





2021 NC1 CCR Landfill Annual Groundwater Report

Nebraska City Station NC1 Ash Disposal Area

Nebraska City, Nebraska January 31, 2022



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 Sate of Nebraska.

Print Name: Megan B. Seymour

Signature: Illy B Suy

Date: /-31-2022

License #: E-15931

My license renewal date is December 31, 2022.

Table of Contents

Ex	ecutiv	e Summary	-
1	Intro	duction	3
	1.1	Purpose	3
	1.2	Facility Information	3
2	Moni	toring Program Summary	3
	2.1	Summary of Monitoring Program Transitions	4
	2.2	Groundwater Monitoring Network Condition Assessment	5
3	Data	Evaluation and Summary	Ę
	3.1	Summary of Sampling Activities	Ę
	3.2	Groundwater Elevations & Flow Direction	5
	3.3	Assessment Monitoring Groundwater Sampling	6
	3.4	Statistical Analysis Results	
	3.5	Other Information Required under 40 CFR §257.90-98	7
4	Key .	Activities for Upcoming Year	7
5	Refe	rences	7
Li	st of F	igures	
Fi	gure 1	- Site Location Map	
	-	 Monitoring Well Location Map 	
•	-	- Groundwater Contour Map - April 2021	
Εi	gure 4	– Groundwater Contour Map – October 2021	
Li	st of T	ables	
Ta	ble 1	- Groundwater Monitoring System	
		- Groundwater Sampling Event Summary	
	_	- Groundwater Elevations	
		- Appendix III Constituents in Groundwater	
		 Appendix IV Constituents in Groundwater Background Threshold Values for Assessment Monitoring 	
		- Background Threshold Values for Assessment Montoning - Established Groundwater Protection Standards	
		Lotabilot Ground and Friedotton Ctandardo	

List of Appendices

Appendix A - Field Sampling Forms

Appendix B – Analytical Laboratory 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 2021 for the assessment monitoring program under 40 CFR §257.95 for the NC1 Ash Disposal Area. Final closure for this CCR landfill was completed in November 2020.

The NC1 Ash Disposal Area transitioned from detection monitoring to assessment monitoring following the fall 2017 sampling event due to statistically significant increases (SSIs) above the background threshold values (BTVs) in downgradient monitoring wells. An alternate source demonstration (ASD), dated May 1, 2018, confirmed the SSIs above BTVs, and an assessment monitoring program was initiated in June 2018, as required by 40 CFR §257.95.

The October 2018 statistical analysis indicated one statistically significant level (SSL) for arsenic in monitoring well NC1MW-3. Another ASD was conducted in April 2019 to evaluate whether the SSL resulted from natural variation in groundwater quality (HDR, 2019b). Arsenic in upgradient monitoring well MW-14 is present at higher concentrations than both the EPA's maximum contaminant level and Nebraska Department of Environment and Energy (NDEE) groundwater protection standards (GWPS) established under Title 118 – Groundwater Quality Standards and Use Classification. As a result of the variability and detected arsenic concentrations in the background monitoring well, the previously published SSL for arsenic at NC1MW-3 was not considered an SSL, and the NC1 Ash Disposal Area remained in assessment monitoring. The monitoring network was sampled and analyzed semi-annually in 2019 and 2020 as part of the assessment monitoring program and did not indicate an SSL; therefore, assessment monitoring continued in 2021.

Assessment monitoring samples were collected in April and October 2021 to assess whether there were SSIs and/or SSLs. This report covers the results of the 2021 sampling events. For the April 2021 sampling event, results of the analysis indicated nine (9) SSIs for Appendix III and Appendix IV constituents.

- Boron in NC1MW-3
- Calcium in NC1MW-3
- Molybdenum in NC1MW-2
- Molybdenum in NC1MW-9
- Sulfate in NC1MW-3

- Thallium in NC1MW-2
- Thallium in NC1MW-3
- TDS in NC1MW-3
- TDS in NC1MW-9



For the October 2021 sampling event, results of the analysis indicated twelve (12) SSIs for Appendix III and Appendix IV constituents.

- Boron in NC1MW-3
- Cadmium in NC1MW-2
- Calcium in NC1MW-3
- Calcium in NC1MW-9
- Molybdenum in NC1MW-2
- Molybdenum in NC1MW-9

- Sulfate in NC1MW-3
- Sulfate in NC1MW-4
- Sulfate in NC1MW-9
- Thallium in NC1MW-2
- TDS in NC1MW-3
- TDS in NC1MW-9

Analysis of the Appendix IV constituents indicated there were no SSLs detected above the GWPS for either the April 2021 or October 2021 sampling events. OPPD will continue to monitor groundwater in accordance with the assessment monitoring program as specified in 40 CFR §257.96(b), and the next semi-annual sampling event is anticipated to occur in April 2022.



1 Introduction

On April 17, 2015, the United States Environmental Protection Agency (EPA) published the final rule for the regulation and management of coal combustion residuals (CCR) under Subtitle D of the Resource Conservation and Recovery Act. The CCR rule is formally promulgated in the United States Code of Federal Regulations (CFR), Title 40, Part 257 (EPA, 2015). The CCR 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. 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 Generating Station (Station or Site).

1.1 Purpose

Specified in 40 CFR §257.90(e), an owner or operator of an existing CCR landfill must prepare an annual groundwater monitoring and corrective action report to summarize key actions completed, problems encountered, and upcoming activities related to the groundwater monitoring system. The information included in this report complies with the requirements established in 40 CFR §257.90(e) and provides a summary of CCR groundwater monitoring system activities for the NC1 Ash Disposal Area for calendar year 2021.

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 (2) existing CCR landfills: the NC1 Ash Disposal Area and the NC2 Ash Disposal Area. The CCR landfills are permitted under the current Nebraska Department of Environment and Energy (NDEE) Title 132 and CCR regulations for fossil fuel combustion ash disposal. This annual report covers the NC1 Ash Disposal Area (NDEE Permit No. NE0054712, Facility ID 58343).

The NC1 Ash Disposal Area is an unlined CCR landfill of approximately 52 acres that was originally constructed as 16 acres in 1979. In 1982, the Station received a state permit to expand the disposal area from the original 16 acres to the current 52 acres. The NC1 Ash Disposal Area has in-situ soils underneath the compacted fly ash and bottom ash. Phase 1 closure was completed in 2015. Final closure for the landfill was completed in November 2020. **Figure 2** identifies the relevant CCR unit for this report and the supporting monitoring well network.

