000270 0.00100 10/17/22 21:06 Bervllium 0.0580 mg/L 0.559 0.100 10/07/22 09:45 10/17/22 21:06 Boron 0.0000550 mg/L 0.000100 10/17/22 21:06 Cadmium 0.000206 10/07/22 09:45 Calcium 241 0.500 0.190 mg/L 10/07/22 09:45 10/17/22 21:06 Chromium < 0.00110 0.00500 0.00110 mg/L 10/07/22 09:45 10/17/22 21:06 Cobalt 0.000713 0.000500 0.000190 mg/L 10/07/22 09:45 10/17/22 21:06 Lead 0.000853 0.000500 0.000240 mg/L 10/07/22 09:45 10/17/22 21:06 Lithium 0.0100 0.00250 mg/L 10/07/22 09:45 10/17/22 21:06 0.0338 Molybdenum 0.0354 0.00200 0.00120 mg/L 10/07/22 09:45 10/17/22 21:06 0.00500 0.000960 mg/L 10/07/22 09:45 10/17/22 21:06 < 0.000960 Selenium Thallium < 0.000260 0.00100 0.000260 mg/L 10/07/22 09:45 10/17/22 21:06 Method: SW846 7470A - Mercury (CVAA) Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Mercury <0.000110 0.000110 mg/L 10/14/22 14:47 10/17/22 14:57 **General Chemistry**

50.0

1030

Analyte

Total Dissolved Solids (SM 2540C)

MDL Unit

26.0 mg/L

Client Sample Results

5.00

0.500

20.0

0.00200

0.00200

0.00200

0.00100

0.000100

0.100

0.500

0.00500

0.000500

0.000500

0.0100

0.00200

0.00500

0.00100

2.25 mg/L

0.220 mg/L

8.00 mg/L

MDL Unit

0.000690 mg/L

0.000750 mg/L

0.000880 mg/L

0.000270 mg/L

0.0000550 mg/L

0.0580 mg/L

0.190 mg/L

0.00110 mg/L

0.000190 mg/L

0.000240 mg/L

0.00250 mg/L

0.00120 mg/L

0.000960 mg/L

0.000260 mg/L

0.000110 mg/L

MDL Unit

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Client Sample ID: NC2MW3

Date Collected: 10/03/22 13:17

Date Received: 10/05/22 16:50

Analyte

Chloride

Fluoride

Sulfate

Analyte

Antimony

Arsenic

Barium

Bervllium

Cadmium

Calcium

Chromium

Cobalt

Lithium

Selenium

Thallium

Analyte

Mercury

Molybdenum

Lead

Boron

Method: SW846 9056A - Anions, Ion Chromatography

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

Method: SW846 7470A - Mercury (CVAA)

Result Qualifie

Result Qualifier

12.1

1.17

563

<0.000690

0.00344

<0.000270

<0.0000550

< 0.00110

0.00328

< 0.000240

0.0234

0.00250

<0.000960

<0.000260

<0.000110

Result Qualifie

0.0718

0.468

Job ID: 310-241714-1

Lab Sample ID: 310-241714-2

Matrix: Water

Analyzed

10/21/22 02:24

10/21/22 02:24

10/21/22 02:39

Analyzed

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

10/17/22 21:09

Prepared

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

10/07/22 09:45

Dil Fac	5
5	

20

	14	
Dil Fac	0	
1	0	l
1	_	
4		

- 1		
1	0	
1	9	
1	40	
1	10	
.1		
1	11	
1		
1	12	

1		
1	40	
1	10	
1		
1 1 1 1 1 1	11	
1		
1	12	
1		
	13	
1		
4		





D	Prepared	Analyzed	Dil Fac

	Result	Qualifier	RL	MDL	Unit	D	Prepar
E40C)	4440		E0.0	26.0	ma/l	_	

0.000200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil F
Total Dissolved Solids (SM 2540C)	1440		50.0	26.0	mg/L			10/06/22 13:40	

Eurofins Cedar Falls

Page 7 of 27 10/21/2022 Eurofins Cedar Falls

Page 8 of 27

10/21/2022

Prepared

Analyzed

10/06/22 13:40

Client Sample Results Client: Omaha Public Power District Job ID: 310-241714-1 Project/Site: Nebraska City Unit 2 CCR Client Sample ID: NC2MW5 Lab Sample ID: 310-241714-3 Date Collected: 10/04/22 08:36 Matrix: Water Date Received: 10/05/22 16:50 Method: SW846 9056A - Anions, Ion Chromatography Analyte Result Qualifier MDL Unit Dil Fac Analyzed 5.00 2.25 mg/L 10/21/22 02:55 Chloride 7.59 Fluoride <0.220 0.500 0.220 mg/L 10/21/22 02:55 6 10/21/22 02:55 5 5.00 2.00 mg/L Sulfate 202 Method: SW846 6020A - Metals (ICP/MS) MDL Unit RL Prepared Analyte Result Qualifier Analyzed Dil Fac Antimony <0.000690 0.00200 0.000690 mg/L 10/07/22 09:45 10/17/22 21:13 0.000750 mg/L 10/07/22 09:45 10/17/22 21:13 0.00200 Arsenic 0.00225 Barium 0.00200 0.000880 mg/L 10/07/22 09:45 10/17/22 21:13 0.00100 0.000270 mg/L 10/07/22 09:45 10/17/22 21:13 < 0.000270 Bervllium 3.81 0.100 0.0580 mg/L 10/07/22 09:45 10/17/22 21:13 Boron 0.0000700 J 0.0000550 mg/L 0.000100 10/07/22 09:45 10/17/22 21:13 Cadmium Calcium 169 0.500 0.190 mg/L 10/07/22 09:45 10/17/22 21:13 <0.00110 10/07/22 09:45 Chromium 0.00500 0.00110 mg/L 10/17/22 21:13 Cobalt 0.000306 J 0.000500 0.000190 mg/L 10/07/22 09:45 10/17/22 21:13 Lead 0.00208 0.000500 0.000240 mg/L 10/07/22 09:45 10/17/22 21:13 Lithium 0.0100 0.00250 mg/L 10/07/22 09:45 10/17/22 21:13 0.0142 Molybdenum 0.0356 0.00200 0.00120 mg/L 10/07/22 09:45 10/17/22 21:13 <0.000960 0.00500 0.000960 mg/L 10/07/22 09:45 10/17/22 21:13 Selenium Thallium < 0.000260 0.00100 0.000260 mg/L 10/07/22 09:45 10/17/22 21:13 Method: SW846 7470A - Mercury (CVAA) Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Mercury <0.000110 0.000200 0.000110 mg/L 10/14/22 14:47 10/17/22 15:15 **General Chemistry**

50.0

Analyte

Total Dissolved Solids (SM 2540C)

832

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

Client Sample ID: NC2MW6

Lab Sample ID: 310-241714-4

Date Collected: 10/04/22 08:47

Total Dissolved Solids (SM 2540C)

Date Received: 10/05/22 16:50

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6.05		5.00	2.25	mg/L			10/21/22 03:10	- 5	
Fluoride	<0.220		0.500	0.220	mg/L			10/21/22 03:10	5	
Sulfate	97.9		5.00	2.00	mg/L			10/21/22 03:10	5	ē
Method: SW846 6020A -	Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Antimony	<0.000690		0.00200	0.000690	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Arsenic	0.00123	J	0.00200	0.000750	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Barium	0.146		0.00200	0.000880	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Beryllium	<0.000270		0.00100	0.000270	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Boron	2.33		0.100	0.0580	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Calcium	120		0.500	0.190	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Chromium	<0.00110		0.00500	0.00110	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Cobalt	0.000724		0.000500	0.000190	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Lead	0.000568		0.000500	0.000240	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Lithium	0.0387		0.0100	0.00250	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Molybdenum	0.0137		0.00200	0.00120	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Selenium	<0.000960		0.00500	0.000960	mg/L		10/07/22 09:45	10/17/22 21:34	1	
Thallium	<0.000260		0.00100	0.000260	mg/L		10/07/22 09:45	10/17/22 21:34	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		10/14/22 14:47	10/17/22 15:17	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	

50.0

566

26.0 mg/L

Eurofins Cedar Falls

Page 9 of 27 10/21/2022

Prepared

Analyzed

10/07/22 16:28

Dil Fac

Eurofins Cedar Falls

10/07/22 16:28

Page 10 of 27

10/21/2022

MDL Unit

26.0 mg/L

Client Sample Results Client: Omaha Public Power District Job ID: 310-241714-1 Project/Site: Nebraska City Unit 2 CCR Client Sample ID: NC2MW7 Lab Sample ID: 310-241714-5 Date Collected: 10/03/22 16:10 Matrix: Water Date Received: 10/05/22 16:50 Method: SW846 9056A - Anions, Ion Chromatography Analyte Result Qualifier MDL Unit Dil Fac Analyzed 8.88 5.00 2.25 mg/L 10/21/22 03:57 Chloride Fluoride <0.220 0.500 0.220 mg/L 10/21/22 03:57 6 10/21/22 03:57 Sulfate 5.00 2.00 mg/L < 2.00 Method: SW846 6020A - Metals (ICP/MS) MDL Unit RL Prepared Analyte Result Qualifier Analyzed Dil Fac Antimony <0.000690 0.00200 0.000690 mg/L 10/07/22 09:45 10/17/22 21:41 0.000750 mg/L 10/07/22 09:45 10/17/22 21:41 0.00200 Arsenic 0.0478 Barium 0.607 0.00200 0.000880 mg/L 10/07/22 09:45 10/17/22 21:41 0.00100 0.000270 mg/L 10/07/22 09:45 10/17/22 21:41 < 0.000270 Bervllium 0.249 0.100 0.0580 mg/L 10/07/22 09:45 10/17/22 21:41 Boron 0.0000550 mg/L <0.0000550 0.000100 10/07/22 09:45 10/17/22 21:41 Cadmium Calcium 117 0.500 0.190 mg/L 10/07/22 09:45 10/17/22 21:41 <0.00110 10/07/22 09:45 Chromium 0.00500 0.00110 mg/L 10/17/22 21:41 Cobalt 0.000236 J 0.000500 0.000190 mg/L 10/07/22 09:45 10/17/22 21:41 Lead < 0.000240 0.000500 0.000240 mg/L 10/07/22 09:45 10/17/22 21:41 Lithium 0.0100 0.00250 mg/L 10/07/22 09:45 10/17/22 21:41 0.0572 Molybdenum 0.00186 J 0.00200 0.00120 mg/L 10/07/22 09:45 10/17/22 21:41 <0.000960 0.00500 0.000960 mg/L 10/07/22 09:45 10/17/22 21:41 Selenium Thallium < 0.000260 0.00100 0.000260 mg/L 10/07/22 09:45 10/17/22 21:41 Method: SW846 7470A - Mercury (CVAA) Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Mercury <0.000110 0.000200 0.000110 mg/L 10/14/22 14:47 10/17/22 15:19

50.0

482

MDL Unit

26.0 mg/L

General Chemistry Analyte

Total Dissolved Solids (SM 2540C)

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

Client Sample ID: NC2MW8 Date Collected: 10/03/22 14:39

Lab Sample ID: 310-241714-6

Matrix: Water

Date Received: 10/05/22 16:50 Method: SW846 9056A - Anions, Ion Chromatography

motified. Office Stock - Amons, for officinatography											
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	1 5
	Chloride	9.91		5.00	2.25	mg/L			10/21/22 04:13	- 5	
	Fluoride	<0.220		0.500	0.220	mg/L			10/21/22 04:13	5	6
	Sulfate	13.3		5.00	2.00	mg/L			10/21/22 04:13	5	
	_										
	Method: SW846 6020A - Metals (IC	P/MS)									

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.000690		0.00200	0.000690	mg/L		10/07/22 09:45	10/17/22 21:45	1
Arsenic	0.0181		0.00200	0.000750	mg/L		10/07/22 09:45	10/17/22 21:45	1
Barium	0.618		0.00200	0.000880	mg/L		10/07/22 09:45	10/17/22 21:45	1
Beryllium	<0.000270		0.00100	0.000270	mg/L		10/07/22 09:45	10/17/22 21:45	1
Boron	0.153		0.100	0.0580	mg/L		10/07/22 09:45	10/17/22 21:45	1
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		10/07/22 09:45	10/17/22 21:45	1
Calcium	125		0.500	0.190	mg/L		10/07/22 09:45	10/17/22 21:45	1
Chromium	<0.00110		0.00500	0.00110	mg/L		10/07/22 09:45	10/17/22 21:45	1
Cobalt	0.00230		0.000500	0.000190	mg/L		10/07/22 09:45	10/17/22 21:45	1
Lead	0.000321	J	0.000500	0.000240	mg/L		10/07/22 09:45	10/17/22 21:45	1
Lithium	0.0364		0.0100	0.00250	mg/L		10/07/22 09:45	10/17/22 21:45	1
Molybdenum	0.00184	J	0.00200	0.00120	mg/L		10/07/22 09:45	10/17/22 21:45	1
Selenium	<0.000960		0.00500	0.000960	mg/L		10/07/22 09:45	10/17/22 21:45	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		10/07/22 09:45	10/17/22 21:45	1

	Method: SW846 7470A - Mercury (CVAA)										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Į	Mercury	<0.000110		0.000200	0.000110	mg/L		10/14/22 14:47	10/17/22 15:21	1	
	General Chemistry										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	

50.0

26.0 mg/L

Eurofins Cedar Falls

Page 11 of 27 10/21/2022 Eurofins Cedar Falls

10/06/22 13:40

Page 12 of 27

10/21/2022

Total Dissolved Solids (SM 2540C) 492

Analyzed 10/06/22 13:40

Prepared

Client Sample Results

Client: Omaha Public Power District

Job ID: 310-241714-1

Matrix: Water

Project/Site: Nebraska City Unit 2 CCR

Lab Sample ID: 310-241714-7

Client Sample ID: DUP2 Date Collected: 10/03/22 00:00

Date Received: 10/05/22 16:50

Total Dissolved Solids (SM 2540C)

Dil Fac

6

Method: SW846 9056A - Anions, lo	n Chromatog	graphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed
Chloride	8.99		5.00	2.25	mg/L			10/21/22 04:28
Fluoride	<0.220		0.500	0.220	mg/L			10/21/22 04:28
Sulfate	<2.00		5.00	2.00	mg/L			10/21/22 04:28

/21/22 04:28 /21/22 04:28 10/21/22 04:28

Sulfate	<2.00	5.00	2.00	mg/L
Method: SW846 6020A - Metals (ICP/MS)				

478

Welliou: Swo46 6020A -	Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Antimony	<0.000690		0.00200	0.000690	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Arsenic	0.0533		0.00200	0.000750	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Barium	0.653		0.00200	0.000880	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Beryllium	<0.000270		0.00100	0.000270	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Boron	0.188		0.100	0.0580	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Cadmium	< 0.0000550		0.000100	0.0000550	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Calcium	115		0.500	0.190	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Chromium	<0.00110		0.00500	0.00110	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Cobalt	0.000259	J	0.000500	0.000190	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Lead	<0.000240		0.000500	0.000240	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Lithium	0.0572		0.0100	0.00250	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Molybdenum	0.00156	J	0.00200	0.00120	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Selenium	<0.000960		0.00500	0.000960	mg/L		10/07/22 09:45	10/17/22 21:48	1	
Thallium	<0.000260		0.00100	0.000260	mg/L		10/07/22 09:45	10/17/22 21:48	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		10/14/22 14:47	10/17/22 15:23	1

Mercury	<0.000110		0.000200	0.000110	mg/L	_	10/14/22 14:47	10/17/22 15:23	1	
_										
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	478		50.0	26.0	mg/L	_		10/06/22 13:40	1	

26.0 mg/L

Definitions/Glossary

Client: Omaha Public Power District Job ID: 310-241714-1 Project/Site: Nebraska City Unit 2 CCR

Qualifiers

HPLC/IC

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

Qualifier

Qualifier Description

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 DFR 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)

FDI 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) Minimum Detectable Concentration (Radiochemistry)

MDC MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit

MQL 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 RFR

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

Eurofins Cedar Falls

Page 13 of 27 10/21/2022 Eurofins Cedar Falls

Page 14 of 27

	QC	Sample I	Results						Q	C Sample	Results				
lient: Omaha Public Power District roject/Site: Nebraska City Unit 2 CCR		•				Job ID: 310-2	241714-1	Client: Omaha Public Project/Site: Nebrask	Power District					Job ID: 310-24	17
Method: 9056A - Anions, Ion Ch	romatography							Method: 6020A -	Metals (ICP/MS) (Continued)						
Lab Sample ID: MB 310-369461/3 Matrix: Water Analysis Batch: 369461					Client S	ample ID: Metho		Lab Sample ID: LC Matrix: Water Analysis Batch: 36					Client Sample ID	Prep Type: To Prep Batch: 3	ot
,	MB MB									Spike	LCS LCS			%Rec	
Analyte	Result Qualifier	RL	MDL Unit		D Prepared	Analyzed	Dil Fac	Analyte Lead		0.200 —	Result Qualifier 0.2054	_ Unit mg/L		Limits	-
Chloride	<0.450	1.00	0.450 mg/L			10/21/22 00:50	1	Lithium		0.200	0.1941	mg/L		30 - 120	
Fluoride	<0.0440	0.100				10/21/22 00:50	1	Molybdenum		0.200	0.1924	mg/L		30 - 120	
Sulfate	<0.400	1.00	0.400 mg/L			10/21/22 00:50	1	Selenium		0.400	0.3578	mg/L		30 _ 120	
Lab Sample ID: LCS 310-369461/4					Client Sample	ID: Lab Control	I Sample	Thallium		0.200	0.2064	mg/L		30 _ 120	
Matrix: Water						Prep Type:		-							
Analysis Batch: 369461								Lab Sample ID: 310	0-241714-4 DU				Client	t Sample ID: NC	
		Spike	LCS LCS			%Rec		Matrix: Water	1000					Prep Type: To	
Analyte		Added	Result Qualifier	Unit	D %Rec	Limits		Analysis Batch: 36	Sample Sample		DU DU			Prep Batch: 3	36
Chloride		10.0	9.263	mg/L	93	90 _ 110		Analyte	Sample Sample Result Qualifier		Result Qualifier	Unit	D	RPD	
Fluoride Sulfate		2.00 10.0	1.884 9.452	mg/L mg/L	94 95	90 - 110 90 - 110		Antimony	<0.000690 Qualifier		<0.000690 Qualifier	mg/L	<u> </u>	NC NC	
		10.0	J.40Z	mg/L	95	30 - 110		Arsenic	0.00123 J		0.001213 J	mg/L		2	
Method: 6020A - Metals (ICP/MS	S)							Barium	0.146		0.1460	mg/L		0.2	
•								Beryllium	<0.000270		<0.000270	mg/L		NC	
Lab Sample ID: MB 310-367783/1-A					Client S	ample ID: Metho		Boron	2.33		2.365	mg/L		1	
Matrix: Water						Prep Type:		Cadmium	<0.000550	<	0.0000550	mg/L		NC	
Analysis Batch: 368920	MB MB					Prep Batch	1: 367783	Calcium	120		120.9	mg/L		0.8	
Analyte	Result Qualifier	RI	MDI Unit		D Prepared	Analyzed	Dil Fac	Chromium Cobalt	<0.00110 0.000724		<0.00110 0.0007500	mg/L		NC 4	
Antimony	<0.000690	0.00200	0.000690 mg/L		10/07/22 09:45		1	Lead	0.000724		0.0007500	mg/L mg/L		9	
Arsenic	<0.000750	0.00200	0.000750 mg/L		10/07/22 09:45		1	Lithium	0.000568		0.0008210	mg/L		0.7	
Barium	<0.000880	0.00200	0.000880 mg/L		10/07/22 09:45		1	Molybdenum	0.0387		0.03093	mg/L		0.6	
Beryllium	<0.000270	0.00100	0.000270 mg/L		10/07/22 09:45	10/17/22 18:28	1	Selenium	<0.000960		<0.000960	mg/L		NC	
Boron	<0.0580	0.100	0.0580 mg/L		10/07/22 09:45		1	Thallium	<0.000260		<0.000260	mg/L		NC	
Cadmium	<0.0000550	0.000100			10/07/22 09:45		1								_
Calcium	<0.190	0.500	0.190 mg/L		10/07/22 09:45		1	Method: 7470A -	Mercury (CVAA)						_
Chromium	<0.00110	0.00500	0.00110 mg/L		10/07/22 09:45		1	Lab Sample ID: MB	3 310-368713/1-A				Client Sam	nple ID: Method	4 B
Cobalt	<0.000190 <0.000240	0.000500	0.000190 mg/L 0.000240 mg/L		10/07/22 09:45 10/07/22 09:45		1	Matrix: Water	3 3 10-3007 13/1-A				Chefft San	Prep Type: To	
Lithium	<0.00250	0.0100			10/07/22 09:45		1	Analysis Batch: 36	8887					Prep Batch: 3	
Molybdenum	<0.00120	0.00200	0.00120 mg/L		10/07/22 09:45		1		MB MB						
Selenium	<0.000960	0.00500	0.000960 mg/L		10/07/22 09:45		1	Analyte	Result Qualifier	R			D Prepared	Analyzed	D
Thallium	<0.000260	0.00100	0.000260 mg/L		10/07/22 09:45	10/17/22 18:28	1	Mercury	<0.000110	0.00020	0 0.000110 mg/	-	10/14/22 14:47	10/17/22 14:53	
								Lab Sample ID: LC	S 310-368713/2-A				Client Sample ID): I ah Control S	201
Lab Sample ID: LCS 310-367783/2-A Matrix: Water					Client Sample	ID: Lab Control		Matrix: Water	0 0 10 -0007 10/2-14				Onent Gample ID	Prep Type: To	
Analysis Batch: 368920						Prep Type: Prep Batch		Analysis Batch: 36	8887					Prep Batch: 3	
Analysis Batch. 300320		Spike	LCS LCS			%Rec	1. 307703			Spike	LCS LCS			%Rec	
Analyte		Added	Result Qualifier	Unit	D %Rec	Limits		Analyte		Added	Result Qualifier	Unit		Limits	_
Antimony		0.200	0.1872	mg/L	94	80 - 120		Mercury		0.00167	0.001567	mg/L	94 8	30 - 120	
Arsenic		0.200	0.1926	mg/L	96	80 _ 120		Lab Sample ID: 310	0 244744 4 MS				00	t Cample ID: NO	
Barium			0.09836	mg/L	98	80 _ 120		Matrix: Water	U-241/14-1 MS				Client	t Sample ID: NC Prep Type: To	
Beryllium		0.100	0.1057	mg/L	106	80 - 120		Analysis Batch: 36	8887					Prep Batch: 3	
Boron		0.200	0.1993	mg/L	100	80 _ 120		Analysis Datell: 30	Sample Sample	Spike	MS MS			%Rec	50
Cadmium			0.09815	mg/L	98	80 _ 120		Analyte	Result Qualifier	Added	Result Qualifier	Unit		Limits	
Calcium		2.00	1.979	mg/L	99 95	80 - 120		Mercury	<0.000110	0.00167	0.001487	mg/L	89 8	30 - 120	-
Chromium Cobalt			0.09547 0.09942	mg/L mg/L	95 99	80 ₋ 120 80 ₋ 120									
CODAIL		0.100	0.09942	mg/L	99	0U = 12U									
						Eurofins Ce	edar Falls							Eurofins Ceda	ar
		D 45	4.07			40"	04/0000			D 10	-4.07			40/04	4 /-
		Page 15 o	12/			10/2	21/2022			Page 16	OT 2/			10/21	1/

Client: Omaha Public Power District			o Jaiii	ple Res	IIIS				Joh ID:	310-241	1714-1
Project/Site: Nebraska City Unit 2 CC	R								00D ID.	. 510-241	1
Method: 7470A - Mercury (CV	AA) (Co	ntinued)									
Lab Sample ID: 310-241714-1 MSD)							Cli	ient Sampl	e ID: NC	2MW2
Matrix: Water										Type: To	
Analysis Batch: 368887	Sample	Sample	Spike	мя	D MSD				Prep %Rec	Batch: 3	68713 RPD
Analyte		Qualifier	Added		It Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000110		0.00167	0.00152	7	mg/L		92	80 - 120	3	20
Method: SM 2540C - Solids, To	otal Dis	solved (TI	OS)								
Lab Sample ID: MB 310-367788/1								Client S	Sample ID:	Method	Blank
Matrix: Water									Prep	Type: To	tal/NA
Analysis Batch: 367788											
Analyte	B	MB MB esult Qualifier		RL	MDL Unit		D F	repared	Analy	and.	Dil Fac
Total Dissolved Solids		26.0 Qualifier		50.0	26.0 mg/l			герагец	10/06/22		DII Fac
Lab Sample ID: LCS 310-367788/2 Matrix: Water							Clien	t Sample	e ID: Lab C	ontrol S Type: To	
Analysis Batch: 367788									rieb	. , pc. 10	CONTRACT.
-			Spike		S LCS				%Rec		
Analyte			Added		It Qualifier	Unit	D	%Rec	Limits		
Total Dissolved Solids			1000	976	0	mg/L		98	90 _ 110		
Lab Sample ID: MB 310-367956/1								Client S	Sample ID:		
Matrix: Water Analysis Batch: 367956									Prep '	Type: To	tal/NA
Analysis Batch. 307930		мв мв									
Analyte	R	esult Qualifier		RL	MDL Unit		D F	repared	Analy	zed	Dil Fac
Analyte Total Dissolved Solids		26.0 Qualifier		RL 50.0	MDL Unit		_ <u>D</u> F	repared	Analy:		Dil Fac
Total Dissolved Solids									10/07/22	16:28	1
									10/07/22 e ID: Lab C	16:28	1 ample
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2									10/07/22 e ID: Lab C	16:28	1 ample
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956			Spike	50.0	26.0 mg/l	Ŀ	Clien	t Sample	10/07/22 e ID: Lab C Prep '	16:28	1 ample
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte			Added	50.0	26.0 mg/l	Unit		t Sample	10/07/22 e ID: Lab C Prep %Rec Limits	16:28	1 ample
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956				50.0	26.0 mg/l	Ŀ	Clien	t Sample	10/07/22 e ID: Lab C Prep '	16:28	1 ample
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: 310-241714-4 DU			Added	50.0	26.0 mg/l	Unit	Clien	%Rec 94	10/07/22 e ID: Lab C Prep %Rec Limits 90 - 110 eient Sample	e ID: NC	ample tal/NA
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: 310-241714-4 DU Matrix: Water			Added	50.0	26.0 mg/l	Unit	Clien	%Rec 94	10/07/22 e ID: Lab C Prep %Rec Limits 90 - 110 eient Sample	ontrol S Type: To	ample tal/NA
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: 310-241714-4 DU			Added	50.0 LC Resu 944	26.0 mg/l	Unit	Clien	%Rec 94	10/07/22 e ID: Lab C Prep %Rec Limits 90 - 110 eient Sample	e ID: NC	ample tal/NA 2MW6 tal/NA
Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: 310-241714-4 DU Matrix: Water	Sample		Added	50.0 LC Resu 944	26.0 mg/l	Unit	Clien	%Rec 94	10/07/22 e ID: Lab C Prep %Rec Limits 90 - 110 eient Sample	e ID: NC	ample tal/NA

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

9

HPLC/IC

Anal	ysis	Batch:	369461
------	------	--------	--------

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
310-241714-1	NC2MW2	Total/NA	Water	9056A	_
310-241714-2	NC2MW3	Total/NA	Water	9056A	
310-241714-2	NC2MW3	Total/NA	Water	9056A	
310-241714-3	NC2MW5	Total/NA	Water	9056A	
310-241714-4	NC2MW6	Total/NA	Water	9056A	
310-241714-5	NC2MW7	Total/NA	Water	9056A	
310-241714-6	NC2MW8	Total/NA	Water	9056A	
310-241714-7	DUP2	Total/NA	Water	9056A	
MB 310-369461/3	Method Blank	Total/NA	Water	9056A	
LCS 310-369461/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 367783

=					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-241714-1	NC2MW2	Total/NA	Water	3005A	
310-241714-2	NC2MW3	Total/NA	Water	3005A	
310-241714-3	NC2MW5	Total/NA	Water	3005A	
310-241714-4	NC2MW6	Total/NA	Water	3005A	
310-241714-5	NC2MW7	Total/NA	Water	3005A	
310-241714-6	NC2MW8	Total/NA	Water	3005A	
310-241714-7	DUP2	Total/NA	Water	3005A	
MB 310-367783/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-367783/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-241714-4 DU	NC2MW6	Total/NA	Water	3005A	

Prep Batch: 368713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
310-241714-1	NC2MW2	Total/NA	Water	7470A	
310-241714-2	NC2MW3	Total/NA	Water	7470A	
310-241714-3	NC2MW5	Total/NA	Water	7470A	
310-241714-4	NC2MW6	Total/NA	Water	7470A	
310-241714-5	NC2MW7	Total/NA	Water	7470A	
310-241714-6	NC2MW8	Total/NA	Water	7470A	
310-241714-7	DUP2	Total/NA	Water	7470A	
MB 310-368713/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-368713/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-241714-1 MS	NC2MW2	Total/NA	Water	7470A	
310-241714-1 MSD	NC2MW2	Total/NA	Water	7470A	

Analysis Batch: 368887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-241714-1	NC2MW2	Total/NA	Water	7470A	368713
310-241714-2	NC2MW3	Total/NA	Water	7470A	368713
310-241714-3	NC2MW5	Total/NA	Water	7470A	36871
310-241714-4	NC2MW6	Total/NA	Water	7470A	368713
310-241714-5	NC2MW7	Total/NA	Water	7470A	36871
310-241714-6	NC2MW8	Total/NA	Water	7470A	36871
310-241714-7	DUP2	Total/NA	Water	7470A	368713
MB 310-368713/1-A	Method Blank	Total/NA	Water	7470A	36871
LCS 310-368713/2-A	Lab Control Sample	Total/NA	Water	7470A	36871

Eurofins Cedar Falls

Page 18 of 27

10/21/2022

QC Association Summary Client: Omaha Public Power District Job ID: 310-241714-1 Project/Site: Nebraska City Unit 2 CCR Metals (Continued) Analysis Batch: 368887 (Continued) Lab Sample ID Client Sample ID Prep Type Method Prep Batch 310-241714-1 MS NC2MW2 7470A 310-241714-1 MSD NC2MW2 Total/NA Water 7470A 368713 Analysis Batch: 368920 Lab Sample ID Client Sample ID Prep Type Prep Batch 310-241714-1 NC2MW2 6020A 367783 310-241714-2 Total/NA NC2MW3 6020A 367783 Water 310-241714-3 NC2MW5 Total/NA Water 6020A 367783 310-241714-4 NC2MW6 Total/NA 367783 Water 6020A 310-241714-5 NC2MW7 Total/NA Water 6020A 367783 310-241714-6 NC2MW8 Total/NA Water 6020A 367783 310-241714-7 6020A 367783 DUP2 Total/NA Water MB 310-367783/1-A Method Blank Total/NA Water 6020A 367783 LCS 310-367783/2-A Lab Control Sample Total/NA Water 6020A 367783 310-241714-4 DU NC2MW6 Total/NA Water 6020A 367783 **General Chemistry** Analysis Batch: 367788 Lab Sample ID Client Sample ID Prep Type 310-241714-1 Total/NA SM 2540C 310-241714-2 NC2MW3 Total/NA Water SM 2540C 310-241714-5 NC2MW7 Total/NA Water SM 2540C 310-241714-6 NC2MW8 Total/NA Water SM 2540C 310-241714-7 DUP2 SM 2540C Total/NA Water MB 310-367788/1 Method Blank Total/NA Water SM 2540C LCS 310-367788/2 Lab Control Sample Total/NA Water SM 2540C Analysis Batch: 367956 Lab Sample ID Client Sample ID Prep Type Matrix Method Prep Batch NC2MW5 310-241714-3 Water SM 2540C 310-241714-4 NC2MW6 Total/NA Water SM 2540C MB 310-367956/1 Method Blank Total/NA Water SM 2540C LCS 310-367956/2 Lab Control Sample Total/NA SM 2540C Water 310-241714-4 DU NC2MW6 Total/NA Water SM 2540C

Eurofins Cedar Falls

Page 19 of 27 10/21/2022

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

Client Sample ID: NC2MW2

Lab Sample ID: 310-241714-1 Matrix: Water

Date Collected: 10/03/22 15:20

Date Received: 10/05/22 16:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		- 5	369461	DHM5	EET CF	10/21/22 02:08
Total/NA	Prep	3005A			367783	QTZ5	EET CF	10/07/22 09:45
Total/NA	Analysis	6020A		1	368920	A6US	EET CF	10/17/22 21:06
Total/NA	Prep	7470A			368713	XXW3	EET CF	10/14/22 14:47
Total/NA	Analysis	7470A		1	368887	XXW3	EET CF	10/17/22 14:57
Total/NA	Analysis	SM 2540C		1	367788	ENB7	EET CF	10/06/22 13:40

Client Sample ID: NC2MW3 Date Collected: 10/03/22 13:17

Date Received: 10/05/22 16:50

Lab Sample ID: 310-241714-2

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	369461	DHM5	EET CF	10/21/22 02:24
Total/NA	Analysis	9056A		20	369461	DHM5	EET CF	10/21/22 02:39
Total/NA	Prep	3005A			367783	QTZ5	EET CF	10/07/22 09:45
Total/NA	Analysis	6020A		1	368920	A6US	EET CF	10/17/22 21:09
Total/NA	Prep	7470A			368713	XXW3	EET CF	10/14/22 14:47
Total/NA	Analysis	7470A		1	368887	XXW3	EET CF	10/17/22 15:03
Total/NA	Analysis	SM 2540C		1	367788	ENB7	EET CF	10/06/22 13:40

Client Sample ID: NC2MW5

Date Collected: 10/04/22 08:36 Date Received: 10/05/22 16:50 Lab Sample ID: 310-241714-3

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	369461	DHM5	EET CF	10/21/22 02:55
Total/NA	Prep	3005A			367783	QTZ5	EET CF	10/07/22 09:45
Total/NA	Analysis	6020A		1	368920	A6US	EET CF	10/17/22 21:13
Total/NA	Prep	7470A			368713	XXW3	EET CF	10/14/22 14:47
Total/NA	Analysis	7470A		1	368887	XXW3	EET CF	10/17/22 15:15
Total/NA	Analysis	SM 2540C		1	367956	ENB7	EET CF	10/07/22 16:28

Client Sample ID: NC2MW6

Date Collected: 10/04/22 08:47 Date Received: 10/05/22 16:50 Lab Sample ID: 310-241714-4

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	369461	DHM5	EET CF	10/21/22 03:10
Total/NA	Prep	3005A			367783	QTZ5	EET CF	10/07/22 09:45
Total/NA	Analysis	6020A		1	368920	A6US	EET CF	10/17/22 21:34
Total/NA	Prep	7470A			368713	XXW3	EET CF	10/14/22 14:47
Total/NA	Analysis	7470A		1	368887	XXW3	EET CF	10/17/22 15:17
Total/NA	Analysis	SM 2540C		1	367956	ENB7	EET CF	10/07/22 16:28

Eurofins Cedar Falls

Page 20 of 27

Lab Chronicle

Dilution

Factor

Batch

Number Analyst

369461 DHM5

367783 QTZ5

368920 A6US

368713 XXW3

368887 XXW3

367788 ENB7

367788 ENB7

Lab

EET CF

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

Client Sample ID: NC2MW7 Date Collected: 10/03/22 16:10 Date Received: 10/05/22 16:50

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Batch

Type

Prep

Analysis

Analysis

Batch

Method

9056A

3005A

6020A

7470A

Lab Sample ID: 310-241714-5 Matrix: Water

Prepared

or Analyzed

10/21/22 03:57

10/07/22 09:45

10/17/22 21:41

10/14/22 14:47

10/17/22 15:19

10/06/22 13:40

10/06/22 13:40

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-22 *
Oregon	NELAP	IA100001	09-29-23

Accreditation/Certification Summary

Total/NA 7470A Analysis SM 2540C Total/NA Analysis

Client Sample ID: NC2MW8 Lab Sample ID: 310-241714-6

Matrix: Water

Date Collected: 10/03/22 14:39 Date Received: 10/05/22 16:50

Batch Batch Dilution Batch Prepared Prep Type Type Method Factor Number Analyst or Analyzed Total/NA 9056A 369461 DHM5 EET CF 10/21/22 04:13 Analysis EET CF Total/NA Prep 3005A 367783 QTZ5 10/07/22 09:45 Total/NA Analysis 6020A 368920 A6US EET CF 10/17/22 21:45 7470A FET CE 10/14/22 14:47 Total/NA Prep 368713 XXW3 Total/NA 7470A 368887 XXW3 EET CF 10/17/22 15:21 Analysis

Client Sample ID: DUP2 Date Collected: 10/03/22 00:00 Date Received: 10/05/22 16:50

Analysis

Lab Sample ID: 310-241714-7

Matrix: Water

Γ	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	369461	DHM5	EET CF	10/21/22 04:28
Total/NA	Prep	3005A			367783	QTZ5	EET CF	10/07/22 09:45
Total/NA	Analysis	6020A		1	368920	A6US	EET CF	10/17/22 21:48
Total/NA	Prep	7470A			368713	XXW3	EET CF	10/14/22 14:47
Total/NA	Analysis	7470A		1	368887	XXW3	EET CF	10/17/22 15:23
Total/NA	Analysis	SM 2540C		1	367788	ENB7	EET CF	10/06/22 13:40

Laboratory References:

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

SM 2540C

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

Page 22 of 27

10/21/2022

Eurofins Cedar Falls

Page 21 of 27

10/21/2022

Eurofins Cedar Falls

Job ID: 310-241714-1





Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020A	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
8005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF

Page 23 of 27

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.

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

Eurofins Cedar Falls

10/21/2022

eurofins

Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information						
Client Ohnoha	Public Poi	her				
City/State: CFF nche	`~	WATE .	Project:			
Receipt Information						
Date/Time Di	0-5-22	16:20	Received B	y: EH		
Delivery Type: UPS	☐ FedE>	K	☐ FedEx Gr	ound	US Mail	☐ Spee-Dee
	Courier 🗌 Lab F	ield Services	Client Dro	p-off	Other:	
Condition of Cooler/Conta	iners					
Sample(s) received in Co	ooler? Yes	□ No	If yes: Coo	oler ID:	2,	
Multiple Coolers?	□Yes		If yes: Coo		_ of 🔏	
Cooler Custody Seals Pr No	_	☑ No	,		y seals intact?	
Sample Custody Seals P No	resent? Yes	☑ No	If yes: Sar	nple custoc	ly seals intact?	Yes
Trip Blank Present?	☐ Yes	₽ No	If yes: Wh	ch VOA sa	mples are in co	ooler? ↓
Temperature Regord						
Coolant:	☐ Blue ice	☐ Dry ice	Other		🗆 1	NONE
Thermometer ID:	U		Correction I	, ,		
Temp Blank Temperature	e – If no temp blank,	or temp blank te	mperature above	criteria, proc	eed to Sample Cor	ntainer Temperature
Uncorrected Temp (°C):	1.1		Corrected T	emp (°C):	l. 1	
 Sample Container Temper 						
Container(s) used:	CONTAINER 1			CONTAINE	<u>R 2</u>	
Uncorrected Temp (°C):						
Corrected Temp (°C):						
Exceptions Noted						
If temperature exceed a) If yes: Is there ex				y of sampli	ing? Yes	□ No □ No
2) If temperature is <0°0 (e.g., bulging septa, l	broken/cracked b	ottles, frozen	solid?)	of sample of	containers is co	mpromised?
Note. If yes, contact P Additional Comments	M before proceeding	ng If no, proce	eed with login			
Additional Comments						
		-				
ł						

Document CED-P-SAM-FRM45521 Revision: 26 Date: 27 Jan 2022

Eurofins Cedar Falls Page 24 of 27

General temperature criteria is 0 to 10°C

10/21/2022 General temperature criteria is 0 to 6°C

⇔ eurofins	Environment Testing America
	Cooler/Sample Receipt a

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client: Ohroha Pullic	\wedge	w 4 x 4	1 2442 4	4 - 16 1
City/State: Concha	STATE	Project:		
-	NE NEW YORK	Y 327 45 56 3 80	8 1 FASTER .	7 175 1 2 a
Date/Time DATE	TIME _	1	1	W 7-3 1 X
Received: 10-5-21	10:30	Received By: E		
	FedEx	FedEx Ground	US Mail	Spee-Dee
Lab Courier L	Lab Field Services		Other:	
Condition of Cooler/Containers	The are	to a specific at	pro was as Mil	all to .
Sample(s) received in Cooler?	Yes □ No	If yes: Cooler ID:	2, of 2	
Maniple oddiere.	∃Yes □No	If yes: Cooler # _	2 of 8	
Cooler Custody Seals Present? [Yes Mo	If yes: Cooler cust	ody seals intact?	Yes
	Yes No	If yes: Sample cus	stody seals intact?	Yes 🗌
Trip Blank Present?	Yes No	If yes: Which VOA	samples are in co	oler? ↓
Temperature Regord 114	思 など (変 大) 新 ()	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	13 P. 7	74 75 1 2
Coolant: Met ice Blue				IONE
Coolant: Wet ice Blue	e ice Dry ice	Other		IONE
Thermometer ID:		Correction Factor (°C): O	
. Temp Blank Temperature 1 if no temp	blank or temp blank te	mperature above criteria; p	proceed to Sample Con	tainer Temperature
Uncorrected Temp (°C):		Corrected Temp (°C	C):	
🕹 Sample Contăiner Temperature		一年物堂及歌歌或品		But hat it's h
Container(s) used:	ml Nitric A	WHE CONTA	INER 2	
Uncorrected Temp (°C)·				
Corrected Temp (°C):				
Exceptions Noted	button at the	a de tra - all de trade de	E + Light C edition "S	- Tell Later - Par
If temperature exceeds criteria, v a) If yes: Is there evidence that			npling? Yes	□ No □ No
2) If temperature is <0°C, are there (e.g., bulging septa, broken/crac	cked bottles, frozen	solid?)	le containers is co Yes	mpromised?
NOTE If yes, contact PM before pro	ceeding. If no, proce	ed with login	ETTEN BUTTO	, st st h
Additional Comments* 1, \$7 5 2	in the man of	STATE AND COLOR	That The " Bank" 4 w	t chart it
				1

Document CED-P-SAM-FRM45521 Revision 26 Date 27 Jan 2022

Eurofpage 25 of 27

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to $10^\circ G$ 0/21/2022

TestAmerica Cedar Falls 704 Enterprise Drive Cedar Falls, IA 50613 Phone (319) 277-2405	Chain	Chain of Custody Record	Rec	ord					es	lestAmerica	
Client Information	Sampler Kyle K. Uhing	3 X	Lab PM: Hayes, Shawn M	awn M			Carrier Tracking No(s)	:(s)o	COC No:		
Client Contact Kyle Uhing	Phone: (531) 226-2515	in go	E-Mail: shawn har	res@te	tameric	E-Mail: shawn hayes@testamericainc.com	_		Page:		
Company: Omaha Public Power District			-			Analysis Requested	quested		Job #;		
Address: 444 South 16th Street Mall 9E/EP1	Due Date Requested:		=		-			E	Preservation Codes	on Codes:	
City Omaha	TAT Requested (days):			228	Air				A - HCL B - NaOH C - Zn Acetat	M - Hexane N - None te O - AsNaO2	
State, Zip: NE, 68102-2247			_	and Ra					D - Nitric Acid		
Phone: (531) 226-2515	#Od		(Razze					G - Amchlor H - Ascorbic		nydrate
Email: kkuhing@oppd.com	WO#:								J-Di Water		
Project Name: Nebraska City Station Unit 2 CCR / Landfill	TestAmerica Project #: 31007559								realiner L-EDA		c
Site: Nebraska City Station Unit 2	SSOW#:								nos Jo		
	Sample	Sample Matrix Type (Wewster, Sesoid,	Filtered	Orm MS/M	C TDS, 905				19 Number		
Sample Identification	Sample Date Time	G=grab) B	E FIBI	_	+	+		+		Special Instructions/Note:	ë
NC2MW2	15/20 CC12/11	W 9	Z	×	+			+	4 CCR Appen	CCR Appendix III and IV Constituents	a Se
NC2MW3	1,5,00,5,1	3	z	×	×				4 CCR Appen	CCR Appendix III and IV Constituents	st
NC2MW5	36.800	3	z	×	×			-	4 CCR Appen	CCR Appendix III and IV Constituents	st.
NC2MW6	12 CE 100	8	z	×	×			-	4 CCR Appen	CCR Appendix III and IV Constituents	atu
NC2MW7	01:01/22/6:10	8	z	×	×				4 CCR Appen	CCR Appendix III and IV Constituents	str
NC2MW8	1013 BULLS	8	Z	×	×				4 CCR Appen	CCR Appendix III and IV Constituents	age .
DUP2	102/D	3	z	×	×				4 CCR Appen	CCR Appendix III and IV Constituents	a a
	00101				Н						
			+	1	+		1	+			1
			+	ļ	+			-			
Possible Hazard Identification Non-Hazard Planmable Skin Irritant Deliverable Requested 1, III, III, IV, Other (specify)	□ Poison B □ Unknown □	Radiological	S S	Re Re	isposa um To structio	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mor Special InstructionsIQC Requirements.	be assessed if sam Disposal By Lab rements.	ples are re	tained longer th Archive For	han 1 month) Months	
Empty Kit Relinquished by:	Date:		Lime.				Method of Shipment:	ipment			1
Relinquished by J. J. Hadridge	Baterime 1907	15:37 CF. 31	_	Receiv	eceived by		1	10-722	22 1515	15 Company	
Reinquished by Reinquished by		OGO Company		Received by Received by	ed by	120		Date/Time: 10-5-24	FF 1650	Company	
Custody Seals Intact: Custody Seal No				Cooler	Tempera	Cooler Temperature(s) °C and Other Remarks:	emarks:				1
				14	13	11 12	9 10	8	6 7	3 4 5	_

Login Number: 241714 List Number: 1

List Source: Eurofins Cedar Falls

Creator: Costello, Mackenzie K

Residual Chlorine Checked.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	

Eurofins Cedar Falls Page 27 of 27 10/21/2022

N/A



Environment Testing

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-241714-2

Client Project/Site: Nebraska City Unit 2 CCR

Revision: 1

For:

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

Attn: Kyle Uhing

RCH

Authorized for release by: 11/11/2022 1:19:12 PM Brian Graettinger, Lab Director (319)595-2012 Brian.Graettinger@et.eurofinsus.com

Designee for

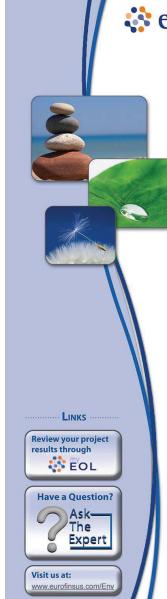
Shirley Thompson, Client Service Manager (319)277-2401

Shirley.Thompson@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

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 {0} Project Manager.