2 Monitoring Program Summary

The groundwater monitoring system currently consists of four upgradient/background monitoring wells (NC2MW-4, MW-11, MW-13, MW-14), three downgradient monitoring wells (NC1MW-2, NC1MW-4, NC1MW-9), and one cross-gradient monitoring well (NC1MW-3). Monitoring well details for the monitoring network, including the date of installation, is provided in **Table 1**. The



locations of the monitoring wells in the groundwater monitoring program with respect to the CCR unit, NC1 Ash Disposal Area, are shown in the attached **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 NC1 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
01/31/2018	Detection monitoring SSIs detected in November 2017 in downgradient monitoring for 11 monitoring well/constituent pairs. Constituents included boron, calcium, chloride, sulfate, and total dissolved solids (TDS).
05/29/2018	Alternate source demonstration (ASD) to evaluate potential error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Notification published for unsuccessful ASD.
06/06/2018	Initiation of assessment monitoring program in accordance with 40 CFR §257.95.
07/12/2018	Installed additional upgradient monitoring well (MW-14).
10/04/2018	Subsequent assessment monitoring sampling conducted in accordance with 40 CFR §257.95.
02/14/2019	Notification of SSLs above GWPS for arsenic in MW-3.
04/08/2019	ASD to evaluate potential error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Notification published for successful ASD.
04/10/2019	Semi-annual assessment monitoring. SSIs detected for 13 monitoring well/constituent pairs. Constituents included boron, calcium, sulfate, TDS, arsenic, and molybdenum. There were no SSLs detected.
10/18/2019	Semi-annual assessment monitoring. SSIs detected for 13 monitoring well/constituent pairs. Constituents included boron, calcium, sulfate, TDS, cobalt, and molybdenum. There were no SSLs detected.
04/21/2020	Semi-annual assessment monitoring. SSIs detected for 12 monitoring well/constituent pairs. Constituents included boron, calcium, sulfate, TDS, and molybdenum. There were no SSLs detected.
10/06/2020	Semi-annual assessment monitoring. SSIs detected for 15 monitoring well/constituent pairs. Constituents included boron, calcium, sulfate, TDS, molybdenum, and selenium. There were no SSLs detected.
04/13/2021	Semi-annual assessment monitoring. SSIs detected for 9 monitoring well/constituent pairs. Constituents included boron, calcium, sulfate, TDS, molybdenum, and thallium. There were no SSLs detected.
10/12/2021	Semi-annual assessment monitoring. SSIs detected for 12 monitoring well/constituent pairs. Constituents included boron, cadmium, calcium, sulfate, TDS, molybdenum, and thallium. There were no SSLs detected.



2.2 Groundwater Monitoring Network Condition Assessment

OPPD personnel evaluated the condition of each monitoring well in the groundwater monitoring network during the semi-annual sampling events in April 2021 and October 2021. During this time period, no repairs were required. The wells were noted in good working condition, concrete pads were intact, and no damage was observed to the protective well casings. No monitoring wells were added to or abandoned from the certified groundwater monitoring system in 2021.

3 Data Evaluation and Summary

3.1 Summary of Sampling Activities

Groundwater sampling events were conducted by OPPD personnel in April 2021 and October 2021 as continuation of the assessment monitoring program. 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 well in the monitoring network. The NC1 Ash Disposal Area is currently in the post-closure care period. The number of samples collected for the background and downgradient wells during each groundwater sample event, whether the sample was collected during detection or assessment monitoring programs, and the date of each event is summarized in **Table 2**.

Groundwater sampling was conducted by OPPD personnel in general accordance with the facility's NDEE Title 132 Groundwater Sampling and Analysis Plan (OPPD, 2016) and the Groundwater Monitoring System Certification (HDR, 2019a). Samples were collected from the certified network wells and were analyzed for Appendix III and Appendix IV constituents during both the April and October 2021 sampling events. Field sampling forms are provided in **Appendix A**. The collected groundwater samples were analyzed by Eurofins TestAmerica in Cedar Falls, Iowa. 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 (HDR, 2019a) were used to develop groundwater contours (**Figure 3** and **Figure 4**). Monitoring well static groundwater elevations are provided in **Table 3**. Groundwater flow estimated from measurements collected on April 6, 2021 indicated a flow direction to the southeast with an average flow velocity of 0.0128 ft/day to 0.0723 ft/day. Groundwater flow estimated from measurements collected on October 4, 2021 indicated a flow direction to the southeast with an average flow velocity of 0.00809 ft/day to 0.0458 ft/day. The April 2021 and October 2021 flow velocities are based on a range of hydraulic conductivity at the Site of 6.96 ft/day to 39.4 ft/day, respectively (HDR, 2019a).

3.3 Assessment Monitoring Groundwater Sampling

The NC1 Ash Disposal Area was monitored semi-annually in 2021 as continuation of the assessment monitoring program in accordance with 40 CFR §257.95(b). Appendix III and Appendix IV constituents were analyzed for both semi-annual sampling events, meeting the requirements of 40 CFR §257.95. The results of the assessment monitoring events in April 2021 and October 2021 are presented in **Table 4** (Appendix III constituents) and **Table 5** (Appendix IV constituents).

3.4 Statistical Analysis Results

In the assessment monitoring program, Appendix III and IV constituents are statistically analyzed to evaluate for SSIs above the calculated background threshold values (BTVs), and Appendix IV constituents are statistically analyzed to evaluate for SSLs above the GWPS. Statistical analysis was performed with Sanitas[™] statistical analysis software in accordance with the methods described in the Groundwater Monitoring Statistical Certification (HDR, 2018). Statistically derived BTVs for Appendix III and IV constituents are provided in **Table 6**. The BTVs were updated following the April 2021 sampling and include data from March 2016 through April 2021. BTVs are updated every two years or during a monitoring program transition, in accordance with Chapter 21 of the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance (EPA, 2009). The 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 and October 2021 sampling events are provided in **Appendix C**.

Assessment monitoring samples were collected in April and October 2021 to assess whether there were SSIs or SSLs. This report covers the results of the 2021 sampling events. For the April 2021 sampling event, results of the analysis indicated five (5) SSIs for Appendix III constituents and four (4) SSIs for Appendix IV constituents.

- Boron in NC1MW-3
- Calcium in NC1MW-3
- Molybdenum in NC1MW-2
- Molybdenum in NC1MW-9
- Sulfate in NC1MW-3

- Thallium in NC1MW-2
- Thallium in NC1MW-3
- TDS in NC1MW-3
- TDS in NC1MW-9

For the October 2021 sampling event, results of the analysis indicated eight (8) SSIs for Appendix III constituents and four (4) SSIs for Appendix IV constituents.

- Boron in NC1MW-3
- Cadmium in NC1MW-2
- Calcium in NC1MW-3
- Calcium in NC1MW-9
- Molybdenum in NC1MW-2
- Molybdenum in NC1MW-9

- Sulfate in NC1MW-3
- Sulfate in NC1MW-4
- Sulfate in NC1MW-9
- Thallium in NC1MW-2
- TDS in NC1MW-3
- TDS in NC1MW-9



Analysis of the Appendix IV constituents indicated there were no SSLs detected above the GWPS for either the April 2021 or October 2021 sampling events.