14

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Laboratory Job ID: 310-241714-2

Table of Cor	ntents
--------------	--------

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	6
Definitions	13
QC Sample Results	14
QC Association	15
Chronicle	16
Certification Summary	18
Method Summary	19
Chain of Custody	20
Receipt Checklists	24
Tracer Carrier Summary	26

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-2

Job ID: 310-241714-2

Laboratory: Eurofins Cedar Falls

Narrative

2

Job Narrative 310-241714-2

Comments

This report was revised on 11/11/22. The narrative statement about bottles being received with limited sample in them was edited to make it clear that only one sample bottle was received in that condition.

Receir

The samples were received on 10/5/2022 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0° C and 1.1° C.

Receipt Exceptions

The following sample was received with one of the bottles containing only 125mL in the container. NC2MW5 (310-241714-3) This had no impact on the data. The only impact was that there was not enough sample to use it for QA/QC purposes so another sample would need to be chosen.

RAF

Methods 903.0. 9315: Radium-226 batch 586466

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date

NC2MW2 (310-241714-1), NC2MW3 (310-241714-2), NC2MW5 (310-241714-3), NC2MW6 (310-241714-4), NC2MW7 (310-241714-5), NC2MW8 (310-241714-6), DUP2 (310-241714-7), (LCS 160-586466/2-A), (MB 160-586466/1-A), (480-202269-A-1-A) and (480-202269-B-1-A DU)

Methods 904.0, 9320: Radium-228 batch 586471

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

NC2MW2 (310-241714-1), NC2MW3 (310-241714-2), NC2MW5 (310-241714-3), NC2MW6 (310-241714-4), NC2MW7 (310-241714-5), NC2MW8 (310-241714-6), DUP2 (310-241714-7), (LCS 160-586471/2-A), (MB 160-586471/1-A), (480-202269-A-1-B) and (480-202269-B-1-B DU)

Method PrecSep 0:

Method PrecSep-21:

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

Eurofins Cedar Falls 11/11/2022 (Rev. 1)

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-241714-1	NC2MW2	Water	10/03/22 15:20	10/05/22 16:50
310-241714-2	NC2MW3	Water	10/03/22 13:17	10/05/22 16:50
310-241714-3	NC2MW5	Water	10/04/22 08:36	10/05/22 16:50
310-241714-4	NC2MW6	Water	10/04/22 08:47	10/05/22 16:50
310-241714-5	NC2MW7	Water	10/03/22 16:10	10/05/22 16:50
310-241714-6	NC2MW8	Water	10/03/22 14:39	10/05/22 16:50
310-241714-7	DUP2	Water	10/03/22 00:00	10/05/22 16:50

	tion Summary
Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR	Job ID: 310-241714-2
Client Sample ID: NC2MW2	Lab Sample ID: 310-241714-1
No Detections.	
Client Sample ID: NC2MW3	Lab Sample ID: 310-241714-2
No Detections.	
Client Sample ID: NC2MW5	Lab Sample ID: 310-241714-3
No Detections.	
Client Sample ID: NC2MW6	Lab Sample ID: 310-241714-4
No Detections.	
Client Sample ID: NC2MW7	Lab Sample ID: 310-241714-5
No Detections.	
Client Sample ID: NC2MW8	Lab Sample ID: 310-241714-6
No Detections.	
Client Sample ID: DUP2	Lab Sample ID: 310-241714-7
No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

5

Page 5 of 26 11/11/2022 (Rev. 1)

Page 4 of 26 Eurofins /2edar(Rells 1)

			Clier	ոt Samp	le Res	ults					
lient: Omaha Public								Jo	b ID: 310-24	1714-2	П
roject/Site: Nebrask	a City Unit	2 CCR									
lient Sample ID	: NC2MV	V2						Lab Sample II	D: 310-241	714-1	
ate Collected: 10/0									Matrix:	Water	
ate Received: 10/0	5/22 16:50	1									
Method: SW846 93	15 - Radiu	m-226 (GF	EPC)								
method: 011040 00	io itaaia	220 (01	Count	Total							
			Uncert.	Uncert.							r.
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.217		0.0956	0.0976	1.00	0.103	pCi/L	10/19/22 09:46	11/10/22 09:17	1	a
Carrier	0/ Viold	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	94.6	Qualifier	40 - 110					10/19/22 09:46		DII Fac	
Da Gamoi	01.0		10 - 110					70770722 00:70			
Method: SW846 93	20 - Radiu	m-228 (GF	PC)								ī
			Count	Total							
			Uncert.	Uncert.							
			(2σ+/-)		RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Analyte	Result	Qualifier	<u> </u>	(2σ+/-)				<u> </u>			
Analyte Radium-228	Result 1.87	Qualifier .	0.454	0.486	1.00	0.459	pCi/L	<u> </u>	11/03/22 11:06	1	
	1.87	Qualifier	<u> </u>	<u> </u>			pCi/L	<u> </u>		1 Dil Fac	
Radium-228	1.87		0.454	<u> </u>			pCi/L	10/19/22 10:22 Prepared	Analyzed 11/03/22 11:06		
Radium-228 Carrier	1.87 %Yield		0.454	<u> </u>			pCi/L	10/19/22 10:22 Prepared	Analyzed 11/03/22 11:06		
Radium-228 Carrier Ba Carrier Y Carrier	94.6 86.0	Qualifier	0.454 Limits 40 - 110 40 - 110	0.486	1.00	0.459	pCi/L	10/19/22 10:22 Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06	Dil Fac	
Radium-228 Carrier Ba Carrier	94.6 86.0	Qualifier	0.454 Limits 40 - 110 40 - 110	0.486 um-226 an	1.00	0.459	pCi/L	10/19/22 10:22 Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06	Dil Fac	
Radium-228 Carrier Ba Carrier Y Carrier	94.6 86.0	Qualifier	0.454 Limits 40 - 110 40 - 110 bined Radi Count	0.486 um-226 and Total	1.00	0.459	pCi/L	10/19/22 10:22 Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06	Dil Fac	
Radium-228 Carrier Ba Carrier Y Carrier	1.87 %Yield 94.6 86.0 Ra226_Ra2	Qualifier	0.454 Limits 40 - 110 40 - 110	0.486 um-226 an	1.00	0.459		10/19/22 10:22 Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06	Dil Fac	

lient: Omaha Pub	lic Power Dis	trict	01101	nt Samp	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Juito			lob ID: 310-24	11714-2
roject/Site: Nebra									10D 1D. 010-2-	71714-2
Client Sample Date Collected: 10	0/03/22 13:17	,						Lab Sample		1714-2 : Water
ate Received: 10	/05/22 16:50									
Method: SW846	9315 - Radiu	m-226 (GI	FPC)							
			Count	Total						
			Uncert.	Uncert.						
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac
Radium-226	0.101	U	0.0764	0.0769	1.00	0.107	pCi/L	10/19/22 09:46	11/10/22 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.1		40 - 110					10/19/22 09:46	11/10/22 09:17	1
Method: SW846	9320 - Radiu	m-228 (GI	FPC)							
		•	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.903		0.359	0.369	1.00	0.446	pCi/L	10/19/22 10:22	11/03/22 11:06	1
Carrier	% Viold	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.1	Qualifier	40 - 110					10/19/22 10:22		1
Y Carrier	82.2		40 - 110					10/19/22 10:22		1
T Carrier	02.2		40 - 110					10/19/22 10.22	11/03/22 11.00	,
Method: TAL-ST	L Ra226 Ra	228 - Com	bined Radi	um-226 an	d Radiur	n-228				
	_		Count	Total						
			Uncert.	Uncert.						
		Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac

Eurofins Cedar Falls

Page 6 of 26 11/11/2022 (Rev. 1)

Eurofins Cedar Falls

Page 7 of 26

11/11/2022 (Rev. 1)

			Clier	ոt Samp	le Res	ults					
lient: Omaha Public roject/Site: Nebraska								J	ob ID: 310-24	1714-2	ī
Client Sample ID late Collected: 10/0								Lab Sample		714-3 : Water	
ate Received: 10/0	5/22 16:50										
Method: SW846 93	15 - Radiu	m-226 (GI	PC)								
			Count	Total							
			Uncert.	Uncert.							ī
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL		Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.0280	U	0.0706	0.0707	1.00	0.130	pCi/L	10/19/22 09:46	11/10/22 09:17	1	i
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	88.0		40 - 110					10/19/22 09:46	11/10/22 09:17	1	
Method: SW846 93	20 - Radiu	m-228 (GI	PC)								ı
Method: SW846 93	20 - Radiu	m-228 (GI	PC) Count	Total							
Method: SW846 93	20 - Radiu	m-228 (GI		Total Uncert.							
Method: SW846 93		m-228 (GI	Count		RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
		•	Count Uncert.	Uncert.	RL 1.00		Unit pCi/L		Analyzed 11/03/22 11:06	Dil Fac	
Analyte	Result 0.688	•	Count Uncert. (2σ+/-)	Uncert. (2σ+/-)							
Analyte Radium-228	Result 0.688	Qualifier	Count Uncert. (2σ+/-) 0.369	Uncert. (2σ+/-)				10/19/22 10:22 Prepared	11/03/22 11:06	1	
Analyte Radium-228 Carrier	Result 0.688	Qualifier	Count Uncert. (2σ+/-) 0.369 Limits	Uncert. (2σ+/-)				10/19/22 10:22 Prepared	11/03/22 11:06 Analyzed 11/03/22 11:06	1 Dil Fac	
Analyte Radium-228 Carrier Ba Carrier Y Carrier	Result 0.688 % Yield 88.0 86.7	Qualifier Qualifier	Count Uncert. (2σ+/-) 0.369 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.375	1.00	0.526		10/19/22 10:22 Prepared 10/19/22 10:22	11/03/22 11:06 Analyzed 11/03/22 11:06	Dil Fac	
Analyte Radium-228 Carrier Ba Carrier	Result 0.688 % Yield 88.0 86.7	Qualifier Qualifier	Count Uncert. (2σ+l-) 0.369 Limits 40-110 40-110 bined Radi	Uncert. (2σ+/-) 0.375	1.00	0.526		10/19/22 10:22 Prepared 10/19/22 10:22	11/03/22 11:06 Analyzed 11/03/22 11:06	Dil Fac	•
Analyte Radium-228 Carrier Ba Carrier Y Carrier	Result 0.688 % Yield 88.0 86.7	Qualifier Qualifier	Count Uncert. (2σ+/-) 0.369 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.375	1.00	0.526		10/19/22 10:22 Prepared 10/19/22 10:22	11/03/22 11:06 Analyzed 11/03/22 11:06	Dil Fac	
Analyte Radium-228 Carrier Ba Carrier Y Carrier	Result 0.688 %Yield 88.0 86.7 Ra226_Ra2	Qualifier Qualifier	Count Uncert. (2σ+/-) 0.369 Limits 40 - 110 40 - 110 bined Radi Count	Uncert. (2σ+/-) 0.375	1.00	0.526 n-228		10/19/22 10:22 Prepared 10/19/22 10:22	11/03/22 11:06 Analyzed 11/03/22 11:06	Dil Fac	1

lient: Omaha Public	. D D:-	4-1-4	Cliei	nt Samp	ie Res	suits			lob ID: 310-24	147440	
roject/Site: Nebrask	, , o , , o , b , c							J	IOD ID: 310-24	11/14-2	
Client Sample ID late Collected: 10/0 late Received: 10/0	04/22 08:47	7						Lab Sample		714-4 : Water	
			EBC)								
Method: SW846 93	oro - Kadiu	IIII-226 (GI	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.294		0.125	0.128	1.00	0.131	pCi/L	10/19/22 09:46		1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	97.8	quamor	40 - 110					10/19/22 09:46		1	
Method: SW846 93	20 Padiu	ım 228 (GI	EDC)								
Wethou. 344040 90	020 - Naulu	IIII-220 (GI	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-228	2.49		0.612	0.653	1.00	0.653	pCi/L	10/19/22 10:22	11/03/22 11:06	1	
Carrier	% Viold	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	97.8	Qualifier	40 - 110					10/19/22 10:22	11/03/22 11:06	1	
Y Carrier	86.4		40 - 110					10/19/22 10:22		1	
	D 000 D										
Method: TAL-STL	Ra226_Ra	228 - Com	Count	um-226 an Total	d Radiur	n-228					
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	

Eurofins Cedar Falls

Page 8 of 26 11/11/2022 (Rev. 1)

Eurofins Cedar Falls

Page 9 of 26

11/11/2022 (Rev. 1)

			Clier	ոt Samp	le Res	ults					
lient: Omaha Public								J	ob ID: 310-24	1714-2	i
roject/Site: Nebraska	a City Unit	2 CCR									
lient Sample ID								Lab Sample			
ate Collected: 10/0									Matrix:	Water	
ate Received: 10/0	5/22 16:50										
Method: SW846 93	15 - Radiu	ım-226 (GI	FPC)								
		(Count	Total							
			Uncert.	Uncert.							ı
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.318		0.128	0.131	1.00	0.139	pCi/L	10/19/22 09:46	11/10/22 11:24	1	f
Carrier	9/ Viold	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	105	Qualifier	40 - 110					10/19/22 09:46	11/10/22 11:24	DII Fac	
Da Gamoi	700		10-110					70770722 00.10		•	
Method: SW846 93	20 - Radiu	m-228 (GF	FPC)								ī
			Count	Total							
			Uncert.	Uncert.							
		Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Analyte		Qualifier									
Analyte Radium-228	0.927	Qualifier .	0.408	0.417	1.00	0.539	pCi/L	10/19/22 10:22	11/03/22 11:06	1	
	0.927						pCi/L			1 Dil Fac	
Radium-228	0.927	Qualifier	0.408				pCi/L	10/19/22 10:22 Prepared 10/19/22 10:22	11/03/22 11:06 Analyzed 11/03/22 11:06		
Radium-228 Carrier	0.927 %Yield		0.408				pCi/L	Prepared	Analyzed 11/03/22 11:06		
Radium-228 Carrier Ba Carrier Y Carrier	0.927 %Yield 105 85.6	Qualifier	0.408 Limits 40 - 110 40 - 110	0.417	1.00	0.539	pCi/L	Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06		
Radium-228 Carrier Ba Carrier	0.927 %Yield 105 85.6	Qualifier	0.408 Limits 40 - 110 40 - 110	0.417 um-226 an	1.00	0.539	pCi/L	Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06		
Radium-228 Carrier Ba Carrier Y Carrier	0.927 %Yield 105 85.6	Qualifier	0.408 Limits 40 - 110 40 - 110 bined Radi Count	0.417 um-226 and Total	1.00	0.539	pCi/L	Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06		
Radium-228 Carrier Ba Carrier Y Carrier	0.927 %Yield 105 85.6 Ra226_Ra2	Qualifier	0.408 Limits 40 - 110 40 - 110	0.417 um-226 an	1.00	0.539		Prepared 10/19/22 10:22	Analyzed 11/03/22 11:06		

Ni to O b D b li	D Di-	44	Cliei	nt Samp	ie Res	suits			I-I- ID: 040 04	147440	
Client: Omaha Public Project/Site: Nebrask								J	lob ID: 310-24	11/14-2	
Client Sample ID Date Collected: 10/0 Date Received: 10/0	3/22 14:39)						Lab Sample		714-6 : Water	
•			TDC)								
Method: SW846 93	15 - Kadiu	III-226 (GI	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-226	0.300		0.140	0.142	1.00	0.166	pCi/L	10/19/22 09:46	11/10/22 11:25	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	103		40 - 110						11/10/22 11:25	1	
Method: SW846 93	20 - Radiu	m-228 (GI	EPC)								
		(0.	Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-228	1.27		0.449	0.464	1.00	0.531	pCi/L	10/19/22 10:22	11/03/22 11:06	1	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	103		40 - 110					10/19/22 10:22	11/03/22 11:06		
Y Carrier	87.5		40 - 110					10/19/22 10:22	11/03/22 11:06	1	
Method: TAL-STL F	2a226 Rat	228 - Com	hined Radi	ium-226 an	d Radiur	n-228					
motilod. IAL OILI	tuzzo_rtu		Count	Total	a readian	220					
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Combined Radium 226 + 228	1.57		0.470	0.485	5.00	0.531	pCi/L		11/10/22 16:20	1	

Eurofins Cedar Falls

Page 10 of 26 11/11/2022 (Rev. 1)

Eurofins Cedar Falls

Page 11 of 26 11/11/2022 (Rev. 1)

Client Sample Results Client: Omaha Public Power District Job ID: 310-241714-2 Project/Site: Nebraska City Unit 2 CCR Client Sample ID: DUP2 Lab Sample ID: 310-241714-7 Date Collected: 10/03/22 00:00 Matrix: Water Date Received: 10/05/22 16:50 Method: SW846 9315 - Radium-226 (GFPC) Total Uncert. Uncert. Analyte Result Qualifier (2σ+/-) MDC Unit Prepared Analyzed Radium-226 0.394 0.125 1.00 0.108 pCi/L 10/19/22 09:46 11/10/22 11:25 0.130 Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 89.2 40 - 110 10/19/22 09:46 11/10/22 11:25 Method: SW846 9320 - Radium-228 (GFPC) Total Uncert. Uncert. Analyte Result Qualifier (2σ+/-) (2σ+/-) MDC Unit Prepared Analyzed 1.25 1.00 0.458 pCi/L 10/19/22 10:22 11/03/22 11:08 Radium-228 0.402 0.418 Carrier %Yield Qualifier Limits Analyzed Ba Carrier 89.2 40 - 110 10/19/22 10:22 11/03/22 11:08 87.5 10/19/22 10:22 11/03/22 11:08 Y Carrier 40 - 110 Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228 Count Total Uncert. Uncert. Analyte Result Qualifier (2σ+/-) (2σ+/-) RL MDC Unit Analyzed Dil Fac Combined Radium 1.65 0.421 0.438 5.00 0.458 pCi/L 11/10/22 16:20 226 + 228

	Definitions/Glossary	
	a Public Power District	Job ID: 310-241714-2
Qualifiers	Nebraska City Unit 2 CCR	
Qualifiers		
Rad		
Qualifier	Qualifier Description	
U	Result is less than the sample detection limit.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
п	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	

Eurofins Cedar Falls

Page 12 of 26 11/11/2022 (Rev. 1)

Eurofins Cedar Falls

7

Page 13 of 26 11/11/2022 (Rev. 1)

	Public Po	ower Dis	trict	QC	Samp	le Resu	IITS			Job ID: 310-24	11714-2	1
roject/Site: Ne												
ethod: 931	15 - Rad	dium-2	26 (GFPC)								
Lab Sample Matrix: Wate	r		66/1-A						Client Samp	ple ID: Method Prep Type: T	otal/NA	
Analysis Bat	ch: 5895	95		Count	Total					Prep Batch:	586466	5
		МВ	МВ	Uncert.	Uncert.							
Analyte		Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC		Prepared	Analyzed	Dil Fac	
Ra. ium-229		-0501712	U	050373	050373	1500	050627	pCi/L	10/16/22 06:49	11/10/22 06:21	1	
		MB										
Carrier Ba Carrier		%Yield 109	Qualifier	40 - 110					Prepared	Analyzed 11/10/22 09:21	Dil Fac	8
oa Carrier		109		40 - 110					10/19/22 09.40	11/10/22 09.21	,	_
Lab Sample Matrix: Wate	r		466/2-A					Cli	ent Sample ID:	Prep Type: T	otal/NA	
Analysis Bat	cn: 5895	95				Total				Prep Batch:	586466	
			Spike	LCS	LCS	Uncert.				%Rec		
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC		Limits		
Ra. ium-229			1153	65609		1504	1500	05114	pCi/L E7	78 - 128		
	LCS											
Carrier Ba Carrier	%Yield 106	Qualifier	Limits 40 - 110	-								13
Analysis Bat	011. 0000			Count	Total					Prep Batch:	000471	
		МВ		Uncert.	Uncert.	ъ.					D	
Analyte Ra. ium-22E		052760	Qualifier	(2σ+/-) 0532E	(2σ+/-) 05326	RL 1500	05841		Prepared 10/16/22 10:22	Analyzed 11/03/22 11:03	Dil Fac	
ta. iaiii EEE				0022	0020	100	0011	PONE	10/10/22 10:22	11/00/22 11:00		
Carrier		MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier		109	Qualifier	40 - 110					10/19/22 10:22		1	
		84.9		40 - 110						11/00/00 11 00		
/ Carrier		04.3		40-110					10/19/22 10:22	11/03/22 11:03	1	
Lab Sample			471/2-A	40 - 110				Cli	10/19/22 10:22 ent Sample ID:	Lab Control	Sample	
Lab Sample Matrix: Wate	r	160-586	471/2-A	40-110				Cli			Sample otal/NA	
Lab Sample Matrix: Wate	r	160-586			100	Total		Cli		Lab Control S Prep Type: T Prep Batch:	Sample otal/NA	
Lab Sample Matrix: Wate Analysis Bat	r	160-586	Spike	LCS		Uncert.	RI		ent Sample ID:	Lab Control : Prep Type: T Prep Batch: %Rec	Sample otal/NA	
Lab Sample Watrix: Wate Analysis Bat Analyte	r	160-586					RL 1500	MDC 05411	ent Sample ID:	Lab Control S Prep Type: T Prep Batch:	Sample otal/NA	
Lab Sample Watrix: Wate Analysis Bat Analyte	r ch: 5883	160-586 36	Spike Added	LCS Result		Uncert. (2σ+/-)		MDC	ent Sample ID:	Lab Control : Prep Type: T Prep Batch: *Rec Limits	Sample otal/NA	
Lab Sample Watrix: Wate Analysis Bat Analyte Ra. ium-22E	r ch: 5883	160-586 36	Spike Added E\$4E	LCS Result		Uncert. (2σ+/-)		MDC	ent Sample ID:	Lab Control : Prep Type: T Prep Batch: *Rec Limits	Sample otal/NA	
Y Carrier Lab Sample Matrix: Wate Analysis Bat Analyte Ra. ium-22E Carrier Ba Carrier	LCS %Yield	160-586 36 	Spike Added E54E Limits 40 - 110	LCS Result		Uncert. (2σ+/-)		MDC	ent Sample ID:	Lab Control : Prep Type: T Prep Batch: *Rec Limits	Sample otal/NA	
Lab Sample Matrix: Wate Analysis Bat Analyte Ra. ium-22E Carrier	r ch: 5883 LCS %Yield	160-586 36 	Spike Added E54E	LCS Result		Uncert. (2σ+/-)		MDC	ent Sample ID:	Lab Control : Prep Type: T Prep Batch: *Rec Limits	Sample otal/NA	
Lab Sample Matrix: Wate Analysis Bat Analyte Ra. ium-22E Carrier Ra. Carrier	LCS %Yield	160-586 36 	Spike Added E54E Limits 40 - 110	LCS Result		Uncert. (2σ+/-)		MDC	ent Sample ID:	Lab Control : Prep Type: T Prep Batch: *Rec Limits	Sample otal/NA	

~~				
UC	ASSC	ciation	า ธนฑ	ımarv

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR

Job ID: 310-241714-2

Rad

Prep Batch: 586466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
310-241714-1	NC2MW2	Total/NA	Water	PrecSep-21	
310-241714-2	NC2MW3	Total/NA	Water	PrecSep-21	
310-241714-3	NC2MW5	Total/NA	Water	PrecSep-21	
310-241714-4	NC2MW6	Total/NA	Water	PrecSep-21	
310-241714-5	NC2MW7	Total/NA	Water	PrecSep-21	
310-241714-6	NC2MW8	Total/NA	Water	PrecSep-21	
310-241714-7	DUP2	Total/NA	Water	PrecSep-21	
ИВ 160-586466/1-A	Method Blank	Total/NA	Water	PrecSep-21	
_CS 160-586466/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-241714-1	NC2MW2	Total/NA	Water	PrecSep_0	
310-241714-2	NC2MW3	Total/NA	Water	PrecSep_0	
310-241714-3	NC2MW5	Total/NA	Water	PrecSep_0	
310-241714-4	NC2MW6	Total/NA	Water	PrecSep_0	
310-241714-5	NC2MW7	Total/NA	Water	PrecSep_0	
310-241714-6	NC2MW8	Total/NA	Water	PrecSep_0	
310-241714-7	DUP2	Total/NA	Water	PrecSep_0	
MB 160-586471/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-586471/2-A	Lab Control Sample	Total/NA	Water	PrecSep 0	

Eurofins Cedar Falls

Page 15 of 26

11/11/2022 (Rev. 1)

11/11/2022 (Rev. 1)

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-2

Client: Omaha Public Power District

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Job ID: 310-241714-2

Batch

Number Analyst

EET SL

FET SI

EET SL

FFT SI

EET SL

Lab

EET SL

FFT SI

EET SL

586466 BMP

589595 FLC

586471 BMP

588336 FLC

589646 CAH

Batch

Number Analyst

586466 BMP

589595 FLC

586471 BMP

588336 FLC

589646 CAH

Batch

Number Analyst

586466 BMP

589595 FLC

586471 BMP

588335 FLC

589646 CAH

Lab Chronicle

Dilution

Factor

Dilution

Factor

Dilution

Factor

Project/Site: Nebraska City Unit 2 CCR

Туре

Prep

Prep

Client Sample ID: NC2MW8

Date Collected: 10/03/22 14:39

Date Received: 10/05/22 16:50

Client Sample ID: DUP2 Date Collected: 10/03/22 00:00

Date Received: 10/05/22 16:50

Analysis

Analysis

Analysis

Batch

Type

Prep

Prep

Analysis

Analysis

Analysis

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Batch

9315

9320

Batch

9315

9320

Batch

9315

9320

Method

PrecSep-21

PrecSep 0

Ra226 Ra228

Method

PrecSep-21

PrecSep_0

Ra226 Ra228

Method

PrecSep-21

PrecSep 0

Ra226 Ra228

Lab Sample ID: 310-241714-5

Prepared

or Analyzed

10/19/22 09:46

11/10/22 11:24

10/19/22 10:22

11/03/22 11:06

11/10/22 16:20

Prepared

or Analyzed

10/19/22 09:46

11/10/22 11:25

10/19/22 10:22

11/03/22 11:06

11/10/22 16:20

Prepared

or Analyzed

10/19/22 09:46

11/10/22 11:25

10/19/22 10:22

11/03/22 11:08 11/10/22 16:20

Lab Sample ID: 310-241714-6

Matrix: Water

Matrix: Water

10

Lab Sample ID: 310-241714-7

Matrix: Water

Laboratory References:

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

Client Sample ID: NC2MW2 Date Collected: 10/03/22 15:20

Date Received: 10/05/22 16:50

Lab Sample ID: 310-241714-1 Matrix: Water

Client Sample ID: NC2MW7 Date Collected: 10/03/22 16:10 Date Received: 10/05/22 16:50

Dilution Batch Prepared Prep Type Туре Method Factor Number Analyst or Analyzed 10/19/22 09:46 586466 BMP EET SL Total/NA PrecSep-21 Prep Total/NA Analysis 9315 589594 FLC FET SI 11/10/22 09:17 586471 BMP EET SL 10/19/22 10:22 Total/NA Prep PrecSep 0 Total/NA Analysis 9320 588336 FLC FFT SL 11/03/22 11:06 Total/NA Analysis Ra226 Ra228 589646 CAH EET SL 11/10/22 16:20

Dilution

Factor

Batch

Number Analyst

586466 BMP

589594 FLC

586471 BMP

588336 FLC

589646 CAH

Lab

EET SL

FFT SL

FFT SL

FFT SL

EET SL

Client Sample ID: NC2MW3 Date Collected: 10/03/22 13:17 Date Received: 10/05/22 16:50

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Ratch

Type

Prep

Prep

Analysis

Analysis

Ratch

9315

9320

Method

PrecSep-21

PrecSep_0

Lab Sample ID: 310-241714-2

Prepared

or Analyzed

10/19/22 09:46

11/10/22 09:17

10/19/22 10:22

11/03/22 11:06

11/10/22 16:20

Matrix: Water

10

Total/NA Analysis Ra226 Ra228 Client Sample ID: NC2MW5 Date Collected: 10/04/22 08:36

Date Received: 10/05/22 16:50

Lab Sample ID: 310-241714-3

Lab Sample ID: 310-241714-4

Matrix: Water

Matrix: Water

Γ	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	PrecSep-21			586466	BMP	EET SL	10/19/22 09:46
Total/NA	Analysis	9315		1	589594	FLC	EET SL	11/10/22 09:17
Total/NA	Prep	PrecSep_0			586471	BMP	EET SL	10/19/22 10:22
Total/NA	Analysis	9320		1	588336	FLC	EET SL	11/03/22 11:06
Total/NA	Analysis	Ra226_Ra228		1	589646	CAH	EET SL	11/10/22 16:20

Client Sample ID: NC2MW6

Date Collected: 10/04/22 08:47

Date Received: 10/05/22 16:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	PrecSep-21			586466	BMP	EET SL	10/19/22 09:46
Total/NA	Analysis	9315		1	589594	FLC	EET SL	11/10/22 09:18
Total/NA	Prep	PrecSep_0			586471	BMP	EET SL	10/19/22 10:22
Total/NA	Analysis	9320		1	588336	FLC	EET SL	11/03/22 11:06
Total/NA	Analysis	Ra226_Ra228		1	589646	CAH	EET SL	11/10/22 16:20

Eurofins Cedar Falls

11/11/2022 (Rev. 1)

Page 17 of 26

Eurofins Cedar Falls 11/11/2022 (Rev. 1)

Page 16 of 26

Accreditation/Certification Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-2

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
laska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-22 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
lowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22 *
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
ouisiana (All)	NELAP	04080	06-30-23
ouisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	04-01-23
North Dakota	State	R-207	06-30-23
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-23
Texas Texas	NELAP	T104704193	07-31-23
JS Fish & Wildlife	US Federal Programs	058448	07-31-23
JSDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-24
Washington	State	C592	08-30-23
West Virginia DEP	State	381	12-31-22

Eurofins Cedar Falls

Page 18 of 26 11/11/2022 (Rev. 1)

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	FFT 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

9

11





Eurofins Cedar Falls

Page 19 of 26

11/11/2022 (Rev. 1)

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information						
Client Ohnoha	Public Po	her				
City/State: CFF nch	'n	WE.	Project:			
Receipt Information						
Date/Time P. Received:	0-5-22	10:50	Received By	: EH		
Delivery Type: UPS FedEx FedEx Ground US Mail Spee-Dee						
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:						
Condition of Cooler/Conta	ainers /					
Sample(s) received in Co	ooler? Yes	S □ No	If yes: Cool	er ID:	2,	
Multiple Coolers?	□Yes		If yes: Cool	er#	of 🔏	
Cooler Custody Seals Pr No	esent? Yes	s ☑ No	If yes: Cool	er custody s	seals intact?	Yes
Sample Custody Seals P No	Present? Yes	No No	If yes: Sam	ple custody	seals intact?	Yes 🗌
Trip Blank Present?	☐ Yes	s ☑ No	If yes: Which	h VOA sam	ples are in co	oler? ↓
Temperature Regord						
Coolant:	☐ Blue ice	☐ Dry ice	Other:			IONE
Thermometer ID:	07		Correction F	. ,	0	
Temp Blank Temperatur	e - If no temp blank,	or temp blank te	mperature above	criteria, procee	d to Sample Cor	tainer Temperature
Uncorrected Temp (°C):	1.1		Corrected Te	emp (°C):	1.1	
Sample Container Temp						
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?						
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?)						
NOTE. If yes, contact P	M before proceedi	ng If no, proc	eed with login			
Additional Comments						

Document CED-P-SAM-FRM45521 Revision: 26

Date: 27 Jan 2022 Eurofins Cedar Falls
Page 20 of 26

General temperature criteria is 0 to 6°C

Bacteria temperature criteria is 0 to 10°C
11/11/2022 (Rev. 1)

eurofins

13

Environment Testing America Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information 4	· ` ` _ `	\$ 10	tori di		1 3442 4	4 - 16 14
Client: Ohnoha	Public Po	her				
City/State: Oncho	u	WE	Project:			
Receipt Information 3	1. 1 18 37 00		Y SETT TETTS	27 J. 86/20	1 1879	A Th t 2 2
Date/Time Received:	9-5-22	110:50	Received B	y: EH		
Delivery Type: UPS	☐ FedE:		FedEx Gr		US Mail	☐ Spee-Dee
	Courier Lab F				Other:	
Condition of Cooler/Conta					an was as Mi	and The
Sample(s) received in Co			If yes: Coo	~	2 of 2	
Multiple Coolers?	☐ Yes		If yes: Coo		_ of &	
Cooler Custody Seals Pr No		_/			ly seals intact?	
Sample Custody Seals P No	resent? Yes	☑No	If yes: Sar	nple custo	dy seals intact?	Yes
Trip Blank Present?	☐ Yes	₽No	If yes: Whi	ich VOA s	amples are in c	ooler? ↓
Temperature Regord	1. 67. 4 0 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	作と無い	through 1.12	4-77 753° 1	The confilt of	74 M. 1 1 - 1
Coolant: Wet ice	☐ Blue ice	☐ Dry ice	Other			NONE
Thermometer ID:	15		Correction I		March 190-190-19	
, • Tếmp Blánk Temperature	If no temp blank	or temp blank te	mperature above	criteria, pro	ceed to Sample Co	ntainer Temperature
Uncorrected Temp (°C):			Corrected T			
Sample Contăiner Tempe Sample Contă	erature 40% 20%	婚品中心了	了分析空戏者	教机品等	r valle palitican	THE TEACH A
Container(s) used:	250 MC	nitric P	aste	CONTAINE	<u>:R2</u>	
Uncorrected Temp	1.0					
Corrected Temp (°C):	1.1)					
Exceptions Noted 2017	2. 2014 Talkes (1915)	N With Th	a the motivation	013 m E	Chefrendle "	fill her, in
If temperature exceed a) If yes: Is there ev	and the same of th			y of samp	ling? Yes	☐ No ☐ No
2) If temperature is <0°0 (e.g., bulging septa, b	proken/cracked b	ottles, frozen	solid?)	of sample	containers is co	ompromised?
Note If yes, contact P	M before proceedir : 廖국도 나누가	g. If no, proce	eed with login	7 - 3		al estendio d
						1

Document CED-P-SAM-FRM45521 Revision 26 Date 27 Jan 2022

Eurofpaged21Falf26

General temperature criteria is 0 to 6°C

Bacteria temperature criteria is 11/11/192022 (Rev. 1)

2

3

5

7

9

10 11

12

14

4

⊢ % 8 8 8	TestAmerica Cedar Falls 704 Enterprise Drive 20464 Falls, 1A 50913	Chain of Custody Record	dy Record	TestAmerica	
		Sampler Kyle K. Uhing	Lab PM: Carrier Tracking No(s): Hayes, Shawn M	COC No:	
2 X S	ient Contact: yle Uhing mpeny:	Phone: (531) 226-2515	E-Mail: shawn hayes@testamericainc.com	Page: Job#:	
0 8	Omaha Public Power District Address:	Due Date Requested:	Analysis Requested	Preservation Codes:	
4 12	44 South 16th Street Mall 9E/EP1	TAT Requested (days):		HOL	
0 6 2	maha ate, Zp. Firstno-2047		Mercury	C - Zn Acetate O - AshaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 O - Na2SO3	
F (c)	31) 226-2515	PO#	A0141	MeOH F	
IP 곳	uhing@oppd.com	WO类	(o A Benida 'Vi bre	1-loe C	
ř ž	oject Name: ebraska City Station Unit 2 CCR / Landfill	TestAmerica Project #: 31007559	9, Comnuls III and III	K-EDTA V	
S Z	atio	SSOW#;	SD (Yessis)	Other	
		Sample Type	(*************************************		
Pa	ample Identification	£ :	E Period	Special Instructions/Note:	
Ž	CZMWZ	Preservation	Z X X Q X X Z X X Z X X X Z X X X X X X	CCR Appendix III and IV Constituents	
2 of	4C2MW3	102 12 12 0 C	×	CCR Appendix III and IV Constituents	
	UC2MW5	1 1	× × × ×	CCR Apper	
ž	NC2MW6		× × × × ×	CCR Appendix III and IV Constituents	
ž Į ž	NCZMW	- 1	× > × × > × × × × × × × × × × × × × × ×	CCR Appendix III and IV Constituents	
₹1⊒	DUP2	10 100 M.57	< ×	CCR Appendix III and IV Constituents	
Ш					
	ssible Hazard Identification		sal (A fee may be assessed if samples	d longer than 1 month)	
<u> </u>	Non-Hazard Flammable Skin Irritant Pots	Poison B Unknown Radiological	Return To Client	ive For Months	
11/		Dates	Special instructions/UC Requirements. Trimos		
ī <u></u> 11/2		3	Received by Date:	Company C	
2022	simquished by	Date-Times	Company Received by Deterfine:	3	
(Re	ilinquished by	5	pany Received by ACC Date/Time: 10~5	(6)0 Company	
v. 1	Custody Seals Intact: Custody Seal No		Cooler Temperature(s) [©] C and Other Remarks:		
_)	Δ Yes Δ No		7 8 9 10 11 11 14	1 3 4 5	
			000111		7 I
	Eurofins Cedar Falls 3019 Venture Way			🔆 eurofins	
	Cedar Falls, 1A 50813 Phone: 319-277-2401 Fax: 319-277-2425	Chain of Cus	Chain of Custody Record	Anterica Anterica	
	Client Information (Sub Contract Lab)	Sampler:	M: npson, Shirlev J	COC No:	
	Client Contact: Shipping/Receiving	Phone:	E-Mail Shirley Thompson@et eurofinsus.com Nebraska	Page:	
	Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):	Job#: 310-241714-1	
	Address: 13715 Rider Trail North,	Due Date Requested: 10/18/2022	Analysis Requested	ğ	
	City. Earth City	TAT Requested (days):			
	State, ZIP: MO, 63045		(၁		
	Phone: 14-298-8566(Tel) 314-298-8757(Fax)	*OL	356 (GII	G - Amerikor S - H2SO4 H - Ascorbic Acid U - Acetone	
	Email. Decimal Manne.	WO.	-muibi	I - Ice J - Di Water K - EDTA	
	Project Name Project Name Project Name Project Name	31007559	21 Ra	L-EDA	
	site. 310 OPPD Nebraska City Unit 2	\$SOW#	Samp Samp	of co	
			(F. Martin Mail Mail Mail Mail Mail Mail Mail Mail	equin	
F	Sample Identification - Client ID (Lab ID)	Sample Date Time G=grab)	Field 9375 9375 9375 9375 9375 9375	Special Instructions/Note:	
Page	MC2MM02/240,244244444444444444444444444444444	15:20	X		
23	NC2MW3 (310-241714-2)	10/3/22 Central	Water X X X	7 (
of 2	NC2MW5 (310-241714-3)	10/4/22 Central		v 20	
6	NC2MW6 (310-241714-4)		×	2	
	NC2MW7 (310-241714-5)	10/3/22 16·10 Central	×	2	
	NC2MW8 (310-241714-6)	_	Water × × ×	2	
	DUP2 (310-241714-7)	10/3/22 Central	×	2	
	Note Since laboratory accreditations are subject to change. Eurofine Environm	nment Testing North Central, LLC places the ownership	ccreditation compliance upon out subcontract laboratories. This sample st		
	y maintain accrec be brought to Eur	ked above for analysis/tests/matrix being analyzed. The s. In Central. LLC attenton immediately. If all requested ac	emples must be shipped back to the Eurofins Environment Testing North Central LLC laboratory or conditations are current to date, return the signed Chain of Custody attesting to said complicance to	or other instructions will be provided. Any changes to to Eurofins Environment Testing North Central. LLC.	
	Possible Hazard Identification Unconfirmed		Sample Disposal (A fee may be assessed it samples are retained longer than 1 month) Return To Client Disposal By Lab Anchive For	ained longer than 1 month) Irchive For Months	
1	Deliverable Requested 1 II. IV. Other (specify) Franty Kit Relinquished by:	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:		
1/11	Reinquished by	Date/Time 73, 17 %	Company Received by Pereir Company	Company	
/202	Relinquished by	au au	Company Received by	7 2022 COMPANY	
2 (R		Date/Time	Company Received by Date/Time	Company	
ev. 1	Custody Seals Intact: Custody Seal No.: A Yes A No		Cooler Temperature(s) [©] C and Other Remarks		
1)				Ver 06.08 2021	

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-241714-2

Answer Comment

List Source: Eurofins Cedar Falls

Login Number: 241714 List Number: 1

Creator: Costello, Mackenzie K

Question

Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td>	N/A
The cooler's custody seal, if present, is intact.	N/A
Sample custody seals, if present, are intact.	N/A
The cooler or samples do not appear to have been compromised or tampered with.	True
Samples were received on ice.	True
Cooler Temperature is acceptable.	True
Cooler Temperature is recorded.	True
COC is present.	True
COC is filled out in ink and legible.	True
COC is filled out with all pertinent information.	True
Is the Field Sampler's name present on COC?	True
There are no discrepancies between the containers received and the COC.	True
Samples are received within Holding Time (excluding tests with immediate HTs)	True
Sample containers have legible labels.	True
Containers are not broken or leaking.	True
Sample collection date/times are provided.	True
Appropriate sample containers are used.	True
Sample bottles are completely filled.	True
Sample Preservation Verified.	True
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True
Multiphasic samples are not present.	True
Samples do not require splitting or compositing.	True
Residual Chlorine Checked.	N/A

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-241714-2

Login Number: 241714 List Source: Eurofins St. Louis List Number: 2 List Creation: 10/07/22 12:26 PM

Creator: Worthington, Sierra M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins Cedar Falls Page 24 of 26 11/11/2022 (Rev. 1) **Eurofins Cedar Falls**

Page 25 of 26 11/11/2022 (Rev. 1)

Tracer/Carrier Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 2 CCR Job ID: 310-241714-2

Method: 9315 - Radium-226 (GFPC)

Matrix: Water Prep Type: Total/NA

_			Percent Yield (Acceptance Limits)	
		Ва		
Lab Sample ID	Client Sample ID	(40-110)		5
310-241714-1	NC2MW2	94.6		
310-241714-2	NC2MW3	93.1		
310-241714-3	NC2MW5	88.0		
310-241714-4	NC2MW6	97.8		
310-241714-5	NC2MW7	105		
310-241714-6	NC2MW8	103		
310-241714-7	DUP2	89.2		U
LCS 160-586466/2-A	Lab Control Sample	106		
MB 160-586466/1-A	Method Blank	109		3
Tracer/Carrier Legen	d			
Bo - Bo Corrier				

Method: 9320 - Radium-228 (GFPC)

Matrix: Water Prep Type: Total/NA

				Percent Yield (Acceptance Limits)	
		Ва	Υ	· · · · · · · · · · · · · · · · · · ·	1
Lab Sample ID	Client Sample ID	(40-110)	(40-110)		
310-241714-1	NC2MW2	94.6	86.0		
310-241714-2	NC2MW3	93.1	82.2		
310-241714-3	NC2MW5	88.0	86.7		1
310-241714-4	NC2MW6	97.8	86.4		
310-241714-5	NC2MW7	105	85.6		
310-241714-6	NC2MW8	103	87.5		
310-241714-7	DUP2	89.2	87.5		
LCS 160-586471/2-A	Lab Control Sample	106	84.5		
MB 160-586471/1-A	Method Blank	109	84.9		
Tracer/Carrier Legen	ıd				

Ba = Ba Carrier

Y = Y Carrier

LINKS Review your project results through **EOL Have a Question?** The Expert Visit us at: www.eurofinsus.com/Env

Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-241716-1

Client Project/Site: Nebraska City Unit 1 & 2 CCR

For:

eurofins

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

Attn: Kyle Uhing

RCHap

Authorized for release by: 10/21/2022 5:19:36 PM Brian Graettinger, Lab Director (319)595-2012 Brian.Graettinger@et.eurofinsus.com

Designee for

Shirley Thompson, Client Service Manager (319)277-2401 Shirley.Thompson@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Eurofins Cedar Falls

Page 26 of 26

11/11/2022 (Rev. 1)

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR Laboratory Job ID: 310-241716-1

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	6
Definitions	8
QC Sample Results	9
QC Association	11
Chronicle	12
Certification Summary	13
Method Summary	14
Chain of Custody	15
Receipt Checklists	17

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR Job ID: 310-241716-1

Job ID: 310-241716-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-241716-1

Comments

No additional comments.

Receipt

The samples were received on 10/5/2022 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C.

HPLC/IC

Method 9056A: The following sample was diluted due to the nature of the sample matrix: NC2MW4 (310-241716-1). 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.