3.5 Other Information Required under 40 CFR §257.90-98

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

4 Key Activities for Upcoming Year

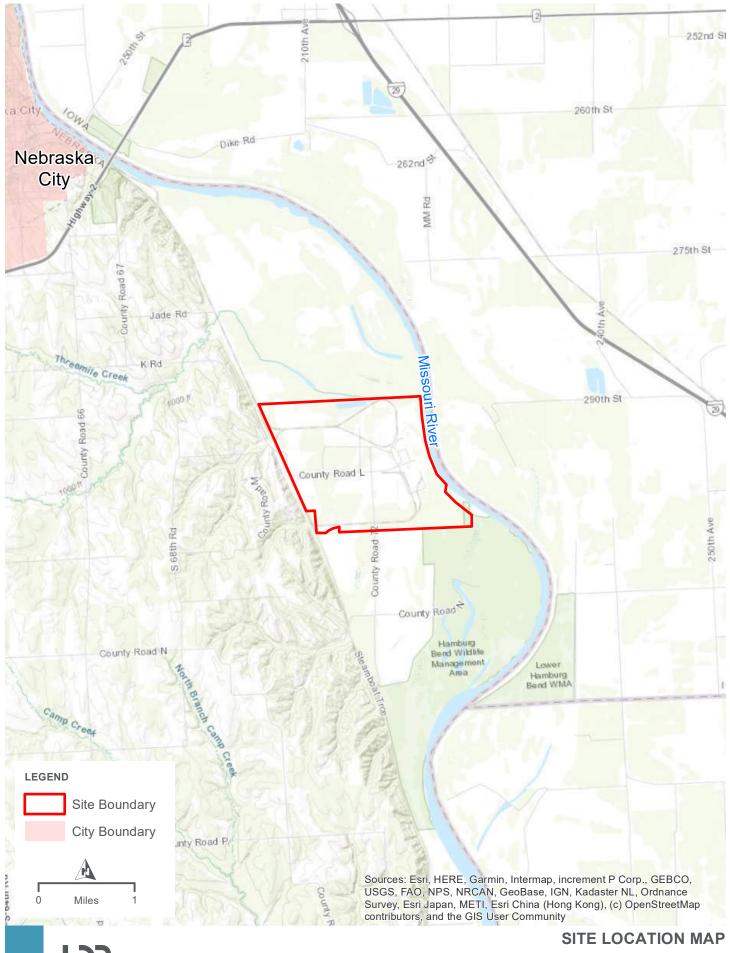
OPPD will continue to monitor the NC1 Ash Disposal Area in accordance with the assessment monitoring program, as specified in 40 CFR §257.95(b). The next semi-annual assessment monitoring sampling event is anticipated to occur in April 2022.

5 References

- EPA, 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities: Unified Guidance. Environmental Protection Agency Office of Resource Conservation and Recovery. EPA 530/R-09-007. March 2009.
- EPA, 2015. 40 CFR Part 257; 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, 2016. *Groundwater Sampling and Analysis Plan*. NC1 Ash Disposal Area. Nebraska City, Nebraska. Revised February 2016.
- HDR, 2018. *Groundwater Monitoring Statistical Certification*. NC1 Ash Disposal Area. Nebraska City, Nebraska. Revised July 2018.
- HDR, 2019a. *Groundwater Monitoring System Certification*. NC1 Ash Disposal Area. Nebraska City, Nebraska. Revised June 2019.
- HDR, 2019b. *Alternate Source Demonstration Evaluation for SSLs Memo.* NC1 Ash Disposal Area. Nebraska City, Nebraska. April 2019.

Figures

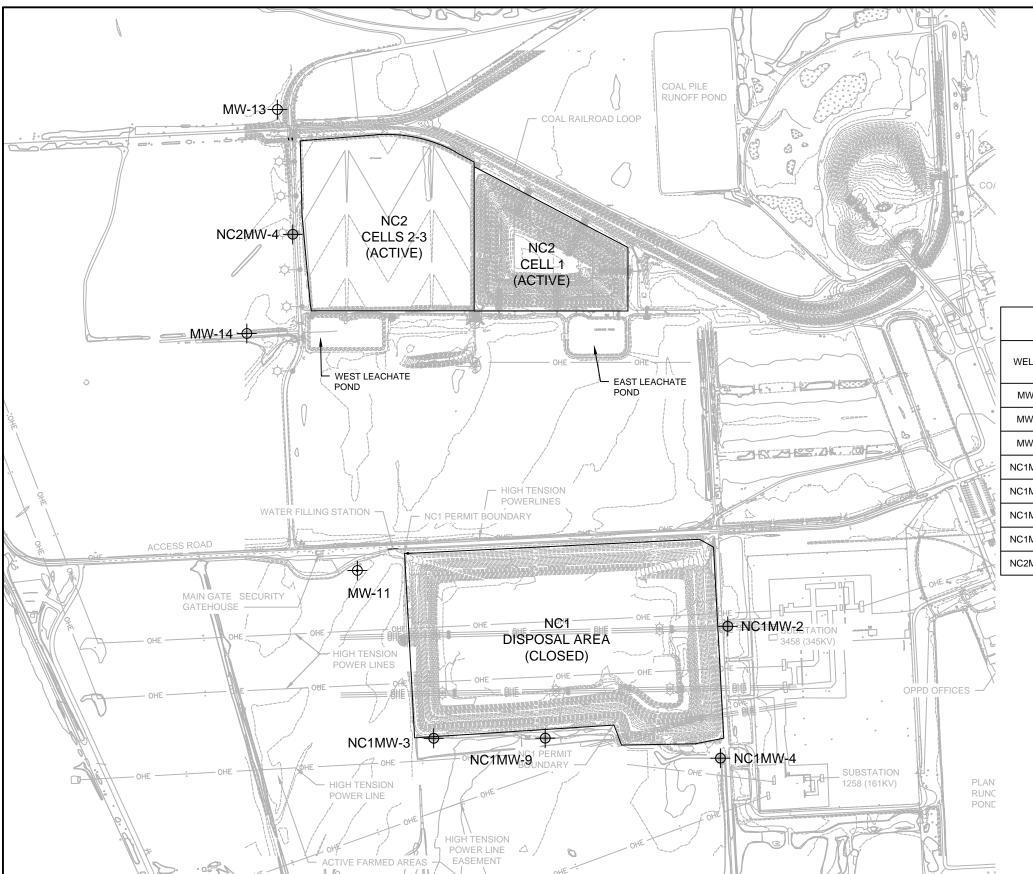


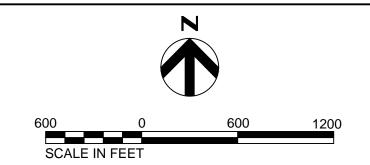


OPPD - NEBRASKA CITY STATION

FIGURE 1







	MONITORING WELL NETWORK												
WELL ID	NORTHING	EASTING	ELEVATION (TOC)	WELL DEPTH (BGS)	LOCATION WITH RESPECT TO NC1 ASH DISPOSAL AREA								
MW-11	315305.14	2808934.31	918.44	20.00	BACKGROUND / UPGRADIENT								
MW-13	318186.64	2808434.68	918.05	13.00	BACKGROUND / UPGRADIENT								
MW-14	316786.47	2808244.03	920.99	18.00	BACKGROUND / UPGRADIENT								
NC1MW-2	314956.72	2811249.03	919.42	17.80	DOWNGRADIENT								
NC1MW-3	314256.45	2809411.68	919.85	19.50	DOWNGRADIENT / CROSS GRADIENT								
NC1MW-4	314132.49	2811203.55	919.63	20.30	DOWNGRADIENT								
NC1MW-9	NC1MW-9 314257.38		920.09	20.00	DOWNGRADIENT								
NC2MW-4	317405.90	2808530.80	919.62	14.00	BACKGROUND / UPGRADIENT								

NOTES:

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



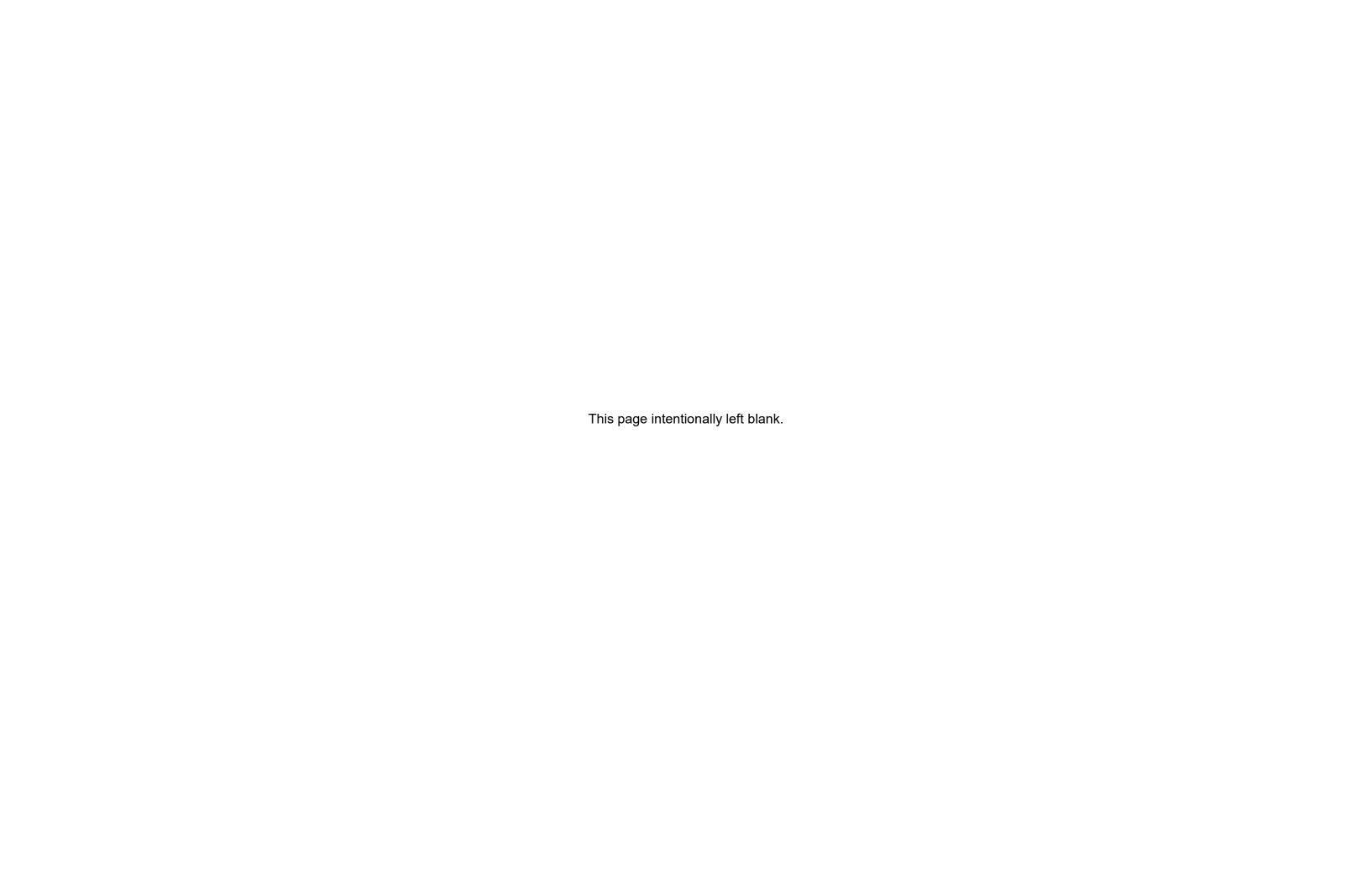


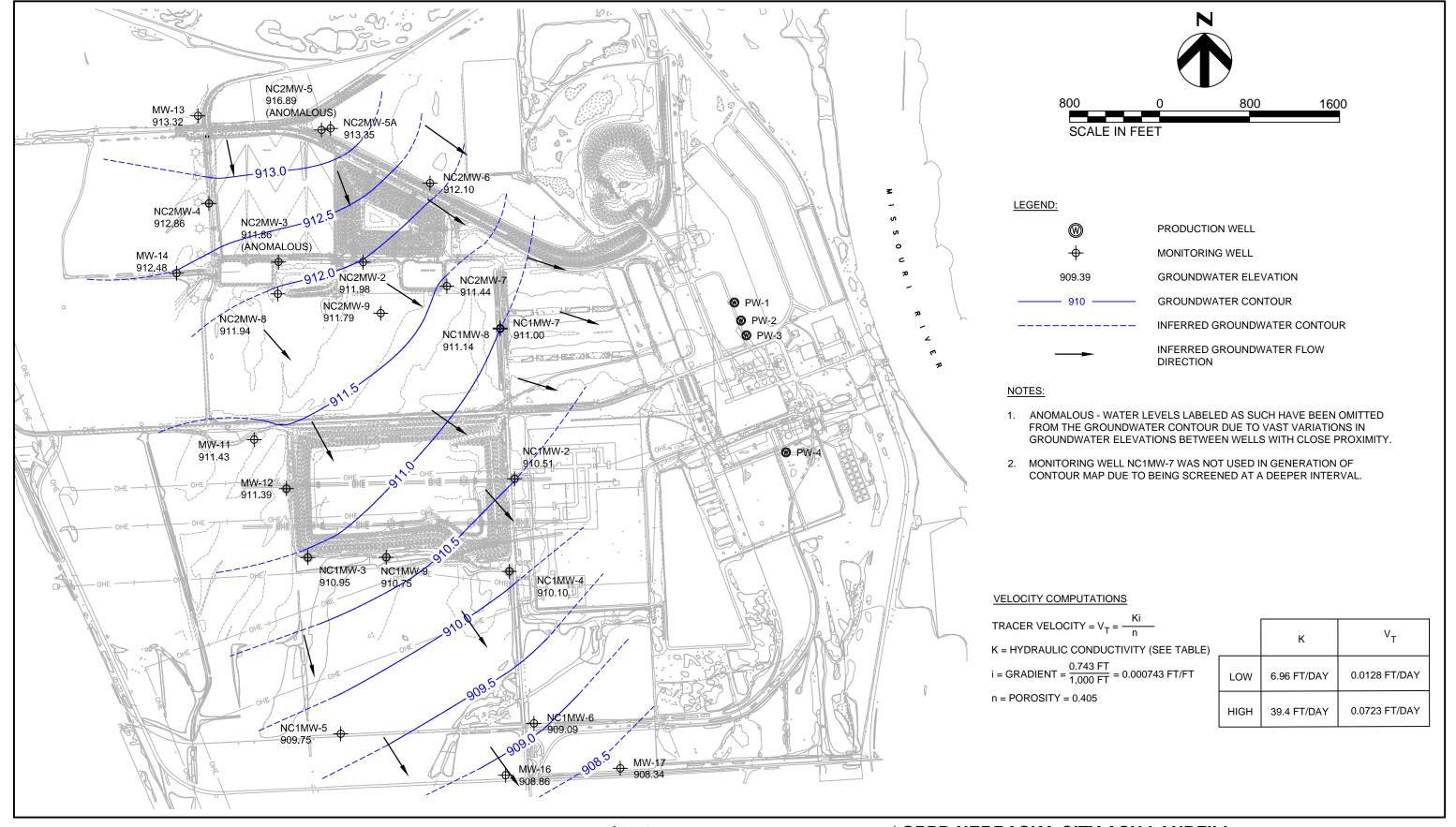
OPPD NEBRASKA CITY ASH LANDFILL NEBRASKA CITY UNIT 1 - NC1 MONITORING WELL LOCATION MAP