Motal

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

General Chemistry

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

Eurofins Cedar Falls 10/21/2022

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR

MW13

Client Sample ID NC2MW4

Lab Sample ID

310-241716-1 310-241716-2 Job ID: 310-241716-1

Matrix	Collected	Received
Water	10/04/22 08:14	10/05/22 16:50
Water	10/03/22 09:08	10/05/22 16:50

Detection Summary Client: Omaha Public Power District

Project/Site: Nebraska City Unit 1 & 2 CCR

Job ID: 310-241716-1

Client Sample ID: NC2MW4

Lab Sample ID: 310-241716-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.30		5.00	2.25	mg/L		_	9056A	Total/NA
Sulfate	37.4		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.00114	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.347		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.160		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.0000600	J	0.000100	0.0000550	mg/L	1		6020A	Total/NA
Calcium	118		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000383	J	0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.000736		0.000500	0.000240	mg/L	1		6020A	Total/NA
Lithium	0.0303		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00422		0.00200	0.00120	mg/L	1		6020A	Total/NA
Total Dissolved Solids	442		50.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW13

Lab Sample ID: 310-241716-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.85		5.00	2.25	mg/L		_	9056A	Total/NA
Sulfate	13.3		5.00	2.00	mg/L	5		9056A	Total/NA
Arsenic	0.0151		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.253		0.00200	0.000880	mg/L	1		6020A	Total/NA
Boron	0.113		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	112		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000419	J	0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0301		0.0100	0.00250	mg/L	1		6020A	Total/NA
Total Dissolved Solids	470		50.0	26.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Page 5 of 17

10/21/2022

Eurofins Cedar Falls 10/21/2022

Page 4 of 17

5

Client Sample Results Client: Omaha Public Power District Job ID: 310-241716-1 Project/Site: Nebraska City Unit 1 & 2 CCR Client Sample ID: MC2Wr 4 Lab Sample ID: 310-24171N-1 Date Cclledte/ : 10504522 0v:14 Watxio: r atex Date Redei6e/: 1050h522 1N:h0 Wet8c/: Sr v4N90hNA - Anicns, Icn C8xcmatcgxap8y Analyte Result Qualifiex WDL Unit Dil Fad Analyze/ C8lcxi/ e 5.00 2.25 mg/L 10/21/22 05:46 h.30 Fluoride <0.220 0.500 0.220 mg/L 10/21/22 05:46 6 10/21/22 05:46 5 Sulfate 5.00 2.00 mg/L 37.4 Wet8c/: Sr v4N N020A - Wetals JCP5WS(Рхерахе/ RL WDL Unit Analyte Result Qualifiex Analyze/ Dil Fad Antimon <0.000690 0.00200 0.000690 mg/L 10/07/22 09:45 10/17/22 22:06 0.00200 0.000750 mg/L 10/07/22 09:45 10/17/22 22:06 Aysenid 0.00114) Baxium 0.347 0.00200 0.000880 mg/L 10/07/22 09:45 10/17/22 22:06 0.00100 0.000270 mg/L 10/07/22 09:45 10/17/22 22:06 <0.000270 Bervllium Bexen 0.1N0 0.100 0.0580 mg/L 10/07/22 09:45 10/17/22 22:06 0.0000N00) 0.0000550 mg/L 0.000100 10/07/22 09:45 10/17/22 22:06 Ca/ mium Caldium 11v 0.500 0.190 mg/L 10/07/22 09:45 10/17/22 22:06 <0.00110 10/07/22 09:45 Chromium 0.00500 0.00110 mg/L 10/17/22 22:06 Ccbalt 0.0003v3) 0.000500 0.000190 mg/L 10/07/22 09:45 10/17/22 22:06 Lea/ 0.00073N 0.000500 0.000240 mg/L 10/07/22 09:45 10/17/22 22:06 Lit8ium 0.0100 0.00250 mg/L 10/07/22 09:45 10/17/22 22:06 0.0303 Wclyb/ enum 0.00422 0.00200 0.00120 mg/L 10/07/22 09:45 10/17/22 22:06 <0.000960 0.00500 0.000960 mg/L 10/07/22 09:45 10/17/22 22:06 Selenium Thallium < 0.000260 0.00100 0.000260 mg/L 10/07/22 09:45 10/17/22 22:06 Wet8c/: Sr v4N7470A - Wexduxy JCVAA(Analyte Result Qualifiex RL WDL Unit Рхерахе/ Analyze/ Dil Fad Mercury <0.000110 0.000200 0.000110 mg/L 10/14/22 14:47 10/17/22 15:34 Genexal C8emistxy Analyte WDL Unit Рхерахе/ Analyze/

50.0

442

26.0 mg/L

Tctal Disscl6e/ Scli/ s JSW 2h40C(

Client Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR Job ID: 310-241716-1

Client Sample ID: Wr 13

< 0.00120

<0.000960

<0.000260

Lab Sample ID: 310-24171N-2 Watxio: r atex

10/07/22 09:45 10/17/22 22:27

10/07/22 09:45 10/17/22 22:27

10/17/22 22:27

10/07/22 09:45

Date Cclledte/: 10503522 09:0v Date Redei6e/: 1050h522 1N:h0

Molybdenum

Selenium

Thallium

Wet8c/: Sr v4N90hNA - Anicns, Icn C8xcmatcgxap8y

Dil Fad

C8lcxi/ e	9.vh		5.00	2.25	mg/L			10/21/22 10:44	- 5	ä
Fluoride	<0.220		0.500	0.220	mg/L			10/21/22 10:44	5	
Sulfate	13.3		5.00	2.00	mg/L			10/21/22 10:44	5	а
Wet8c/: Sr v4N N020A - Wetals JC	P5WS(
Analyte	Result	Qualifiex	RL	WDL	Unit	D	Рхерахе/	Analyze/	Dil Fad	
Antimony	<0.000690		0.00200	0.000690	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Axsenid	0.01h1		0.00200	0.000750	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Baxium	0.2h3		0.00200	0.000880	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Beryllium	<0.000270		0.00100	0.000270	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Bexen	0.113		0.100	0.0580	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Cadmium	<0.0000550		0.000100	0.0000550	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Caldium	112		0.500	0.190	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Chromium	<0.00110		0.00500	0.00110	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Ccbalt	0.000419)	0.000500	0.000190	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Lead	<0.000240		0.000500	0.000240	mg/L		10/07/22 09:45	10/17/22 22:27	1	
Lit8ium	0.0301		0.0100	0.00250	mg/L		10/07/22 09:45	10/17/22 22:27	1	

Wet8c/: Sr v4N7470A - Wexduxy	JCVAA(
Analyte	Result	Qualifiex	RL	WDL	Unit	D	Рхерахе/	Analyze/	Dil Fad
Mercury	<0.000110		0.000200	0.000110	mg/L		10/14/22 14:47	10/17/22 15:40	1

0.00200

0.00500

0.00100

0.00120 mg/L

0.000960 mg/L

0.000260 mg/L

Genexal C8emistxy Analyte Рхерахе/ Analyze/ Tctal Disscl6e/ Scli/ s JSW 2h40C(26.0 mg/L 10/06/22 13:40 470

10/07/22 16:28

Page 6 of 17 10/21/2022 Eurofins Cedar Falls

Page 7 of 17

10/21/2022

Eurofins Cedar Falls

	Definitions/Glossary	
	Public Power District ebraska City Unit 1 & 2 CCR	Job ID: 310-241716-1
	SUISKA CITY UTILL 1 & 2 CCR	
Qualifiers		
Vietals 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.	
3	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 DL, RA, RE, IN	Detection Limit (DoD/DOE)	
	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC FDI	Decision Level Concentration (Radiochemistry)	
LOD	Estimated Detection Limit (Dioxin) 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	
ac	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)	
INTC	Too Numerous To Count	
		Eurofins Cedar Falls

Page 8 of 17

10/21/2022

		QC	Sample	Resul	ts					
lient: Omaha Public Power District roject/Site: Nebraska City Unit 1 & 2 (CCR								Job ID: 310-2	41716-1
lethod: 9056A - Anions, Ion Cl		raphy								
		. шру								
Lab Sample ID: MB 310-369461/3 Matrix: Water							С	lient Sa	ample ID: Metho Prep Type:	
Analysis Batch: 369461	МВ	MB								
Analyte	Result		RL		MDL Unit		D Pre	pared	Analyzed	Dil Fac
Chloride	<0.450		1.00		.450 mg/L				10/21/22 00:50	1
Fluoride	<0.0440		0.100	0.0	0440 mg/L				10/21/22 00:50	1
Sulfate	<0.400		1.00	0	.400 mg/L				10/21/22 00:50	1
Lab Sample ID: LCS 310-369461/4 Matrix: Water							Client S	Sample	ID: Lab Control Prep Type:	
Analysis Batch: 369461										
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			10.0	9.263		mg/L		93	90 _ 110	
Fluoride			2.00	1.884		mg/L		94	90 - 110	
Sulfate			10.0	9.452		mg/L		95	90 _ 110	
lethod: 6020A - Metals (ICP/M	S)									
Lab Sample ID: MB 310-367783/1-A Matrix: Water							C	lient Sa	ample ID: Metho	
									Prep Type:	
Analysis Batch: 368920										
•	мо	мп							Prep Batch:	367783
-		MB Qualifier	RI		MDI Unit		D Pres	nared	-	
Analyte	Result				MDL Unit			pared 22 09:45	Analyzed	Dil Fac
Analyte	Result <0.000690		0.00200	0.000	0690 mg/L		10/07/2	22 09:45	Analyzed 10/17/22 18:28	Dil Fac
Analyte Antimony Arsenic	Result <0.000690 <0.000750		0.00200 0.00200	0.000	0690 mg/L 0750 mg/L		10/07/2	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28	Dil Fac
Analyte Antimony Arsenic Barium	Result <0.000690 <0.000750 <0.000880		0.00200 0.00200 0.00200	0.000	0690 mg/L 0750 mg/L 0880 mg/L		10/07/2 10/07/2 10/07/2	22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1
Analyte Antimony Arsenic Barium Beryllium	Result <0.000690 <0.000750 <0.000880 <0.000270		0.00200 0.00200 0.00200 0.00100	0.000 0.000 0.000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L		10/07/2 10/07/2 10/07/2	22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580		0.00200 0.00200 0.00200 0.00100 0.100	0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L		10/07/2 10/07/2 10/07/2 10/07/2	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.000550		0.00200 0.00200 0.00200 0.00100 0.100 0.000100	0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 0580 mg/L		10/07/2 10/07/2 10/07/2 10/07/2 10/07/2 10/07/2	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.0000550 <0.190		0.00200 0.00200 0.00200 0.00100 0.100 0.000100	0.000 0.000 0.000 0.000 0.000 0.0000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 0580 mg/L 0550 mg/L		10/07/2 10/07/2 10/07/2 10/07/2 10/07/2 10/07/2	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Calcium Chromium	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.500 0.00500	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 0580 mg/L 0550 mg/L 0110 mg/L		10/07/2 10/07/2 10/07/2 10/07/2 10/07/2 10/07/2 10/07/2	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmilum Calcium Chromium Cobalt	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.000550 <0.190 <0.00110 <0.000190		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.500 0.00500 0.00500	0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 0580 mg/L 0550 mg/L 0110 mg/L 0110 mg/L		10/07// 10/07// 10/07// 10/07// 10/07// 10/07// 10/07// 10/07//	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.000550 <0.090 <0.00110 <0.000190 <0.000240		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.500 0.00500 0.00500	0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 0580 mg/L 0550 mg/L 0110 mg/L 0110 mg/L 01240 mg/L		10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/;	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Berylilium Boron Cadmium Calcium Chromium Cobalt Lead	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.000550 <0.190 <0.00110 <0.000190 <0.000240 <0.00250		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.500 0.00500 0.00500 0.00500	0.000 0.000 0.000 0.000 0.000 0.000 0.000	mg/L 0690 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 0580 mg/L 0550 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0240 mg/L		10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.0000550 <0.0190 <0.00110 <0.000190 <0.000240 <0.00250 <0.00120		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.00500 0.00500 0.00500 0.0100	0.000 0.000 0.000 0.000 0.000 0.000 0.000	9690 mg/L 9750 mg/L		10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.000550 <0.090110 <0.000190 <0.000190 <0.000240 <0.000250 <0.00120 <0.000960		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.00500 0.00500 0.00500 0.00500 0.00200	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	9690 mg/L 9750 mg/L		10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead	Result <0.000690 <0.000750 <0.000880 <0.000270 <0.0580 <0.0000550 <0.0190 <0.00110 <0.000190 <0.000240 <0.00250 <0.00120		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.00500 0.00500 0.00500 0.0100	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	9690 mg/L 9750 mg/L		10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.00500 0.00500 0.00500 0.00500 0.00200	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	9690 mg/L 9750 mg/L		10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/;	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.00500 0.00500 0.00500 0.00500 0.00200	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	9690 mg/L 9750 mg/L		10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/;	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.500 0.00500 0.000500 0.0100 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L		10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/; 10/07/;	22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample Total/NA
Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L		10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample Total/NA
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molyddenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.500 0.00500 0.000500 0.000500 0.000500 0.000500 0.00100	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L	Unit	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 23 09:45 24 09:45 25 09:45 26 09:45 27 09:45 28 09:45 28 09:45 29 09:45 29 09:45 20 09:45 20 09:45 20 09:45 20 09:45 20 09:45	Analyzed 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Andimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Antimony	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.000100 0.000500 0.000500 0.000500 0.000500 0.00100 Spike Added 0.200	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	- <mark>Unit</mark>	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45 22 09:45	Analyzed 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Antimory Arsenic	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.000100 0.00500 0.000500 0.000500 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	- <mark>Unit</mark> mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 24 09:45 25 ample	Analyzed 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample Total/NA
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Antimony Arsenic Barium	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.500 0.00500 0.00500 0.00500 0.00500 0.00500 0.00500 Spike Added 0.200 0.200	0.000 0.000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	- <mark>Unit</mark> mg/L mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 23 09:45 24 09:45 24 09:45 25 09:45 26 09:45	Analyzed 10/17/22 18:28	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample Total/NA
Analyte Andimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Litthium Molybdenum Selenium Thaillium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Antimony Arsenic Beryllium Beryllium	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.500 0.000500	0.000 0.000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	Unit mg/L mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09.45 24 09.45 24 09.45 26 09.45 26 09.45 26 09.45 27 09.45 28 09.45 29 09.45 29 09.45 29 09.45 29 09.45 20	Analyzed 10/17/22 18:28 10/17/22 18	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Barium Beryllium Beryllium Boron	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.000100 0.00000 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.0005000 0.0005000 0.0005000 0.0005000 0.0005000 0.000500000000	0.000 0.000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	Unit mg/L mg/L mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 24 09.45 24 09.45 24 09.45 25 09.45 26 09.45 27 09.45 28 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 20	Analyzed 10/17/22 18:28 10/17/22 18	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Antimory Arsenic Barium Beryllium Boron Cadmilum Calcium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Antimory Arsenic Barium Beryllium Beryllium Boron Cadmium	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.000500 0.000500 0.000500 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100	0.000000000000000000000000000000000000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	Unit mg/L mg/L mg/L mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 23 09:45 24 09:45 26 09:45 26 09:45 27 09:45 28 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 20	Analyzed 10/17/22 18:28 10/17/22 18	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Cobalt Lead Lithium Molybdenum Selenium Thallium Lab Sample ID: LCS 310-367783/2-A Matrix: Water Analysis Batch: 368920 Analyte Antimory Arsenic Barium Beryllium Boron Cadmium Cadeium	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.500 0.000500 0.000500 0.000500 0.000500 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.00500 0.00100 0.00500 0.00100 0.00500 0.0	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.000000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	Unit mg/L mg/L mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 22 09.45 24 09.45 24 09.45 26 09.45 26 09.45 26 09.45 27 09.45 28 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 29 09.45 20	Analyzed 10/17/22 18:28 10/17/22 18	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample
Analyte Antimony Arsenic Barium Beryllium Boron Cadmium Calcium	Result <0.000690 <0.000750 <0.000750 <0.000270 <0.0580 <0.000270 <0.0580 <0.0000550 <0.190 <0.00110 <0.00110 <0.000110 <0.000190 <0.000240 <0.000260 <0.000260 <0.000260		0.00200 0.00200 0.00200 0.00200 0.00100 0.100 0.000500 0.000500 0.000500 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100 0.000500 0.00100	0.000000000000000000000000000000000000	0690 mg/L 0750 mg/L 0750 mg/L 0750 mg/L 0880 mg/L 0270 mg/L 05580 mg/L 05580 mg/L 05590 mg/L 0110 mg/L 0110 mg/L 0120 mg/L 0260 mg/L	Unit mg/L mg/L mg/L mg/L mg/L	10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/: 10/07/:	22 09:45 23 09:45 24 09:45 26 09:45 26 09:45 27 09:45 28 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 29 09:45 20	Analyzed 10/17/22 18:28 10/17/22 18	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Sample

Page 9 of 17

10/21/2022

Eurofins Cedar Falls

	QC Sar	mple Results			1		Association Summa	ry		
lient: Omaha Public Power District roject/Site: Nebraska City Unit 1 & 2 CCR				Job ID: 310-241716-	Client: Omaha Public P Project/Site: Nebraska				Job II	D: 310-241716-
Method: 6020A - Metals (ICP/MS) (C	Continued)				HPLC/IC					
Lab Sample ID: LCS 310-367783/2-A			Client	t Sample ID: Lab Control Sampl	Analysis Batch: 36946	1				
Matrix: Water				Prep Type: Total/N	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
Analysis Batch: 368920	Spik	e LCS LCS		Prep Batch: 36778 %Rec	310-241716-1	NC2MW4	Total/NA	Water	9056A	
Analyte	Adde		Unit D	%Rec Limits	310-241716-2	MW13	Total/NA	Water	9056A	
Lead	0.20		mg/L	103 80 - 120	MB 310-369461/3	Method Blank	Total/NA	Water	9056A	
Lithium	0.20		mg/L	97 80 - 120	LCS 310-369461/4	Lab Control Sample	Total/NA	Water	9056A	
Molybdenum	0.20	0 0.1924	mg/L	96 80 - 120	7 Metals					
Selenium	0.40	0 0.3578	mg/L	89 80 ـ 120						
Thallium _	0.20	0 0.2064	mg/L	103 80 - 120	8 Prep Batch: 367783					
Method: 7470A - Mercury (CVAA)					Lab Sample ID 310-241716-1	Client Sample ID NC2MW4	Prep Type Total/NA	Matrix Water	Method 3005A	Prep Bate
					310-241716-1	NG2MW4 MW13	Total/NA Total/NA	Water	3005A 3005A	
Lab Sample ID: MB 310-368713/1-A				Client Sample ID: Method Blan	MB 310-367783/1-A	Method Blank	Total/NA	vvater Water	3005A 3005A	
Matrix: Water				Prep Type: Total/N	LCS 310-367783/2-A	Lab Control Sample	Total/NA	Water	3005A	
Analysis Batch: 368887	MB MB			Prep Batch: 36871	_	Lab Control Cample	IOIDINA	**atci	JUJUA	
Analyte	MB MB Result Qualifier	RL MDL Uni		repared Analyzed Dil Fa	11 Prep Batch: 368713					
		0.000200 0.000110 mg/		4/22 14:47 10/17/22 14:53	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bat
		0.000.10 High	_ 10/1	TOTTILE THOU	310-241716-1	NC2MW4	Total/NA	Water	7470A	
Lab Sample ID: LCS 310-368713/2-A			Client	Sample ID: Lab Control Sampl	310-241716-2	MW13	Total/NA	Water	7470A	
Matrix: Water				Prep Type: Total/N	MB 310-368713/1-A	Method Blank	Total/NA	Water	7470A	
Analysis Batch: 368887				Prep Batch: 36871	LCS 310-368713/2-A	Lab Control Sample	Total/NA	Water	7470A	
	Spik			%Rec	Analysis Batch: 36888	7				
Analyte	Adde 0.0016			%Rec Limits						
Mercury	0.0016	7 0.001567	mg/L	94 80 ـ 120	Lab Sample ID 310-241716-1	Client Sample ID NC2MW4	Prep Type Total/NA	Matrix Water	Method 7470A	Prep Bat 3687
Made at OM OF 400 Called Tatal F										
vietnoa: Sivi 2540C - Solias, Total L	Dissolved (TDS)				1 1 1					
	Dissolved (TDS)				310-241716-2	MW13 Method Blank	Total/NA	Water	7470A	3687
Lab Sample ID: MB 310-367788/1	Dissolved (TDS)			Client Sample ID: Method Blan	310-241716-2 MB 310-368713/1-A	MW13				3687 3687
Lab Sample ID: MB 310-367788/1 Matrix: Water	Dissolved (TDS)			Client Sample ID: Method Blan Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A	MW13 Method Blank Lab Control Sample	Total/NA Total/NA	Water Water	7470A 7470A	3687 3687
Lab Sample ID: MB 310-367788/1					310-241716-2 MB 310-368713/1-A	MW13 Method Blank Lab Control Sample	Total/NA Total/NA	Water Water	7470A 7470A	3687 3687
Matrix: Water Analysis Batch: 367788	мв мв	Di MOLULI	4	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID	MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type	Water Water Water Matri x	7470A 7470A 7470A Method	36871 36871 Prep Bate
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788	MB MB Result Qualifier	RL MDL Uni		Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1	MW13 Method Blank Lab Control Sample Clo Client Sample ID NC2MW4	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water	7470A 7470A 7470A Method 6020A	3687 3687 3687 Prep Bat 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788	мв мв	RL MDL Uni 50.0 26.0 mg/		Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2	MW13 Method Blank Lab Control Sample Clo Client Sample ID NC2MW4 MW13	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA	Water Water Water Matrix Water Water Water	7470A 7470A 7470A Method 6020A 6020A	36871 36871 36871 Prep Bate 36778 36778
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788	MB MB Result Qualifier		/L	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Water Water Water Matrix Water Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water	MB MB Result Qualifier		/L	Prep Type: Total/N repared Analyzed Dil Fa 10/06/22 13:40	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2	MW13 Method Blank Lab Control Sample Clo Client Sample ID NC2MW4 MW13	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA	Water Water Water Matrix Water Water Water	7470A 7470A 7470A Method 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2	MB MB Result Qualifier <26.0	50.0 26.0 mg/	/L	Prep Type: Total/N repared Analyzed Dil Fa 10/06/22 13:40 t Sample ID: Lab Control Sampl Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Water Water Water Matrix Water Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788	MB MB Result Qualifier <26.0 Spik	50.0 26.0 mg/	Client	Prep Type: Total/N repared Analyzed Dill Fa 10/06/22 13:40 Sample ID: Lab Control Sampl Prep Type: Total/N %Rec	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Water Water Water Matrix Water Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte	MB MB Result Qualifier <26.0 Spilk Adde	50.0 26.0 mg/ e LCS LCS d Result Qualifier	Client	Prep Type: Total/N repared Analyzed Dil Fa 10/06/22 13:40 Sample ID: Lab Control Sampl Prep Type: Total/N %Rec %Rec Limits	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Water Water Water Matrix Water Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788	MB MB Result Qualifier <26.0 Spik	50.0 26.0 mg/ e LCS LCS d Result Qualifier	Client	Prep Type: Total/N repared Analyzed Dill Fa 10/06/22 13:40 Sample ID: Lab Control Sampl Prep Type: Total/N %Rec	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID	MW13 Method Blank Lab Control Sample Cilent Sample ID NC2MW4 MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix	7470A 7470A 7470A Method 6020A 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte	MB MB Result Qualifier <26.0 Spilk Adde	50.0 26.0 mg/ e LCS LCS d Result Qualifier	Client	Prep Type: Total/N repared Analyzed Dil Fa 10/06/22 13:40 Sample ID: Lab Control Sampl Prep Type: Total/N %Rec %Rec Limits	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID Client Sample ID MW13	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Water Water Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids	MB MB Result Qualifier <26.0 Spilk Adde	50.0 26.0 mg/ e LCS LCS d Result Qualifier	Client	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/1	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank H88	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Water Water Water Matrix Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C SM 2540C	3687 3687 3687 Prep Bat 3677 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1	MB MB Result Qualifier <26.0 Spik Adde	50.0 26.0 mg/ e LCS LCS d Result Qualifier	Client	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID Client Sample ID MW13	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Water Water Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A 6020A 6020A	3687 3687 3687 Prep Bat 3677 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB MB	e LCS LCS d Result 0 976.0	Client Unit D mg/L	Prep Type: Total/N repared Analyzed Dil Fa 10/06/22 13:40 Sample ID: Lab Control Sampl Prep Type: Total/N **Rec Limits 98 90 - 110 Client Sample ID: Method Blan Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/1	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Water Water Water Matrix Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C SM 2540C	3687 3687 3687 Prep Bat 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Analysis Batch: 367956 Analyte	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB Result Qualifier	e LCS LCS d Qualifier 976.0	Client Unit D P	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/1 LCS 310-367788/1 LCS 310-367788/2 Analysis Batch: 36795	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C SM 2540C SM 2540C	3687 3687 3687 Prop Bat 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB MB	e LCS LCS d Result 0 976.0	Client Unit D P	Prep Type: Total/N repared Analyzed Dil Fa 10/06/22 13:40 Sample ID: Lab Control Sampl Prep Type: Total/N **Rec Limits 98 90 - 110 Client Sample ID: Method Blan Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/1 LCS 310-367788/1	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample MW13 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Water Water Water Matrix Water Water Water	7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C SM 2540C	36871 36871 36871 36871 36776 36776 36776 Prop Bate
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB Result Qualifier	e LCS LCS d Qualifier 976.0	Client Unit D mg/L t D P	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/1 LCS 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-2 MB 310-367788/1	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Client Sample ID MW13 Client Sample ID MG16 Client Sample ID	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Water Water Water Matrix Water Water Water Water Water Water Water Matrix Water Water Water Water Water Water Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C SM 2540C SM 2540C Method	3687' 3687' Prop Bate 36778 36778 Prop Bate
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Analysis Batch: 367956 Analyte	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB Result Qualifier	e LCS LCS d Qualifier 976.0	Client Unit D mg/L t D P	Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N P	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/1 LCS 310-367788/1 LCS 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1	MW13 Method Blank Lab Control Sample Cilont Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Cilont Sample ID MW13 Method Blank Lab Control Sample Cilont Sample ID MW13 Method Blank Lab Control Sample Cilont Sample ID Cilont Sample ID Cilont Sample ID NC2MW4	Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Matrix Water Water Water Water Water Water Water Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	3687 3687 3687 Prop Bate 36776 36776 36776
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analyte Total Dissolved Solids	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB Result Qualifier	e LCS LCS d Qualifier 976.0	Client Unit D mg/L t D P	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1 MB 310-367956/11	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 Method Blank Method Blank Method Blank Method Blank Method Blank Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C	3687 3687 3687 Prop Bate 36776 36776 36776
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/2	MB MB Result Qualifier <26.0 Spik Adde 100 MB MB Result Qualifier	e LCS LCS d Result 0 976.0 PM Uni 50.0 26.0 mg/	Client Unit D mg/L t D P	Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N P	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1 MB 310-367956/11	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 Method Blank Method Blank Method Blank Method Blank Method Blank Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C	3687 3687 3687 Prop Bate 36776 36776 36776
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte	MB MB Result Qualifier <26.0 Spilk Adde 100 MB Result Qualifier <26.0 Spilk Adde	CS CS CS CS CS CS CS CS	Client Unit D mg/L t D P	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1 MB 310-367956/11	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 Method Blank Method Blank Method Blank Method Blank Method Blank Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C	3687 3687 3687 Prep Bat 3677 3677 3677
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids	MB MB Result Qualifier <26.0 Spilk Adde 100 MB MB Result Qualifier <26.0 Spilk	CS CS CS CS CS CS CS CS	Unit D P	Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1 MB 310-367956/11	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 Method Blank Method Blank Method Blank Method Blank Method Blank Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C	3687 3687 3687 Prop Bate 36776 36776 36776
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Analysis Batch: 367956 Analysis Batch: 367956 Analysis Batch: 367956 Analysis Batch: 367956	MB MB Result Qualifier <26.0 Spilk Adde 100 MB Result Qualifier <26.0 Spilk Adde	CS CS CS CS CS CS CS CS	Client Unit D Ref Client Unit D	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1 MB 310-367956/11	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 Method Blank Method Blank Method Blank Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C	3687 3687 3687 Prop Bate 36776 36776 36776
Lab Sample ID: MB 310-367788/1 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-367788/2 Matrix: Water Analysis Batch: 367788 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/1 Matrix: Water Analysis Batch: 367956 Analyte Total Dissolved Solids Lab Sample ID: MB 310-367956/2 Matrix: Water Analysis Batch: 367956 Analyte Analysis Batch: 367956 Analysis Batch: 367956 Analysis Batch: 367956 Analysis Batch: 367956	MB MB Result Qualifier <26.0 Spilk Adde 100 MB Result Qualifier <26.0 Spilk Adde	CS CS CS CS CS CS CS CS	Client Unit D Replication D Client Unit D	Prep Type: Total/N	310-241716-2 MB 310-368713/1-A LCS 310-368713/2-A Analysis Batch: 36892 Lab Sample ID 310-241716-1 310-241716-2 MB 310-367783/1-A LCS 310-367783/2-A General Chemistry Analysis Batch: 36778 Lab Sample ID 310-241716-2 MB 310-367788/2 Analysis Batch: 36795 Lab Sample ID 310-241716-1 MB 310-367956/11	MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID MW13 Method Blank Lab Control Sample Client Sample ID NC2MW4 Method Blank Method Blank Method Blank Method Blank	Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Matrix Water Water Water Water Water Water Matrix Water	7470A 7470A 7470A 7470A Method 6020A 6020A 6020A 6020A Method SM 2540C	3687 3687 Prop Bat 3677 3677 3677 Prop Bat

Lab Chronicle

Client: Omaha Public Power District

Project/Site: Nebraska City Unit 1 & 2 CCR

Client Sample ID: NC2MW4

Lab Sample ID: 310-241716-1

Matrix: Water

Job ID: 310-241716-1

Date Collected: 10/04/22 08:14 Date Received: 10/05/22 16:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	369461	DHM5	EET CF	10/21/22 05:46
Total/NA	Prep	3005A			367783	QTZ5	EET CF	10/07/22 09:45
Total/NA	Analysis	6020A		1	368920	A6US	EET CF	10/17/22 22:06
Total/NA	Prep	7470A			368713	XXW3	EET CF	10/14/22 14:47
Total/NA	Analysis	7470A		1	368887	XXW3	EET CF	10/17/22 15:34
Total/NA	Analysis	SM 2540C		1	367956	FNR7	FET CE	10/07/22 16:28

Lab Sample ID: 310-241716-2

Matrix: Water

Client Sample ID: MW13 Date Collected: 10/03/22 09:08 Date Received: 10/05/22 16:50

Batch Batch Dilution Batch Prepared Prep Type Type Method Factor Number Analyst Lab or Analyzed 10/21/22 10:44 Total/NA Analysis 9056A 369461 DHM5 EET CF EET CF Total/NA Prep 3005A 367783 QTZ5 10/07/22 09:45 Total/NA Analysis 6020A 368920 A6US EET CF 10/17/22 22:27 Total/NA Prep 7470A 368713 XXW3 EET CF 10/14/22 14:47 Total/NA 7470A 368887 XXW3 EET CF 10/17/22 15:40 Analysis Total/NA Analysis SM 2540C 367788 ENB7 EET CF 10/06/22 13:40

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: Nebraska City Unit 1 & 2 CCR

Job ID: 310-241716-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-22 *
Oregon	NELAP	IA100001	09-29-23

Eurofins Cedar Falls

Page 13 of 17

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cedar Falls

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.

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



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information
Client: Ohnsha Public Pouce
City/State: Comunication STATE Project:
Receipt Information
Date/Time Received: PATE 0-5-21 TIME Received By: EH
Delivery Type: UPS FedEx FedEx Ground US Mail Spee-De
☐ 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?
Cooler Custody Seals Present? Yes If yes: Cooler custody seals intact? Yes
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 Regord 14
Thermometer ID: Correction Factor (°C):
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature
Uncorrected Temp (°C): Corrected Temp (°C):
• Sample Container Temperature ಳ ಕನ್ನಿಸಿ ಕಾರ್ಡಿಕ್ ಸ್ಟ್ರಾಕ್ ಕ್ರಿಸ್ಟ್ ಕ್ಟ್ಟ್ ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ ಕ್ಟ್ಟ್ಟ್ಟ
Container(s) used: Container 1 Container 1 Container 2 Container 2
Uncorrected Temp (°C):
Corrected Temp (°C):
Exceptions Noted or a first service of the service
1) If temperature exceeds criteria, was sample(s) received same day of sampling?
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?)
Note: If yes, contact PM before proceeding. If no, proceed with login Additional Comments' Ad

Document, CED-P-SAM-FRM45521 Revision 26

Date 27 Jan 2022

Eurofips Cedar Falls Page 15 of 17

General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C 10/21/2022

Eurofins Cedar Falls

Page 14 of 17

																						1		
Ol	П	Т	Τ		_	ate		Т		1	П	П	Т	П	TT	\sqcap	Т	Т		Τ	Τ	2	Login Sample Receipt Checklist	
TestAmerica				exane one iNaO2	252503 252503	P Dodecahydr etone	n 4-5 ner (specify)		ions/Note:	Constituents	Constituents						thurs.		E Sany	any		3	Client: Omaha Public Power District Job Number:	310-24171/ -1
Ě			Sodes:	N N N N N N N N N N N N N N N N N N N	223	D - NC - N	W-pt		Instruct	dix III and IV	III and IV						1 mont		S	dia	+	4	Login Number: 241716 List Source: Eurofin	ns Cedar Falls
10			ation (etate	4 - 6	blc Aci			Special In) Sendix	Sendix	11					r thar		1515	0		5	Creator: Costello, Mackenzie K	
,Ø	C No:	:# de:	eservi	NaOr - A	MeOr	- Ascor	EDTA	Leg l	Ū.	CR Ap	CR App						onge		1	1650		6	Question Answer Comment	
B	8	Pa Joh	la.	4000	ய்ட்ட		rtainers r ¬	100 Jo 181	otal Numb		0	+	\vdash	+	++	+	ined I		22				d avioactiyit' wasnkt chec <ev a="" as="" b'="" bac<.="" is="Ag" measurev="" nar<="" or="" rounv="" surye'="" td=""><td></td></ev>	
			\vdash			-						\top	\vdash		++	\top	retai □ An		3	22			meterT , he cooler's custov' sealf ipSresentf is intactT NAR	
										\Box	\top						are re	aut	O Line	Time:	ĺ	8	I amSle custov' sealsf ipSresentf are intactT NAR	
	No(s):																aldm b	Shipm	Date	Oate			, he cooler or samSles vo not aSSear to haye been comSromisev or , rue	
	cking																f if sa By La	Jo po			1	9	tamSerev withT	
	er Tra	1	D L														sed E	\$	11			40	I amSles were receiyev on iceT , rue Cooler , emSerature is acceStableT , rue	
	g		<u> </u>							$\perp \perp$	+				\perp	\perp	Dispo		MX		amarks	IU	Cooler , emSerature is acceStableT , rue Cooler , emSerature is recorvevT , rue	
		6								+	+			1	44	\perp	pe [IV		her Re	11	COC is SresentT , rue	
		ic.com	<u></u>							+	++	\perp		+	++	+	may		1		10 pue		COC is pillev out in in <anv ,="" iblet="" le.="" rue<="" td=""><td></td></anv>	
		C.CO	<u> </u>							++	++	+	-	+	++	+	A fee	3		5	(S)	12	COC is pillev out with all Sertinent inpormationT , rue	
		ricair	` -		AVRILLE	no 'epuon	סטמפי בור	INJ Ageur	240C TDS, 9	7 7 >	< ×	+	-	++	++	+	o Cli	Suon		5	rature	13	Fis the ?ielv I amSlerks name Sresent on COCH , rue	
		tame	\vdash	Auno					A0208 Into	-		+	\vdash	++	++	+	odsi um T	Struc	à V	d by	Tempe	10	, here are no viscreSancies between the containers receiyev anv the COCT , rue	
ō	Σ	@tes	\vdash						315 Ra226,	-		\top	\vdash	+	+	+	Ple D	E 0	eceive	secely secely	cooler	14	I amSles are receiyev within (olvin. , ime xe) cluvin. tests with immeviate , rue (, sV	
Ö	Shawn M	ayes							SM mrohe		\pm						Sample	obed ne.	-	- 4	Ť	1 1	l amSle containers haye le. ible labelsT , rue	
Şe	PM:	E-Mail: shawn h	F	_		(oN 10	9 (Yes o	dma8 be	Filtere	Z Z	ZZ	-		$\overline{+}$	$\overline{+}$	$\overline{+}$		TĖ.	-				Containers are not bro <en ,="" lea<in.="" or="" rue<="" t="" td=""><td></td></en>	
<u>></u>	울훈	Sha Sha							Matrix (Winwater Smooth, Dinwasterfoll,	N N	3 3								COMPany CON CONTRACT				I amSle collection vateAtimes are SroyivevT , rue	
0								:	R Fr	ion C	-								S C	ad wo			RSSroSriate samSle containers are usevT , rue	
ust									9 e 6	ervat	++				+		gical		řŤ	O	7		I amSle bottles are comSletel' pillevT , rue	
ည	1		1	1	1		1 1		Sample Type (C=comp,	Pres	0			11		11	diolo	1	2		1		I amSle Preseryation qeripievT , rue	
0								H			+	+	-	++	++	+	J Ra	-	5.0	2			, here is suppicient yolTpor all reMuestev anal'sesfinclTan'reMuestev , rue z I Ax I Ds	
Chain of Custody Record			÷	ys):			#		Sample	} ≥	76						Own	Date:					Containers reMuirin. 6ero heavsSace haye no heavsSace or bubble is , rue =/ mm x1A*'\Vi	
O	- Bu	-2515	queste	ep) pe			Project	Г	ate	n A A	6/09						Unkn	Г	Elect.	2			z ultiShasic samSles are not SresentT , rue	
	- 5	226-;	te Re	dnest			erica 559		Sample Date										Z iii				I amSies vo not reMuire sSittin. or comSositin. T	
	Sampler Kyle K. Uhing	Phone: (531) 226-	one Da	AT Re	#	#	estAm 31007	SOW	Sam	N A	五字	-					on B	- 1	Date O	2 E			desivual Chlorine Chec≺evT NAR	
	0) 1		۴	-	100	-	F 69	8		11	7			++	++		Poisor	- 1		1	7			
										11														
					1					1/										1				
										М							Irritar	ê l		M_{ℓ}				
	2						llibui			IIII							Skin	ods.		3				
	7-242						N/L			IVI								iner.	130	1	ealN			
alls	-ax (319) 277			<u> </u>			000	~		111							ple	, E	3	1	ody S			
ar H	(3)		<u> </u>		1	1	اب مي	-α		111	11	1 1	1	11		11	Flammable	<u> </u>	/	\	Custo			
3 8			nistri	100			ion Unit 1 & 2 CCR / La	Unit		_							Intiffic	od by	1		长	1		
ca C Drive	one (319) 277-2401 ient Information		ower	5		E S	tation	tation	it	Identification							d Ide	ueste	3	-	No No			
neric rise D s, IA	9) 27 Form	ing ing	olic i		68102-2247 e:	2515	Sity S	S (it)	hotific								lazar fazar	Red	2	2	Seals 3 A			
tAme Interpris r Falls,	nt In	Contac	%: %	g g	8102	226-	Name Iska (ska (9	₩ ₩							Von-F	/ Kit F	ished	ished	1 Yes			
Tes 704 E Sedar	Clie	Kyle Calent	Addres	Omar	NE, 6	531) Email: ckuhir	Project	Vebra	ame	VC2MW4	WW13						sso [mpt	Relinqu	celinqu	Cus			
0			14	. 10 0 10	, <u>~ u</u>	<u> ~Im →</u>	- u - C	v) =	F	0 12	16 of 1	7					4-10	<u>. m</u>	1()/21/2	022	1	Eurofins Cedar Falls Page 17 of 17	10/21/2022
																						- 1	1	



Environment Testing

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-241716-2

Client Project/Site: Nebraska City Unit 1 & 2 CCR

For:

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

Attn: Kyle Uhing

RCH

Authorized for release by: 11/10/2022 4:59:33 PM Brian Graettinger, Lab Director (319)595-2012 Brian.Graettinger@et.eurofinsus.com

Designee for

LINKS

Review your project results through

Have a Question?

The Expert

www.eurofinsus.com/Env

Visit us at:

Shirley Thompson, Client Service Manager (319)277-2401 Shirley.Thompson@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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 (0) Project Manager.

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR

Laboratory Job ID: 310-241716-2

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	6
Definitions	8
QC Sample Results	9
QC Association	10
Chronicle	11
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	17
Tracer Carrier Summary	19

2

<u>3</u>

5

7

9 10

12 13

1

Case Narrative Client: Omaha Public Power District Job ID: 310-241716-2 Project/Site: Nebraska City Unit 1 & 2 CCR Job ID: 310-241716-2 **Laboratory: Eurofins Cedar Falls** Job Narrative 310-241716-2 Comments No additional comments. Receipt The samples were received on 10/5/2022 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C. RAD Methods 903.0, 9315: Radium-226 batch 586466 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date NC2MW4 (310-241716-1), MW13 (310-241716-2), (LCS 160-586466/2-A), (MB 160-586466/1-A), (480-202269-A-1-A) and (480-202269-B-1-A DU) Methods 904.0, 9320: Radium-228 batch 586471 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. NC2MW4 (310-241716-1), MW13 (310-241716-2), (LCS 160-586471/2-A), (MB 160-586471/1-A), (480-202269-A-1-B) and (480-202269-B-1-B DU) Method PrecSep_0: Method PrecSep-21: 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: Nebraska City Unit 1 & 2 CCR

Job ID: 310-241716-2

DD 1D. 010 2+11 10 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-241716-1	NC2MW4	Water	10/04/22 08:14	10/05/22 16:50
310-241716-2	MW13	Water	10/03/22 09:08	10/05/22 16:50

4

6

9

11

13

15

Detection Summary Client: Omaha Public Power District Job ID: 310-241716-2 Project/Site: Nebraska City Unit 1 & 2 CCR Client Sample ID: NC2MW4 Lab Sample ID: 310-241716-1 No Detections. Client Sample ID: MW13 Lab Sample ID: 310-241716-2 5 No Detections.

Client Sample Results

Uncert.

(2σ+/-)

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR Job ID: 310-241716-2

Client Sample ID: NC2MW4 Date Collected: 10/04/22 08:14

Lab Sample ID: 310-241716-1 Matrix: Water

Analyzed

Prepared

Prepared

10/19/22 10:22 11/03/22 11:08

Date Received: 10/05/22 16:50

Analyte

Radium-228

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

Uncert.

(2σ+/-)

Analyte 0.597 Radium-226

0.245 pCi/L 0.227 1.00 0.234 10/19/22 09:46 11/10/22 11:25 %Yield Qualifier Ba Carrier 94.6 40 - 110 10/19/22 09:46 11/10/22 11:25

1.00

MDC Unit

0.959 pCi/L

Method: SW846 9320 - Radium-228 (GFPC)

Count Uncert. Uncert Result Qualifier (2σ+/-) (2σ+/-) 0.759 0.782

Dil Fac 10/19/22 10:22 11/03/22 11:08 Analyzed 10/19/22 10:22 11/03/22 11:08

Analyzed

Carrier %Yield Qualifier Limits Ba Carrier 94.6 40 - 110 Y Carrier 88.2 40 - 110

2.05

Method: TAL-STL Ra226 Ra228 - Combined Radium-226 and Radium-228

Total Uncert. (2σ+/-) MDC Unit Analyzed

Count Uncert. Result Qualifier (2σ+/-) Combined Radium 2.64 0.792 0.816 5.00 0.959 pCi/L 11/10/22 16:20 226 + 228

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Page 5 of 19

11/10/2022

Eurofins Cedar Falls

Page 6 of 19

11/10/2022

Client Sample Results Client: Omaha Public Power District Job ID: 310-241716-2 Project/Site: Nebraska City Unit 1 & 2 CCR Client Sample ID: MW13 Lab Sample ID: 310-241716-2 Date Collected: 10/03/22 09:08 Matrix: Water Date Received: 10/05/22 16:50 Method: SW846 9315 - Radium-226 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier (2σ+/-) (2σ+/-) Prepared Analyzed 0.203 pCi/L 11/10/22 11:25 0.228 0.142 1.00 10/19/22 09:46 Radium-226 0.144 %Yield Qualifier Analyzed Ba Carrier 98.3 40 - 110 10/19/22 09:46 11/10/22 11:25 Method: SW846 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Result Qualifier Dil Fac Analyte (2σ+/-) (2σ+/-) Prepared Analyzed 1.00 0.519 pCi/L 10/19/22 10:22 11/03/22 11:08 Radium-228 1.01 0.416 0.426 %Yield Qualifier Limits Prepared Analyzed 11/03/22 11:08 Ba Carrier 98.3 40 - 110 10/19/22 10:22 10/19/22 10:22 11/03/22 11:08 Y Carrier 89.3 40 - 110 Method: TAL-STL Ra226 Ra228 - Combined Radium-226 and Radium-228 Count Total Uncert. Uncert. Result Qualifier (2σ+/-) (2σ+/-) MDC Unit Analyzed Dil Fac Combined Radium 1.24 0.440 0.450 5.00 0.519 pCi/L 11/10/22 16:20 226 + 228

	Definitions/Glossary	
Client: Omaha	Public Power District	Job ID: 310-241716-2
Project/Site: N	ebraska City Unit 1 & 2 CCR	
Qualifiers		
Rad		
Qualifier	Qualifier Description	
U	Result is less than the samLle getection limitq	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
M	disteg unger the pDpcolumn to gesixnate that the result is reLorteg on a gry weixht basis	
v R	Percent Reco. ery	
C¤d	Contains ¤ree di" uig	
C¤U	Colony ¤orminx Unit	
CN¤	Contains No ¤ree di" uig	
D%R	DuLlicate %rror Ratio FnormaliEeg absolute gi((erencez	
Dil ¤ac	Dilution ¤actor	
Dd	Detection dimit fDoD/DO%z	
Ddf R) f R%f IN	Ingicates a Dilutionf Re-analysisf Re-e, tractionf or aggitional Initial metals/anion analysis o(the samLle	
DdC	Decision de. el Concentration fRagiochemistryz	
%Dd	%stimateg Detection dimit fDio, inz	
dOD	dimit o(Detection FDoD/DO%z	
dOA	dimit o(Auantitation FDoD/DO%z	
QCd	%P) recommengeg pQa, imum Contaminant de. elp	
QD)	Qinimum Detectable) cti. ity Ragiochemistryz	
QDC	Qinimum Detectable Concentration Ragiochemistryz	
QDd	Qethog Detection dimit	
Qd	Qinimum de. el fDio, inz	
QPN	Qost Probable Number	
QAd	Qethog Auantitation dimit	
NC	Not Calculateg	
ND	Not Detecteg at the reLortinx limit for QDd or %Dd i(shownz	
N%G	Nexati. e /) bsent	
POS	Positi. e / Present	
PAd	Practical Auantitation dimit	
PR%S	PresumLti. e	
AC	Auality Control	
R%R	Relati. e %rror Ratio Ragiochemistryz	
Rd	ReLortinx dimit or Re" uesteg dimit ragiochemistryz	
RPD	Relati. e Percent Di((erencef a measure o(the relati. e gi((erence between two Loints	
T%¤	To, icity %" ui. alent ¤actor fDio, inz	
T%A	To, icity % ui. alent Auotient fDio, inz	