JANUARY 2022

FIGURE

02





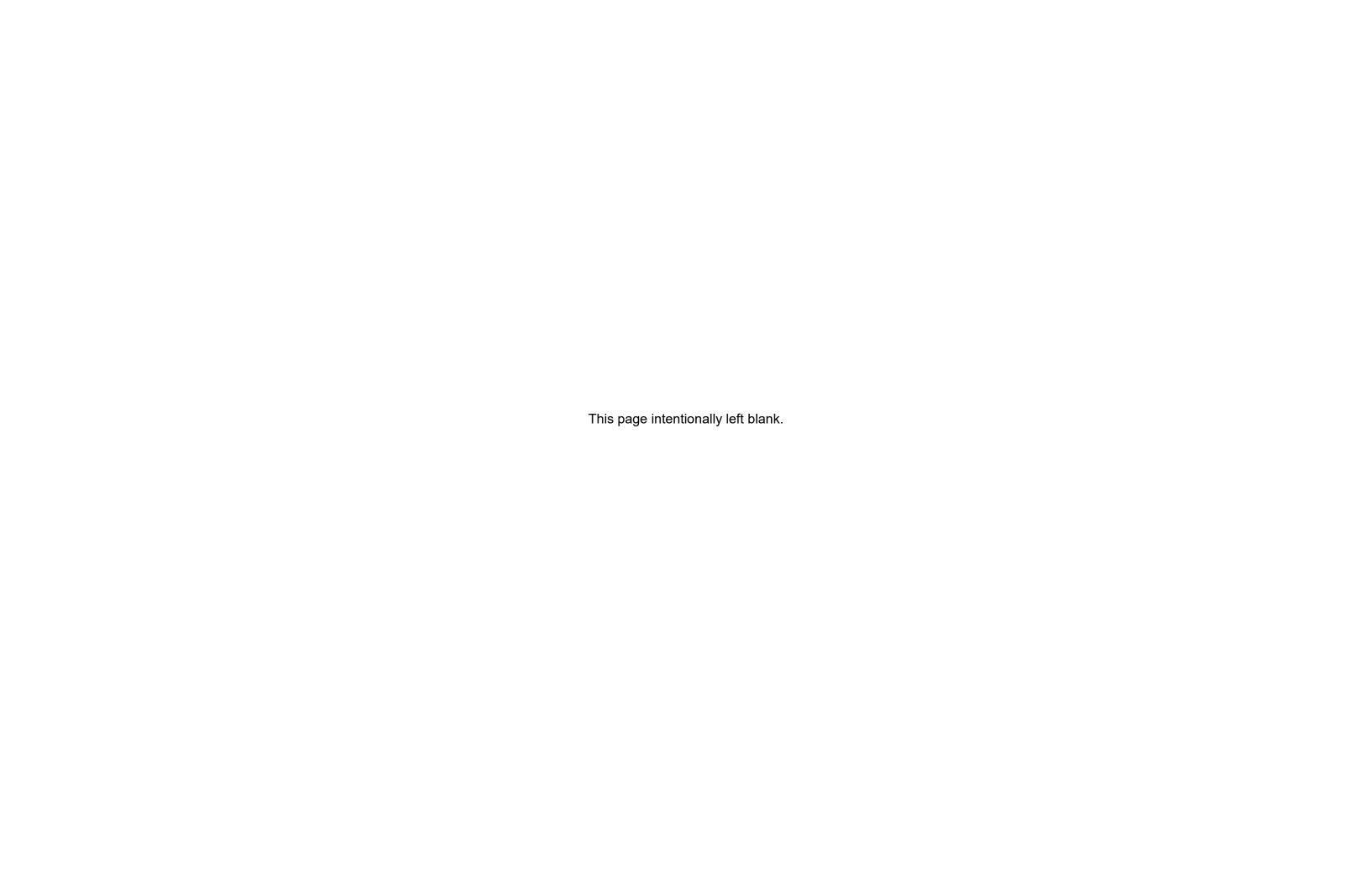


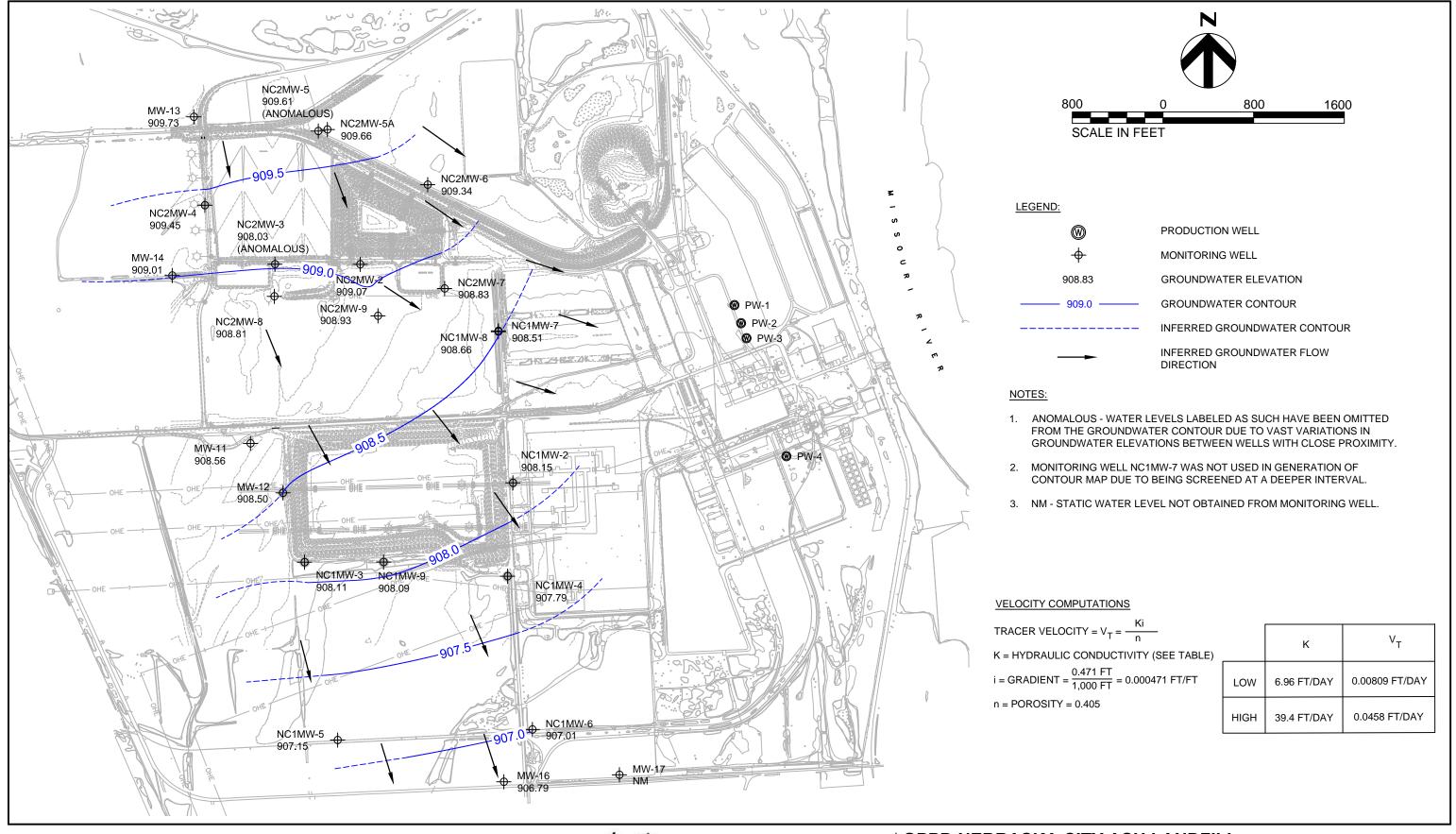


OPPD NEBRASKA CITY ASH LANDFILL GROUNDWATER CONTOUR MAP APRIL 2021

2021 GROUNDWATER MONITORING

JANUARY 2022 FIGURE 03





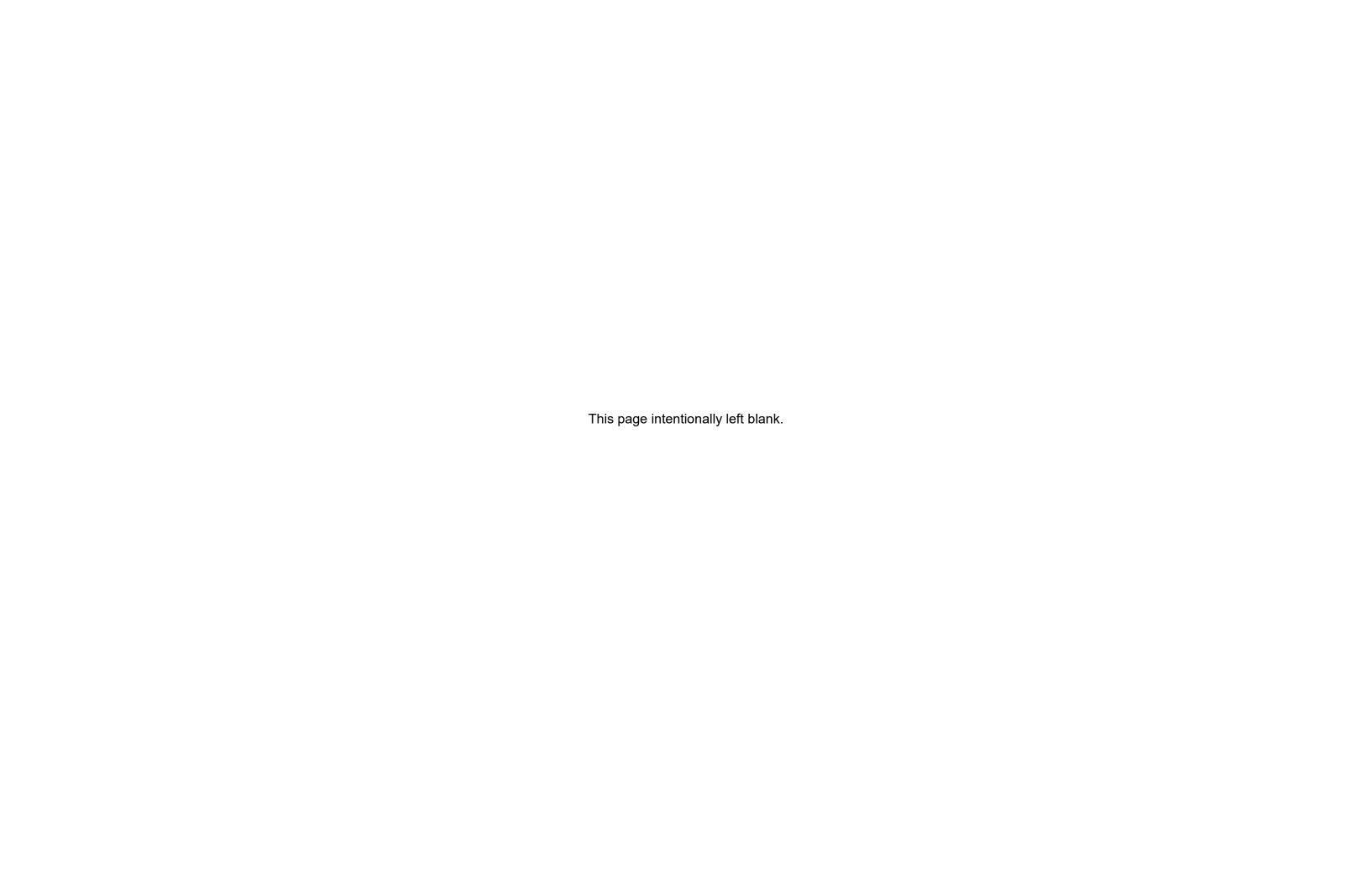




OPPD NEBRASKA CITY ASH LANDFILL GROUNDWATER CONTOUR MAP OCTOBER 2021

JANUARY 2022
FIGURE
04

2021 GROUNDWATER MONITORING



Tables



Table 1 - Groundwater Monitoring System

Monitoring Well ID	Date Installed	Well Depth (feet bgs)	Location w/ respect to NC1 Ash Disposal Area	Ground Surface Elevation (feet AMSL)	Top of Well Casing Elevation (feet AMSL)			
			CCR Monitoring Network We	s				
NC2MW-4	9/8/2004	14.0	Background/Upgradient	917.07	919.62			
MW-11	1/16/2004	20.0	Background/Upgradient	911.90	918.44			
MW-13	1/26/2016	13.0	Background/Upgradient	915.97	918.05			
MW-14	7/12/2018	18.0	Background/Upgradient	917.99	920.99			