Eurofins Cedar Falls

TNTC

Too Numerous To Count

Page 7 of 19 11/10/2022

%uro(ins Cegar ¤alls

Page 8 of 19

11/10/2022

7

Analysis Batch: 589595 Spike LCS LCS Uncert. RL MDC Unit MRec Limits Railwin-226 LCS LCS Unit LCS LCS	Section Sect	roject/Site: Neb	ublic Pow			Q	C Samp	le Resul	เร				
Client Sample D: MB 160-586466/1-A	Lab Sample ID: MB 160-586466/1-A Matrix: Water Analysis Batch: 589595 MB MB Count Uncert. (2e+t) Uncert. (2e+t) (ethod: 9315	raska City									Job ID: 310-2	41716-2
Matrix: Water Analysis Batch: 589595 Count Total Uncert.	Matrix: Water Analysis Batch: 589595 MB MB Uncert	- Radiu	m-226	(GFPC)									
Analysis Batch: 589595 MB MB Uncert.	Analysis Batch: 589595 MB MB MB Uncert. Uncer		: MB 160-	-586466/1	-A						Client Sa		
Result Qualifier Qualifi	Mail		h: 589595										
Result Qualifier Qualifi	Result Qualifier Qo+/- Qo+/- RL MDC Unit Prepared Analyzed Dil Fac Total Name Nam												
Ra. lum-226	MB												
Carrier Wyled Qualifier Limits	MB MB MB Carrier Wyleid Qualifier Limits 40 - 110 Matrix: Water Client Sample ID: Lab Control Sample ID: Lab Sample ID: Lab Control Sample ID: Lab Sample ID: Matrix: Water Count												DII Fac
Carrier	Carrier Wilel Qualifier Limits Qualifier	tu. ium 220				02010	02070	120	02027	оолр	10/10/22 00:10	11/10/22 00:21	
Ba Carrier 109	Client Sample ID: LCS 160-586466/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 586466 Prep Type: Total/NA Prep Type: Total/NA Prep Type: Total/NA Prep Batch: 586471 Prep Type: Total/NA Prep Batch: 586471 Prep Type: Total/NA Prep Batch: 586471												57.5
Client Sample ID: LcS 160-586466/2-A Client Sample ID: Lab Control Sample Client Sample ID: Method Blank Client Sample	Client Sample ID: Los 160-586466/2-A Client Sample ID: Lab Control Sample ID: Safeth: 586466 ID: Sample ID: Lab Control Sample ID: Marix: Water Client Sample ID: Lab Control Sample Client Sample C				Qualifier								DII Fac
Matrix: Water Analysis Batch: 589595 Spike Added Result Count	Matrix: Water Analysis Batch: 589595 Spike LCS LCS Uncert. RL MDC Unit MRec Limits Ra Ra Ra Ra Ra Ra Ra R	ba Carrier		109		40 - 110					10/19/22 09.46	11/10/22 09.21	,
Analysis Batch: 589595 Spike Added Result Qual Q20+/-) RL MDC Quilt MRC Limits Result Qual Q20+/-) RL MDC Quilt MRC Limits Result Qual Q20+/-> RL MDC Quilt MRC Limits Result Qual Q20+/-> RL MDC Qualifier Result Qualifier Result Qualifier Limits Result Qualifier Limits Result Qualifier Result Qualifier Limits Result Qualifier Result Qualifier Result Qualifier Q20+/-> REsult Qualifier Q20+/> Result Qualifier Q20+/	Analysis Batch: 589595 Total Total Total	Lab Sample ID	: LCS 160	-586466/	2-A						Client Sample I	D: Lab Control	Sample
Count Coun	Companies Comp	Matrix: Water										Prep Type:	Total/NA
Spike LCS LCS Uncert. Qual (2σ+/) RL MDC Unit %Rec Limits	Spike LCS LCS Uncert. RL MDC Unit MRc Limits L	Analysis Batch	h: 589595									Prep Batch	: 586466
Analyte	Added Result Qual (20+/-) RL MDC Unit %Rec Limits												
Ra. lum-226	Carrier Wild Qualifier Limits Analysis Batch: 588336 Count Total Uncert. Carrier Wild Qualifier Carrier Count Carrier Carrier Carrier Count Carrier								ъ.				
Count Total Count Coun	LCS LCS Carrier %Yield Qualifier Limits 40 . 110						Qual						
Carrier	Carrier Wyield Qualifier Limits 40 . 110	Iva. IUIII=220			1113	31306		т Ф4	ımo	JU 14	2011h E/	70 - 120	
Client Sample ID: MB 160-586471/1-A	Count Total Carrier 106 MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB		LCS										
Lab Sample ID: MB 160-586471/1-A	Count Total Count Total Count Total Count Coun												
Lab Sample ID: MB 160-586471/1-A Matrix: Water Analysis Batch: 58836 MB MB Uncert. Uncert. Analyte Result Qualifler (2σ+/-) (2σ+/-) RL MDC Unit Prepared Analyze District Prepared District Prepared District Prepared District District Prepared District Distric	Lab Sample ID: MB 160-586471/1-A Matrix: Water Analysis Batch: 588336 MB MB Uncert.			Qualifier		-							
Analyte Result 012750 Qualifier United 20132 (2σ+1) (2σ+1) (2σ+1) RL RL MDC 01841 Unit 01841 Prepared Prepared Nanalyzed 018 Analyzed 018 Fac 01825 Dil Fac 01825 1100 01841 9C/lp 018712 0122 11/103/22 11:23 11 11/103/22 11:23 11	Name	Ba Carrier	106 - Radiu	m-228	40 - 110 (GFPC)	=					Client Sa	mple ID: Metho	od Blank
Analyte Result Qualifier (2σ+i-) (2σ+i-) RL MDC Unit Prepared Analyzed Dil Fac Ra. ium-22E 012750 U 0132E 01325 1100 01841 9Ci/p 10/15/22 10:22 11/03/22 11:03 1	Result Qualifier (20+1-) (20+1-) RL MDC Unit Prepared Analyzed Dil Fac	Ba Carrier lethod: 9320 Lab Sample ID Matrix: Water	106) - Radiu): MB 160-	m-228	40 - 110 (GFPC)	-					Client Sa	Prep Type:	Total/NA
Ra. ium-22E 012750 U 0132E 01325 1100 01841 9Ci/p 10/15/22 10:22 11/03/22 11:03 1	Nation	Ba Carrier lethod: 9320 Lab Sample ID Matrix: Water	106) - Radiu): MB 160-	m-228 (40 - 110 (GFPC)						Client Sa	Prep Type:	Total/NA
·	MB MB Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac	Ba Carrier lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch	106) - Radiu): MB 160-	m-228 (40 - 110 (GFPC)	Uncert.	Uncert.					Prep Type: Prep Batch	Total/NA : 586471
MB MB	Carrier % Yield Number Limits Prepared Analyzed Di Fac 3a Carrier 109 40 . 110 10/19/22 10:22 11/03/22 11:03 1 Y Carrier 84.9 40 . 110 10/19/22 10:22 11/03/22 11:03 1 Lab Sample ID: LCS 160-586471/2-A Client Sample ID: Lab Control Sample Matrix: Water	Ba Carrier Iethod: 9320 Lab Sample ID Matrix: Water Analysis Batch	106) - Radiu): MB 160-	m-228 (-586471/1 MB Result	40 - 110 (GFPC) -A MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Prep Type: Prep Batch	Total/NA : 586471 Dil Fac
	Ba Carrier 109 40 . 110 10/19/22 10:22 11/03/22 11:03 1 V Carrier 84.9 40 - 110 10/19/22 10:22 11/03/22 11:03 1 Lab Sample ID: LCS 160-586471/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA	Ba Carrier Iethod: 9320 Lab Sample ID Matrix: Water Analysis Batch	106) - Radiu): MB 160-	MB Result 012750	40 - 110 (GFPC) -A MB Qualifier U	Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Prep Type: Prep Batch	Total/NA : 586471 Dil Fac
	V Cerrier 84.9 40 - 110 10/19/22 10:22 11/03/22 11:03 1 Lab Sample ID: LCS 160-586471/2-A Client Sample ID: Lab Control Sample Matrix: Water Matrix: Water Prep Type: Total/NA	Ba Carrier Jethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E	106) - Radiu): MB 160-	MB Result 012750	40 - 110 (GFPC) -A MB Qualifier U MB	Uncert. (2σ+/-) 0l32E	Uncert. (2σ+/-)				Prepared 10/15/22 10:22	Prep Batch Analyzed 11/03/22 11:03	Total/NA: 586471 Dil Fac 1
	Lab Sample ID: LCS 160-586471/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA	Ba Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier	106) - Radiu): MB 160-	m-228 (-586471/1 MB Result 012750 MB %Yield	40 - 110 (GFPC) -A MB Qualifier U MB	Uncert. (2σ+/-) 0l32E	Uncert. (2σ+/-)				Prepared 10/15/22 10:22 Prepared	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed	Total/NA: 586471 Dil Fac Dil Fac
Teamer 64.9 40 - 110 10/19/22 10.22 17/03/22 11.03 1	Matrix: Water Prep Type: Total/NA	Ba Carrier lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier	106) - Radiu): MB 160-	MB Result 012750 MB %Yield 109	40 - 110 (GFPC) -A MB Qualifier U MB	Uncert. (2σ+/-) 0l32E Limits 40 - 110	Uncert. (2σ+/-)				Prepared 10/15/22 10:22 Prepared 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03	Total/NA: 586471 Dil Fac 1 Dil Fac 1
Lab Sample ID: LCS 160-586471/2-A Client Sample ID: Lab Control Sample		Ba Carrier lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier	106) - Radiu): MB 160-	MB Result 012750 MB %Yield 109	40 - 110 (GFPC) -A MB Qualifier U MB	Uncert. (2σ+/-) 0l32E Limits 40 - 110	Uncert. (2σ+/-)				Prepared 10/15/22 10:22 Prepared 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03	Total/NA: 586471 Dil Fac 1 Dil Fac 1
The state of the s	Analysis Batch: 588336 Prep Batch: 586471	Ba Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier	106 0 - Radiu 0: MB 160 h: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0l32E Limits 40 - 110	Uncert. (2σ+/-)				Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03	Dil Fac
	•	Be Carrier lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Be Carrier Y Carrier Lab Sample ID Matrix: Water	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0l32E Limits 40 - 110	Uncert. (2σ+/-)				Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type:	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	Total	Be Carrier lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Be Carrier Y Carrier Lab Sample ID Matrix: Water	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0l32E Limits 40 - 110	Uncert. (2σ+/-)	1100			Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type:	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
·	Caller 100 100 Hazard	Be Carrier lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Be Carrier Y Carrier Lab Sample ID Matrix: Water	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0l325	1LDO Total			Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	Spike LCS LCS Uncert. %Rec	Be Carrier Iethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Be Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike	Uncert. (20+/-) 0132E Limits 40 - 110 40 - 110 LCS	Uncert. (2σ+/-) 0l325	Total Uncert.	0L841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	Analyte Added Result Qual (2σ+/-) RL MDC Unit %Rec Limits	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
LCS LCS	Analyte Added Result Qual (20+/) RL MDC Unit %Rec Limits Ra. ium-22E EldE 51852 1123 1100 01611 9C/lp 113 78 - 128	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 1 - Radiu 1: MB 160- 1: ht: 588336 2: LCS 160 1: ht: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	Analyte Added Result Qual (20+/-) RL MDC Unit %Rec Limits Ra. ium-22E EI4E 51852 1123 1100 01411 9CV/p 113 78 - 128 LCS LCS	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E	106 - Radiu	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added EdE	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
Carrier %Yield Qualifier Limits Ba Carrier 106 40 . 110	AnalyteAdded Result Qual (20+/-) RL MDC Unit %Rec Limits	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Carrier Carrier Carrier Carrier Carrier Carrier	106 - Radiu -	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added E44E Limits	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
·	Spike LCS LCS Uncert. %Rec	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0l325	1LDO Total			Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	·	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike	Uncert. (20+/-) 0132E Limits 40 - 110 40 - 110 LCS	Uncert. (2σ+/-) 0l325	Total Uncert.	0L841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
Ra. ium-22E EL4E 51852 1123 1L00 0L411 9Ct/p 113 78 - 128	Analyte Added Result Qual (2σ+/-) RL MDC Unit %Rec Limits	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Sa Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	Analyte Added Result Qual (2σ+/-) RL MDC Unit %Rec Limits	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Sa Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 0 - Radiu 1: MB 160- 1: 588336 1: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
LCS LCS	Analyte Added Result Qual (20+/) RL MDC Unit %Rec Limits Ra. ium-22E EldE 51852 1123 1100 01611 9C/lp 113 78 - 128	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Sa Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 1 - Radiu 1: MB 160- 1: ht: 588336 2: LCS 160 1: ht: 588336	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	Analyte Added Result Qual (20+/-) RL MDC Unit %Rec Limits Ra. ium-22E EI4E 51852 1123 1100 01411 9CV/p 113 78 - 128 LCS LCS	lethod: 9320 Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	106 - Radiu	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added EdE	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA
	AnalyteAdded Result Qual (20+/-) RL MDC Unit %Rec Limits	Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte Ra. ium-22E Carrier	106 - Radiu -	MB Result 012750 MB %Yield 109 84.9	MB Qualifier U MB Qualifier 2-A Spike Added E44E Limits	Uncert. (2σ+/-) 0l32E Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0l325	1ID0 Total Uncert. (20+/-)	01841	9Ci/p	Prepared 10/15/22 10:22 Prepared 10/19/22 10:22 10/19/22 10:22 Client Sample I	Prep Type: Prep Batch Analyzed 11/03/22 11:03 Analyzed 11/03/22 11:03 11/03/22 11:03 D: Lab Control Prep Type: Prep Batch %Rec Limits	Dil Fac Dil Fac 1 Dil Fac 1 Sample Total/NA

Page 9 of 19

\cap C	Acci	ocia	tion	CIT	nmarv

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR Job ID: 310-241716-2

Rad

11/10/2022

Prep Batch: 586466

ſ	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	310-241716-1	NC2MW4	Total/NA	Water	PrecSep-21	
ı	310-241716-2	MW13	Total/NA	Water	PrecSep-21	
	MB 160-586466/1-A	Method Blank	Total/NA	Water	PrecSep-21	
L	LCS 160-586466/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 586471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-241716-1	NC2MW4	Total/NA	Water	PrecSep_0	
310-241716-2	MW13	Total/NA	Water	PrecSep_0	
MB 160-586471/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-586471/2-A	Lab Control Sample	Total/NA	Water	PrecSep 0	

Eurofins Cedar Falls

Page 10 of 19

11/10/2022

1:

Lab Chronicle

Client: Omaha Public Power District

Project/Site: Nebraska City Unit 1 & 2 CCR

Job ID: 310-241716-2

Client Sample ID: NC2MW4

Lab Sample ID: 310-241716-1

Matrix: Water

Date Collected: 10/04/22 08:14 Date Received: 10/05/22 16:50

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	PrecSep-21			586466	BMP	EET SL	10/19/22 09:46
Total/NA	Analysis	9315		1	589595	FLC	EET SL	11/10/22 11:25
Total/NA	Prep	PrecSep_0			586471	BMP	EET SL	10/19/22 10:22
Total/NA	Analysis	9320		1	588335	FLC	EET SL	11/03/22 11:08
Total/NA	Analysis	Ra226_Ra228		1	589646	CAH	EET SL	11/10/22 16:20

Client Sample ID: MW13

Lab Sample ID: 310-241716-2

Matrix: Water

10

Date Received: 10/05/22 16:50

Date Collected: 10/03/22 09:08

Prep Type	Batch Type	Batch Method		Dilution	Batch			Prepared or Analyzed
			Run	Factor	Number	Analyst	Lab	
Total/NA	Prep	PrecSep-21			586466	BMP	EET SL	10/19/22 09:46
Total/NA	Analysis	9315		1	589595	FLC	EET SL	11/10/22 11:25
Total/NA	Prep	PrecSep_0			586471	BMP	EET SL	10/19/22 10:22
Total/NA	Analysis	9320		1	588335	FLC	EET SL	11/03/22 11:08
Total/NA	Analysis	Ra226_Ra228		1	589646	CAH	EET SL	11/10/22 16:20

Laboratory References:

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

Accreditation/Certification Summary

Client: Omaha Public Power District

Project/Site: Nebraska City Unit 1 & 2 CCR

Job ID: 310-241716-2

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	05-06-25 04-06-25	
Alaska (UST)	State	20-001		
ANAB	Dept. of Defense ELAP	L2305		
ANAB	Dept. of Energy	L2305.01	04-06-25	
ANAB	ISO/IEC 17025	L2305	04-06-25	
Arizona	State	AZ0813	12-08-22	
California	Los Angeles County Sanitation Districts	10259	06-30-22 *	
California	State	2886	07-01-22 *	
Connecticut	State	PH-0241	03-31-23	
Florida	NELAP	E87689	06-30-23	
HI - RadChem Recognition	State	n/a	06-30-23	
Illinois	NELAP	200023	11-30-23	
lowa	State	373	12-01-22	
ansas NELAP		E-10236	10-31-22 *	
Kentucky (DW)	State	KY90125	12-31-22	
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22	
Louisiana (All)	NELAP	04080	06-30-23	
Louisiana (DW)	State	LA011	12-31-22	
Maryland	State	310	09-30-23	
MI - RadChem Recognition	State	9005	06-30-23	
Missouri	State	780	06-30-25	
Nevada	State	MO000542020-1	07-31-23	
New Jersey	NELAP	MO002	06-30-23	
New York	NELAP	11616	04-01-23	
North Dakota	State	R-207	06-30-23	
NRC	NRC	24-24817-01	12-31-22	
Oklahoma	NELAP	9997	08-31-23	
Oregon	NELAP	4157	09-01-23	
Pennsylvania	NELAP	68-00540	02-28-23	
South Carolina	State	85002001	06-30-23	
Texas	NELAP	T104704193	07-31-23	
US Fish & Wildlife	US Federal Programs	058448	07-31-23	
USDA	US Federal Programs	P330-17-00028	03-11-23	
Utah	NELAP	MO000542021-14	07-31-23	
Virginia	NELAP	10310	06-14-24	
Washington	State	C592	08-30-23	
West Virginia DEP	State	381	12-31-22	

Eurofins Cedar Falls

Page 12 of 19

11/10/2022

Page 11 of 19

Eurofins Cedar Falls

11/10/2022

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 & 2 CCR Job ID: 310-241716-2

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:

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.

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

eurofins

Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client: Ohnoha Pu	blic Pu	ner		
City/State: Concha		WE	Project:	
Receipt Information	1	_ JF	- 11 °	i i k
Date/Time Received:	5-22	W:50	Received By: EH	
Delivery Type: UPS	☐ FedEx		FedEx Ground	☐ US Mail ☐ Spee-Dee
Lab Cou	ırier 🗌 Lab Fi	eld Services	Client Drop-off	Other:
Condition of Cooler/Containe	ers 🐴	1		4 1 1
Sample(s) received in Coole	er? Yes	□No	If yes: Cooler ID:	
Multiple Coolers?	Yes	XV.	If yes: Cooler # -	
Cooler Custody Seals Prese	ent? Yes	MW.	If yes: Cooler cust	ody seals intact? 🗌 Yes 📗
Sample Custody Seals Pres No	sent? Yes	☑ No	If yes: Sample cus	stody seals intact? Yes
Trip Blank Present?	Yes	₩ No	If yes: Which VOA	samples are in cooler? ↓
Temperature Regord ो ﴿	e 4 1 , 1 3	3·3 J. h	, 134 ,	1 , 3 , 4 ° 5 , °
Coolant: Wet ice	☐ Blue ice	☐ Dry ice	Other:	NONE
Thermometer ID:	17		Correction Factor (°	,
 Temp Blänk Temperature – 	If no temp blank, c	or temp blank ter	mperature above criteria, p	proceed to Sample Container Temperature
Uncorrected Temp (°C):			Corrected Temp (°C	*
Sample Container Tempera		, ,	1 'm1 to 1	
Container(s) used:	250 nl	PLOSTIC 1	nifric CONTAI	INER 2
Uncorrected Temp (°C):	0.6			
Corrected Temp (°C):	0.6			
Exceptions Noted -	1 1600 140	8 h		ことの数という マーキ
If temperature exceeds of a) If yes: Is there evide				npling? Yes No
(e.g., bulging septa, brol	ken/cracked bo	ottles, frozen	solid?)	le containers is compromised?
Note If yes, contact PM b	efore proceedin	g. If no, proce	ed with login	

Document, CED-P-SAM-FRM45521 Revision 26

Date 27 Jan 2022

Eurofips Cedar Falls Page 14 of 19

General temperature criteria is 0 to 6°C

Bacteria temperature criteria is 0 to 10°C

11/10/2022

Eurofins Cedar Falls

Page 13 of 19

11/10/2022

Tex Ced 2 Phon	TestAmerica Cedar Falls 704 Enterprise Drive Cedar Falls, IA, 50813 Phone (319) 277-2401 Fax (319) 277-2425 [Client Information Central Control Central Central Central Central Central Central Central Central Central Centra	Chain of Custody Record	y Record La Pit La Pit Halles, Sham M Faller Fault Tracking Ne(0): Fault	TestAmerica	
를 위해 열 등 4 / 호텔을 가는 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등	Wet Commercy (Wet Commercy Com	Sample (Cecom) Time General) in: Time General) in: (Cecom) Time General) in: (Cecom) (Cecom	A Staff Read Staff Rea	Special Instructional orders - House with the second of the second orders - House with the second of the second orders - House with the second orders - Ho	
Cur elinq elinq Diss.	ible Hzard Identification Non-Hazard — Figurmable — Skin initiant — Pols remble Requested 1.11, 111, IV. Other (apacity) Vict Relinquished by Vict Relinquished by Vict Relinquished by Vict Relinquished by A file of Castody Seal No A Yea & No Eurofins Cedar Falls 2019 Venture Way Cedar Falls Cedar Falls Cedar Falls	Chain of Custody Record	Cosal A fee may be assessed if samples To Ciferat Cife	Archive For Months Archive For Months For Archive For Company S-2.2 /4.50 Company For Archive For Company For Archiv	
	Phone 319-227/2401 Fax 319-277-2425 [leint Information (Sub Contract Lab) Clear Contract Con	Sampler: Phone Phone Phone Phone Phone Phone TAT Requested (days): TAT Requested (days): Phone P	100	200 No. 10	
	Sample Identification - Client ID (Lab ID) MC2MV4 (310-241716-1) MW13 (310-241716-2) Mote Since indominory accordinations are subset to chance. Eurolin Fore	Sample Date Time (Sample (Pype 1994) 19472	W mohad W mo	₹ N	
	proceedings of the process of the pr	In the second to the second se	The second to the second to the control to the same is a propertion to the second to the control to the same is a propertion to the second to the same is a propertion to the second to the same is a propertion to the second to	Preparent a forward used rate data changes are other articles in the personal control of the personal	