NC1MW-2	3/14/1995	17.8	Downgradient	917.23	919.42			
NC1MW-3	3/13/1995	19.5	Downgradient/Cross-gradient	917.10	919.85			
NC1MW-4	3/13/1995	20.3	Downgradient	916.79	919.63			
NC1MW-9	1/21/1999	20.0	Downgradient	917.52	920.09			
			Water Level Only Wells					
NC1MW-5	3/17/1995	16.6	Downgradient/Cross-gradient	917.61	920.70			
NC1MW-6	3/13/1995	16.5	Downgradient	914.01	916.67			
NC1MW-7	1/20/1999	40.5	Upgradient/Cross-gradient	917.12	919.20			
NC1MW-8	1/21/1999	20.0	Upgradient/Cross-gradient	917.19	919.68			
NC2MW-2	9/8/2004	17	Upgradient	919.80	922.55			
NC2MW-3	9/8/2004	16	Upgradient	913.30	919.58			
NC2MW-5	9/16/2004	16	Upgradient	919.34	922.76			
NC2MW-5A	9/16/2019	17.2	Upgradient	919.13	922.05			
NC2MW-6	9/7/2004	14	Upgradient	916.30	919.72			
NC2MW-7	11/6/2013	24	Upgradient	915.11	918.20			
NC2MW-8	7/9/2018	15	Upgradient	915.20	917.97			
NC2MW-9	9/17/2019	18.0	Upgradient	917.49	920.35			
MW-12	3/26/2004	18.1	Cross-gradient	917.91	920.36			