Login Sample Re	ceipt Checkli	st		
Client: Omaha Public Power District			Job Number: 310-24171/ -2	
Login Number: 241716			List Source: Eurofins Cedar Falls	
List Number: 1			List Gource. Euromis Gedai i ans	5
Creator: Costello, Mackenzie K				Э
Question	Answer	Comment		
davioactiyit' wasnkt chec <ev a="" as="" b'="" bac<="" is="Ag" measurev="" metert<="" or="" rounv="" surye'="" td=""><td>NÆR</td><td></td><td></td><td>7</td></ev>	NÆR			7
, he coolerls custov' sealf ipSresentf is intactT	NAR			
I amSle custov' sealsf ipSresentf are intactT	NAR			
, he cooler or samSles vo not aSSear to have been comSromisev or tamSerev withT	, rue			9
I amSles were receiyev on iceT	, rue			
Cooler , emSerature is acceStableT	, rue			
Cooler , emSerature is recorvevT	, rue			
COC is SresentT	, rue			
COC is pillev out in in <anv iblet<="" le.="" td=""><td>, rue</td><td></td><td></td><td></td></anv>	, rue			
COC is pillev out with all Sertinent inpormationT	, rue			
Fis the ?ielv I amSlerks name Sresent on COCH	, rue			13
, here are no viscreSancies between the containers receiyev anv the COCT	, rue			
I amSles are receiyev within (olvin. , ime xe) cluvin. tests with immeviate (, sV	, rue			14
I amSle containers haye le. ible labelsT	, rue			
Containers are not bro <en lea<in.="" or="" t<="" td=""><td>, rue</td><td></td><td></td><td></td></en>	, rue			
I amSle collection vateAimes are SroyivevT	, rue			
RSSroSriate samSle containers are usevT	, rue			
I amSle bottles are comSletel' pillevT	, rue			
I amSle Preseryation qeripevT	, rue			
, here is suppicient yolTpor all reMuestev anal'sesfinclTan'reMuestevz IAxIDs	, rue			
Containers reMirin. 6ero heavsSace haye no heavsSace or bubble is =/ mm x1 At " V T"	, rue			
z ultiShasic samSles are not SresentT	, rue			

, rue

NAR

Page 17 of 19

I amSles vo not reMuire sSlittin. or comSositin. T

d esivual Chlorine Chec<evT

Eurofins Cedar Falls

	Job Number: 310-24171/ -2	
	List Creation: 10/07/22 12:35 PM	
Answer Comment		
, rue		
NAR		
, rue		1
, rue		
, rue		1
, rue		
	rue , rue NAR , rue	rue , rue , rue , rue NAR , rue

Page 18 of 19

11/10/2022

Eurofins Cedar Falls

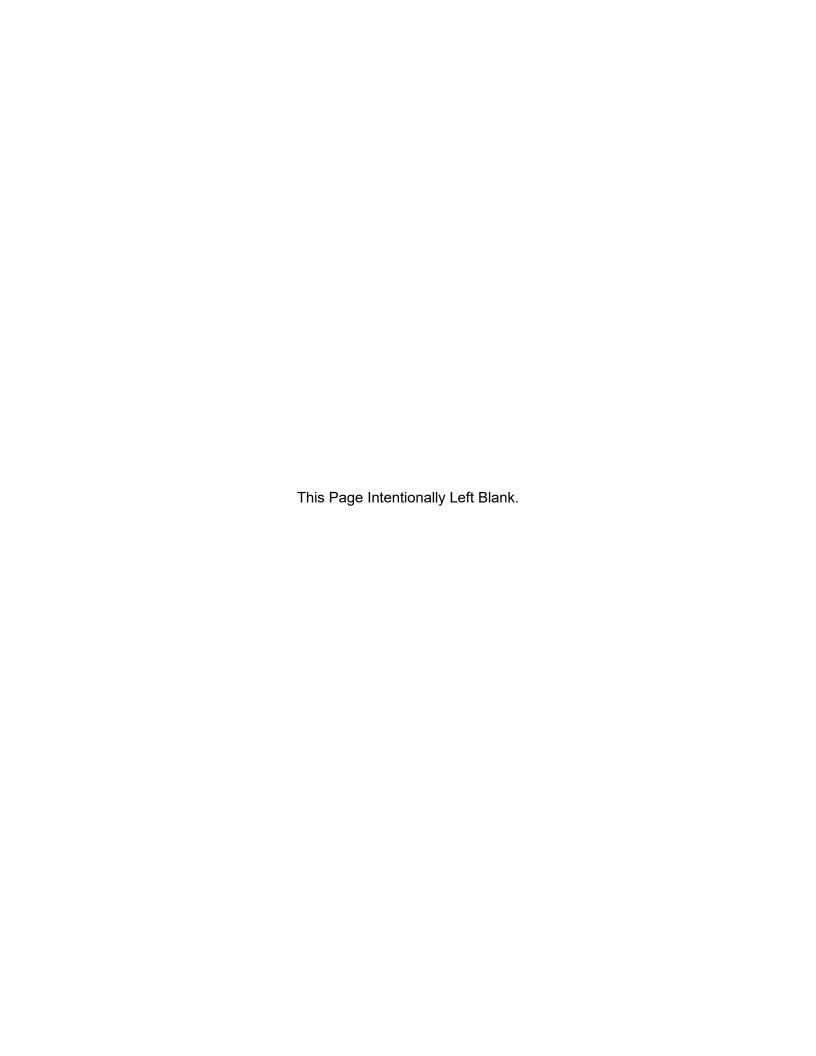
11/10/2022

Tracer/Carrier Summary Client: Omaha Public Power District Job ID: 310-241716-2 Project/Site: Nebraska City Unit 1 & 2 CCR Method: 9315 - Radium-226 (GFPC) Matrix: Water Prep Type: Total/NA Percent Yield (Acceptance Limits) Ва 10-241716-1 Client Sample ID (40-110) NC2MW4 94.6 310-241716-2 MW13 98.3 LCS 160-586466/2-A Lab Control Sample 106 MB 160-586466/1-A Method Blank 109 Tracer/Carrier Legend Ba = Ba Carrier Method: 9320 - Radium-228 (GFPC) Matrix: Water Prep Type: Total/NA Percent Yield (Acceptance Limits) Ва Lab Sample ID 310-241716-1 Client Sample ID NC2MW4 (40-110) (40-110) 88.2 94.6 310-241716-2 MW13 98.3 89.3 LCS 160-586471/2-A Lab Control Sample 106 84.5 MB 160-586471/1-A Method Blank 109 84.9 Tracer/Carrier Legend Ba = Ba Carrier Y = Y Carrier 15

Eurofins Cedar Falls

Page 19 of 19

11/10/2022



Appendix C April 2022 & October 2022 Statistical Memo





Technical Memorandum

Date: Friday, July 01, 2022

To: Omaha Public Power District (OPPD)

From: HDR Engineering, Inc.

Summary of Statistical Analysis and Evaluation for SSLs

Subject: Nebraska City Station NC2 Ash Disposal Area

NDEE Title 132 & Federal CCR Groundwater Monitoring Network

Omaha Public Power District operates a two-unit (Unit 1 and Unit 2) fossil fuel-fired generating plant at the Nebraska City Station, herein referenced as "Station" or "Site". The Station is located southeast of Nebraska City, Nebraska. The Station has two existing coal combustion residuals (CCR) landfills for fossil fuel combustion ash disposal known as the NC1 Ash Disposal Area and the NC2 Ash Disposal Area. Both NC1 and NC2 Ash Disposal Areas are subject to the United States Environmental Protection Agency'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 Title 132 regulations for fossil fuel combustion ash disposal areas. This memorandum provides a discussion and evaluation of the NC2 Ash Disposal Area. The NC2 Ash Disposal Area is a CCR landfill permitted under the Title 132 regulations for 40.7 acres. Cell 1 was constructed in 2008/2009. The NC2 Ash Disposal Area Cells 2 and 3 and West Leachate Pond were completed in January 2018. Cells 1 through 3 were constructed with a composite liner and leachate collection system.

Groundwater sampling was completed as part of an assessment monitoring program for the NC2 Ash Disposal Area, as specified in 40 CFR §257.95(d) and Title 132 Chapter 7 Section <u>005.06</u>. The statistical analysis of groundwater data was performed in accordance with the methods described in the *Groundwater Monitoring Statistical Methods Certification*, amended December 2021, and the facility's most recent Groundwater Sampling and Analysis Plan (dated January 4, 2019; revised March 1, 2019) as permitted under Title 132. Sampling results used to calculate the background threshold values (BTVs) were obtained during monitoring events performed between March 2016 and April 2022. The BTVs were updated as part of this sampling event and will be reevaluated following the spring 2024 sampling event.

Downgradient sampling results from the spring 2022 assessment monitoring were used to evaluate for statistically significant increases (SSIs) over background and statistically significant levels (SSLs) over the groundwater protection standards (GWPS). The calculated BTVs and the evaluation for SSIs for the Appendix III (herein referred to as "detection monitoring") constituents and Appendix IV (herein referred to as "assessment monitoring") constituents are provided in **Table D-1**. The calculated lower confidence levels and the evaluation for SSLs over the GWPS for the assessment monitoring constituents are provided in **Table D-2**.



Table D-1. Summary of Evaluations for SSIs over Background (April 2022)

Table B-1. Cultillary of Evaluations for Gols over Background (April 2022)								
\	Well ID:	NC2MW-2	NC2MW-3	NC2MW-6	NC2MW-7	NC2MW-8		
BTV (UPL):	Unit		Asses	ssment Monitoring	g Results			
	Appendix III (Detection Monitoring) Constituents							
4.63	mg/L	0.456	0.198	2.42	0.241	0.114		
229	mg/L	<u>231</u>	212	142	132	132		
36.6	mg/L	18.1	<u>47.0</u>	6.45	7.08	9.66		
1.89	mg/L	<0.220	1.12	<0.220	<0.220	<0.220		
6.38 - 7.87*	SU	6.70	7.10	7.20	7.20	7.30		
611	mg/L	381	<u>703</u>	134	6.49	9.69		
1,390	mg/L	934	<u>1590</u>	600	484	428		
	Арј	pendix IV (Asse	ssment Monitorin	g) Constituents				
0.00200	mg/L	<u>0.00298</u>	0.000690	0.00123	<0.000690	<0.000690		
0.0402	mg/L	0.000766	0.00171	0.00118	<u>0.0487</u>	0.00887		
0.447	mg/L	0.124	0.0977	0.143	<u>0.563</u>	<u>0.552</u>		
0.00100	mg/L	<0.000270	<0.000270	<0.000270	<0.000270	<0.000270		
0.000500	mg/L	0.0000900	0.000104	0.0000550	<0.0000550	<0.0000550		
0.00500	mg/L	<0.00110	<0.00110	0.00188	<0.00110	<0.00110		
0.00236	mg/L	0.000522	0.00101	0.000289	0.000422	<u>0.00264</u>		
1.94	pCi/L	1.09	0.955	0.778	0.747	0.912		
1.89	mg/L	<0.220	1.12	<0.220	<0.220	<0.220		
0.00610	mg/L	0.000861	0.000288	0.00221	<0.000240	<0.000240		
0.0423	mg/L	0.0254	0.0201	0.0420	<u>0.0654</u>	0.0363		
0.000200	mg/L	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110		
0.0339	mg/L	0.0322	0.00371	0.00630	0.00159	0.00202		
0.0146	mg/L	0.00627	0.0174	0.00329	<0.000960	<0.000960		
0.00100	mg/L	<0.000260	<0.000260	<0.000260	<0.000260	<0.000260		
	4.63 229 36.6 1.89 6.38 – 7.87* 611 1,390 0.00200 0.0402 0.447 0.00100 0.00500 0.00500 0.00236 1.94 1.89 0.00610 0.0423 0.000200 0.0339 0.0146	Well ID: BTV (UPL): Unit A 4.63 mg/L 229 mg/L 36.6 mg/L 1.89 mg/L 6.38 - 7.87* SU 611 mg/L 1,390 mg/L 0.00200 mg/L 0.0402 mg/L 0.0407 mg/L 0.00100 mg/L 0.00500 mg/L 0.00500 mg/L 1.89 mg/L 1.89 mg/L 0.00500 mg/L 0.00236 mg/L 1.94 pCi/L 1.89 mg/L 0.00610 mg/L 0.0423 mg/L 0.0339 mg/L 0.0146 mg/L	Well ID: NC2MW-2 BTV (UPL): Unit Appendix III (Determine) 4.63 mg/L 0.456 229 mg/L 18.1 36.6 mg/L 18.1 1.89 mg/L <0.220	Well ID: NC2MW-2 NC2MW-3 Appendix III (Detection Monitoring 4.63 mg/L 0.456 0.198 229 mg/L 231 212 36.6 mg/L 18.1 47.0 47.0 1.89 mg/L <0.220 1.12	Well ID: NC2MW-2 NC2MW-3 NC2MW-6 Assessment Monitoring Appendix III (Detection Monitoring) Constituents 4.63 mg/L 0.456 0.198 2.42 229 mg/L 231 212 142 36.6 mg/L 18.1 47.0 6.45 1.89 mg/L <0.220	Well ID: NC2MW-2 NC2MW-3 NC2MW-6 NC2MW-7 BTV (UPL): Unit Assessment Monitoring Results Appendix III (Detection Monitoring) Constituents 4.63 mg/L 0.456 0.198 2.42 0.241 229 mg/L 231 212 142 132 36.6 mg/L 18.1 47.0 6.45 7.08 1.89 mg/L <0.220		

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).

J – Value is less than the Reporting Limit but above the Method Detection Limit, therefore value is an approximation.

U – 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.



Table D-2. Summary of Evaluation for SSLs (April 2022)

Well ID:		NC2MW-2	NC2MW-3	NC2MW-6	NC2MW-7	NC2MW-8		
Constituent	GWPS ^[1]	Unit	Aļ		r Confidence Le essment Monito	e Levels – nitoring) Constituents		
Antimony	0.006	mg/L	0.002857	0.0069	0.001	0.00069	0.00069	
Arsenic	0.0402 [2]	mg/L	0.0008601	0.002543	0.000889	0.03817	0.00895	
Barium	2.0	mg/L	0.1174	0.1302	0.1097	0.5300	0.454	
Beryllium	0.004	mg/L	0.00027	0.00027	0.00027	0.00027	0.00027	
Cadmium	0.005	mg/L	0.0001088	0.000068	0.00005946	0.000051	0.00004102	
Chromium	0.1	mg/L	0.0011	0.0011	0.0011	0.0011	0.0011	
Cobalt	0.006	mg/L	0.0001628	0.0008543	0.000122	0.0002809	0.001699	
Fluoride	4.0	mg/L	0.2306	0.3754	0.2335	0.2744	0.2513	
Lead	0.015	mg/L	0.0007511	0.0002706	0.0003818	0.00021	0.0003089	
Lithium	0.0423 [2]	mg/L	0.02991	0.02349	0.02611	0.05747	0.02956	
Mercury	0.002	mg/L	0.00011	0.00011	0.00011	0.00011	0.00011	
Molybdenum	0.1	mg/L	0.01529	0.003547	0.0102	0.001554	0.002275	
Radium 226+228	5.0	pCi/L	0.7996	0.5769	0.4624	0.6111	0.5552	
Selenium	0.05	mg/L	0.001159	0.00096	0.00096	0.00096	0.00096	
Thallium	0.002	mg/L	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 Environmental Protection Agency's (EPA) Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2), unless otherwise specified.

^[2] GWPS is established as the UPL when the background level is higher than the EPA MCL.





Technical Memorandum

Date: Monday, December 19, 2022

To: Omaha Public Power District (OPPD)

From: HDR Engineering, Inc.

Summary of Statistical Analysis and Evaluation for SSLs

Subject: Nebraska City Station NC2 Ash Disposal Area

NDEE Title 132 & Federal CCR Groundwater Monitoring Network

Omaha Public Power District operates a two-unit (Unit 1 and Unit 2) fossil fuel-fired generating plant at the Nebraska City Station, herein referenced as "Station" or "Site". The Station is located southeast of Nebraska City, Nebraska. The Station has two existing coal combustion residuals (CCR) landfills for fossil fuel combustion ash disposal known as the NC1 Ash Disposal Area and the NC2 Ash Disposal Area. Both NC1 and NC2 Ash Disposal Areas are subject to the United States Environmental Protection Agency'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 Title 132 regulations for fossil fuel combustion ash disposal areas. This memorandum provides a discussion and evaluation of the NC2 Ash Disposal Area. The NC2 Ash Disposal Area is a CCR landfill permitted under the Title 132 regulations for 40.7 acres. Cell 1 was constructed in 2008/2009. The NC2 Ash Disposal Area Cells 2 and 3 and West Leachate Pond were completed in January 2018. Cells 1 through 3 were constructed with a composite liner and leachate collection system.

Groundwater sampling was completed as part of an assessment monitoring program for the NC2 Ash Disposal Area, as specified in 40 CFR §257.95(d) and Title 132 Chapter 7 Section <u>005.06</u>. The statistical analysis of groundwater data was performed in accordance with the methods described in the *Groundwater Monitoring Statistical Methods Certification*, amended December 2021, and the facility's most recent Groundwater Sampling and Analysis Plan (dated January 4, 2019; revised March 1, 2019) as permitted under Title 132. 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 background threshold values (BTVs) were updated as part of the April 2022 sampling event and will be reevaluated following the spring 2024 sampling event. The current BTVs were calculated with data obtained during monitoring events performed between March 2016 and April 2022.

Downgradient sampling results from the fall 2022 assessment monitoring were used to evaluate for statistically significant increases (SSIs) over background and statistically significant levels (SSLs) over the groundwater protection standards (GWPS). The calculated BTVs and the evaluation for SSIs for the Appendix III (herein referred to as "detection monitoring") constituents and Appendix IV (herein referred to as "assessment monitoring") constituents are provided in **Table D-1**. The calculated lower confidence levels and the evaluation for SSLs over the GWPS for the assessment monitoring constituents are provided in **Table D-2**.



Table D-1. Summary of Evaluations for SSIs over Background (October 2022)

		Well ID:	NC2MW-2	NC2MW-3	NC2MW-6	NC2MW-7	NC2MW-8
Constituent	BTV (UPL):	Unit		Asses	sment Monito	oring Results	
		Appendix III (Det	ection Monito	ring) Constitue	ents		
Boron	4.63	mg/L	0.559	0.468	2.33	0.249	0.153
Calcium	229	mg/L	<u>241</u>	194	120	117	125
Chloride	36.6	mg/L	11.3	12.1	6.05	8.88	9.91
Fluoride	1.89	mg/L	0.330J	1.17	<0.220	<0.220	<0.220
рН	6.38 - 7.87*	SU	7.03	7.15	7.41	7.60	7.30
Sulfate	611	mg/L	319	563	97.9	<2.00	13.3
TDS	1,390	mg/L	1030	<u>1440</u>	566	482	492
		Appendix IV (Asses	ssment Monit	oring) Constitu	uents		
Antimony	0.00200	mg/L	0.00298	<0.000690	<0.000690	<0.000690	<0.000690
Arsenic	0.0402	mg/L	0.00104J	0.00344	0.00123J	<u>0.0478</u>	0.0181
Barium	0.447	mg/L	0.108	0.0718	0.146	0.607	<u>0.618</u>
Beryllium	0.00100	mg/L	<0.000270	<0.000270	<0.000270	<0.000270	<0.000270
Cadmium	0.000500	mg/L	0.000206	<0.0000550	<0.0000550	<0.0000550	<0.0000550
Chromium	0.00500	mg/L	<0.00110	<0.00110	<0.00110	<0.00110	<0.00110
Cobalt	0.00236	mg/L	0.000713	0.00328	0.000724	0.000236J	0.00230
Radium 226+228	1.94	pCi/L	<u>2.08</u>	1.00	<u>2.78</u>	1.24	1.57
Fluoride	1.89	mg/L	0.330J	1.17	<0.220	<0.220	<0.220
Lead	0.00610	mg/L	0.000853	<0.000240	0.000568	<0.000240	0.000321J
Lithium	0.0423	mg/L	0.0338	0.0234	0.0387	0.0572	0.0364
Mercury	0.000200	mg/L	<0.000110	<0.000110	<0.000110	<0.000110	<0.000110
Molybdenum	0.0339	mg/L	<u>0.0354</u>	0.00250	0.0137	0.00186J	0.00184J
Selenium	0.0146	mg/L	<0.000960	<0.000960	<0.000960	<0.000960	<0.000960
Thallium	0.00100	mg/L ndicates an SSI over ba	<0.000260	<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).

J – Value is less than the Reporting Limit but above the Method Detection Limit, therefore value is an approximation.

U – 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.



Table D-2. Summary of Evaluation for SSLs (October 2022)

	1	Well ID:	NC2MW-2	NC2MW-3	NC2MW-6	NC2MW-7	NC2MW-8
Constituent	GWPS ^[1]	Unit	Aį		r Confidence Le essment Monito		nts
Antimony	0.006	mg/L	0.002998	0.001	0.001	0.001	0.001
Arsenic	0.0402 [2]	mg/L	0.000907	0.002746	0.000925	0.03925	0.01106
Barium	2.0	mg/L	0.1156	0.1349	0.1141	0.5447	0.5389
Beryllium	0.004	mg/L	0.00027	0.00027	0.00027	0.00027	0.00027
Cadmium	0.005	mg/L	0.0001206	0.000082	0.000055	0.000055	0.000055
Chromium	0.1	mg/L	0.0011	0.0011	0.00176	0.0011	0.0011
Cobalt	0.006	mg/L	0.0004534	0.001255	0.0002413	0.000269	0.001848
Fluoride	4.0	mg/L	0.2579	0.4391	0.2382	0.2815	0.2724
Lead	0.015	mg/L	0.0008017	0.0003571	0.000419	0.00024	0.000321
Lithium	0.0423 [2]	mg/L	0.02772	0.02497	0.02747	0.05791	0.03093
Mercury	0.002	mg/L	0.00015	0.00015	0.00015	0.00015	0.00015
Molybdenum	0.1	mg/L	0.01806	0.003551	0.01065	0.001578	0.00222
Radium 226+228	5.0	pCi/L	0.8632	0.7499	0.4549	0.6729	0.6644
Selenium	0.05	mg/L	0.0008861	0.005	0.00154	0.00096	0.00142
Thallium	0.002	mg/L	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 Environmental Protection Agency's (EPA) Maximum Contaminant Level (MCL) or the GWPS specified in 40 CFR §257.95(h)(2), unless otherwise specified.

^[2] GWPS is established as the UPL when the background level is higher than the EPA MCL.