Notes:

bgs - below ground surface

AMSL - above mean sea level



Table 2 - Groundwater Sampling Event Summary

Monitoring Well ID	# of Background Samples	Background Sample Dates	# of Detection Monitoring Samples	Detection Monitoring Sample Dates ^[1]	# of Assessment Monitoring Samples	Assessment Monitoring Sample Dates ^{[2] [3] [5] [6]}
Current Backgr	ound Monitoring Wells					
NC2MW-4	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	10	6/6/2018, 10/4/2018, 4/8/2019, 10/15/2019, 1/30/2020, 4/20/2020, 4/27/2020, 10/5/2020, 4/12/2021, 10/4/2021
MW-11	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	8	6/6/2018, 10/4/2018, 4/8/2019, 10/16/2019, 4/20/2020, 10/6/2020, 4/13/2021, 10/5/2021
MW-13 ^[3]	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	8	6/6/2018, 10/4/2018, 1/30/2020, 4/20/2020, 4/27/2020, 10/5/2020, 4/12/2021, 10/4/2021
MW-14 ^[4]	8	1/15/2019, 3/5/2019, 10/4/2018, 4/8/2019, 10/16/2019, 1/30/2020, 4/20/2020, 10/5/2020	0	N/A	2	4/13/2021, 10/4/2021
Downgradient I	Monitoring Wells		•			
NC1MW-2	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	8	6/6/2018, 10/4/2018, 4/8/2019, 10/18/2019, 4/20/2020, 10/6/2020, 4/13/2021, 10/5/2021
NC1MW-3	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	8	6/6/2018, 10/4/2018, 4/9/2019, 10/18/2019, 4/21/2020, 10/6/2020, 4/13/2021, 10/6/2021
NC1MW-4	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	8	6/6/2018, 10/4/2018, 4/9/2019, 10/18/2019, 4/21/2020, 10/6/2020, 4/13/2021, 10/5/2021
NC1MW-9	8	3/9/2016, 6/7/2016, 10/3/2016, 11/18/2016, 2/14/2017, 4/25/2017, 6/20/2017, 7/13/2017	2	11/8/2017, 3/13/2018	8	6/6/2018, 10/4/2018, 4/10/2019, 10/18/2019, 4/21/2020, 10/6/2020, 4/13/2021, 10/6/2021

Notes

^[1] The March 13, 2018 Detection Monitoring event was completed as an Alternate Source Demonstration (ASD) due to detected SSIs in November 2017.

^[2] The June 6, 2018 sampling event was completed for initiation of the Assessment Monitoring Program.

^[3] MW-13 submerged under water during April and October 2019 sampling events.

^[4] Monitoring well MW-14 was installed in July 2018.

^[5] The January 30, 2020 Assessment Monitoring event was completed as a verification sampling event due to detected SSIs in October 2019.

^[6] The April 27, 2020 sampling was conducted for the NC2 Monitoring Network, but data has been included into the NC1 database.



Table 3 - Groundwater Elevations

Omaha Public Power District - NC1 Ash Disposal Area

							CCR	Monitoring	g Network	Wells						
	NC2I	NW-4	MW	<i>I-</i> 11	MW	<i>I-</i> 13	MV	<i>I-</i> 14	NC1	MW-2	NC1	MW-3	NC1I	MW-4	NC1I	MW-9
	TOC EI	evation	TOC E	evation	TOC EI	evation	TOC EI	evation	TOC EI	evation						
	919	0.62	918	3.44	918	3.05	920).99	919	9.42	919).85	919	9.63	920	0.09
Date	Measured Depth to Water (ft.)	GW Elevation (AMSL)														
3/9/2016	6.95	912.67	6.90	911.54	4.61	913.44			8.90	910.52	8.95	910.90	9.50	910.13	9.30	910.79
6/7/2016	6.06	913.56	5.85	912.59	3.95	914.10			7.04	912.38	7.75	912.10	7.41	NM	7.88	912.21
10/3/2016	6.25	913.37	6.34	912.10	4.03	914.02			8.45	910.97	8.35	911.50	9.10	NM	8.76	911.33
11/18/2016	6.79	912.83	7.37	911.07	4.43	913.62				910.12	9.36	910.49	10.10	909.53	7.75	912.34
2/14/2017	7.52	912.10	7.95	910.49	5.20	912.85	1.0147.4.4			909.32	9.91	909.94	10.85	908.78	10.41	909.68
4/25/2017	6.20	913.42	6.24	912.20	4.02	914.03	MW-14 installed 7/12/2018		8.10	911.32	8.25	911.60	8.84	910.79	8.65	911.44
6/20/2017	6.75	912.87	7.85	910.59	4.72	913.33			7.60	911.82	7.95	911.90	8.20	911.43	8.15	911.94
7/13/2017	7.10	912.52	6.25	912.19	5.00	913.05			8.40	911.02	8.75	911.10	9.10	910.53	9.10	910.99
11/8/2017	12.20	907.42	10.95	907.49	8.25	909.80			11.55	907.87	11.90	907.95	11.60	908.03	12.10	907.99
3/13/2018	10.18	909.44	9.85	908.59	8.10	909.95			11.50	907.92	11.85	908.00	12.16	907.47	12.22	907.87
6/6/2018	6.80	912.82	6.80	911.64	4.56	913.49			5.30	914.12	7.15	912.70	7.10	912.53	8.90	911.19
10/4/2018	4.14	915.48	4.45	913.99	1.63	916.42	7.35	913.64	5.78	913.64	6.60	913.25	6.66	912.97	6.87	913.22
1/15/2019	NM	NM	NM	NM	NM	NM	8.15	912.84	NM	NM	NM	NM	NM	NM	NM	NM
3/5/2019	NM	NM	NM	NM	NM	NM	8.75	912.24	NM	NM	NM	NM	NM	NM	NM	NM
4/8/2019	3.53	916.09	3.04	915.40	NM	NM	5.73	915.26	4.17	915.25	4.69	915.16	4.58	915.05	4.85	915.24
10/14/2019	3.47	916.15	2.90	915.54	NM	NM	5.75	915.24	3.64	915.78	4.56	915.29	4.33	915.30	4.65	915.44
4/20/2020	5.24	914.38	5.48	912.96	2.94	915.11	7.59	913.40	6.82	912.60	7.42	912.43	7.60	912.03	7.69	912.40
10/2/2020	9.65	909.97	9.37	909.07	7.76	910.29	11.47	909.52	10.52	908.90	11.13	908.72	11.17	908.46	11.35	908.74
4/6/2021	6.76	912.86	7.01	911.43	4.73	913.32	8.51	912.48	8.91	910.51	8.90	910.95	9.53	910.10	9.34	910.75
10/1/2021	10.17	909.45	9.88	908.56	8.32	909.73	11.98	909.01	11.27	908.15	11.74	908.11	11.84	907.79	12.00	908.09

Notes:

TOC: Top of PVC well casing

NM = not measured

AMSL = above mean sea level

Table 3 - Groundwater Elevations

		Water Level Only Wells																
	NC1N	/IW-5	NC1N	/IW-6	NC1N	IW-7	NC1I	WW-8	NC2I	MW-2	NC2I	MW-3	NC2I	/IW-5	NC2I	MW-6	NC2	MW-7
	TOC Ele	evation	TOC EI	evation	TOC Ele	evation	TOC EI	evation	TOC EI	evation	TOC Elevation		TOC Elevation		TOC Elevation		TOC EI	evation
	920	.70	916	6.67	919.20		919).68	922	2.55	916	5.58	922	2.76	919.72		918.20	
Date	Measured Depth to Water (ft.)	GW Elevation (AMSL)	Measured Depth to Water (ft)	GW Elevation (AMSL)														
3/9/2016	10.82	909.88	7.55	909.12	8.25	910.95	8.60	911.08	10.80	911.75	4.05	912.53	6.98	915.78	7.95	911.77	7.04	911.16
6/7/2016	9.67	911.03	6.31	910.36	6.43	912.77	6.80	912.88	8.96	913.59	2.55	914.03	7.67	915.09	6.02	913.70	4.80	913.40
10/3/2016	12.99	907.71	6.86	909.81	7.94	911.26	8.53	911.15	8.91	913.64	2.31	914.27	5.30	917.46	5.95	913.77	5.40	912.80
11/18/2016	11.25	909.45	8.20	908.47	8.72	910.48	9.10	910.58	10.90	911.65	4.10	912.48	9.25	913.51	8.10	911.62	7.20	911.00
2/14/2017	11.70	909.00	8.80	907.87	9.60	909.60	10.00	909.68	11.70	910.85	4.95	911.63	10.20	912.56	9.00	910.72	8.15	910.05
4/25/2017	10.30	910.40	7.02	909.65	7.41	911.79	7.75	911.93	9.85	912.70	3.21	913.37	8.48	914.28	7.00	912.72	5.96	912.24
6/20/2017	10.72	909.98	7.42	909.25	7.85	911.35	8.04	911.64	10.30	912.25	3.42	913.16	9.82	912.94	7.35	912.37	6.35	911.85
7/13/2017	10.50	910.20	8.10	908.57	8.32	910.88	8.89	910.79	10.76	911.79	4.25	912.33	10.15	912.61	7.90	911.82	6.80	911.40
11/8/2017	10.90	909.80	8.70	907.97	9.05	910.15	9.18	910.50	15.10	907.45	12.10	904.48	14.20	908.56	11.20	908.52	10.50	907.70
3/13/2018	NM	NM	NM	NM	NM	NM	NM	NM	13.90	908.65	7.15	909.43	12.95	909.81	10.88	908.84	10.00	908.20
6/6/2018	NM	NM	NM	NM	NM	NM	NM	NM	10.35	912.20	3.70	912.88	9.70	913.06	7.25	912.47	6.35	911.85
10/4/2018	8.85	911.85	5.41	911.26	4.48	914.72	5.14	914.54	7.39	915.16	0.80	915.78	4.95	917.81	4.30	915.42	3.20	915.00
1/15/2019	10.06	910.64	6.56	910.11	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
3/5/2019	NM	NM	8.08	908.59	NM	NM	NM	NM	6.70	915.85	NM	NM	4.56	918.20	4.18	915.54	2.74	915.46
4/8/2019	NM	NM	NM	NM	3.68	915.52	3.98	915.70	6.34	916.21	0.21	916.37	4.48	918.28	3.75	915.97	2.27	915.93
10/14/2019	NM	NM	NM	NM	3.01	916.19	3.33	916.35	9.09	913.46	2.56	914.02	5.81	916.95	6.11	913.61	5.37	912.83
4/20/2020	9.70	911.00	6.16	910.51	6.05	913.15	6.36	913.32	8.83	913.72	2.36	914.22	6.37	916.39	5.97	913.75	4.99	913.21
10/2/2020	12.90	907.80	9.11	907.56	10.06	909.14	10.36	909.32	12.92	909.63	10.34	906.24	12.63	910.13	9.90	909.82	8.81	909.39
4/6/2021	10.95	909.75	7.58	909.09	8.20	911.00	8.54	911.14	10.57	911.98	7.72	908.86	5.87	916.89	7.62	912.10	6.76	911.44
10/1/2021	13.54	907.16	9.66	907.01	10.69	908.51	11.02	908.66	13.48	909.07	11.55	905.03	13.15	909.61	10.38	909.34	9.37	908.83

Notes:

TOC: Top of PVC well casing

NM = not measured

AMSL = above mean sea level

Table 3 - Groundwater Elevations

Omaha Public Power District - NC1 Ash Disposal Area

					V	Vater Leve	l Only Well	S				
	NC2I	NW-8	NC2N	IW-5A	NC2I	MW-9	MW	<i>I-</i> 12	MW	<i>I</i> -16	MW	<i>I-</i> 17
	TOC EI	evation	TOC EI	evation	TOC EI	evation	TOC EI	evation	TOC EI	evation	TOC EI	evation
	917	' .97	922	2.05	920).35	920).36	916	5.77	913.53	
Date	Measured Depth to Water (ft)	GW Elevation (AMSL)	Measured Depth to Water (ft.)	GW Elevation (AMSL)	Depth to Elevation		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							9.00	911.36	9.00	907.77	NM	NM
6/7/2016							7.80	912.56	7.80	908.97	NM	NM
10/3/2016							8.40	911.96	8.40	908.37	NM	NM
11/18/2016							9.35	911.01	9.35	907.42	NM	NM
2/14/2017	Well Installed 7/9/2018						9.95	910.41	9.95	906.82	NM	NM
4/25/2017							8.20	912.16	8.20	908.57	NM	NM
6/20/2017			147 117				8.40	911.96	8.40	908.37	NM	NM
7/13/2017				Vell Installed 9/16/2019		Well Installed 9/17/2019		911.84	8.52	908.25	NM	NM
11/8/2017			3/10/	2019	9/11/2019		12.55	907.81	12.55	904.22	NM	NM
3/13/2018							NM	NM	NM	NM	NM	NM
6/6/2018							NM	NM	NM	NM	NM	NM
10/4/2018	3.15	914.82					6.55	913.81	8.49	908.28	8.59	904.94
1/15/2019	6.67	911.30					NM	NM	7.14	NM	4.00	909.53
3/5/2019	NM	NM					NM	NM	8.45	908.32	9.29	904.24
4/8/2019	2.38	915.59					4.89	915.47	NM	NM	NM	NM
10/14/2019	4.75	913.22	4.38	917.67	4.19	916.16	4.77	915.59	NM	NM	NM	NM
4/20/2020	4.59	913.38	7.49	914.56	6.76 913.59		7.41	912.95	NM	NM	NM	NM
10/2/2020	8.68	909.29	11.88	910.17			11.29	909.07	NM	NM	NM	NM
4/6/2021	6.03	911.94	8.70	913.35	8.56	911.79	8.97	911.39	7.91	908.86	5.19	908.34
10/1/2021	9.16	908.81	12.39	909.66	11.42	908.93	11.86	908.50	9.98	906.79	NM ^[1]	NM
	Notoo:											

Notes:

TOC: Top of PVC well casing

NM = not measured

AMSL = above mean sea level

^[1] Monitoring Well MW-17 was damaged; therefore, no water level was obtained during the October 2021 sampling event.

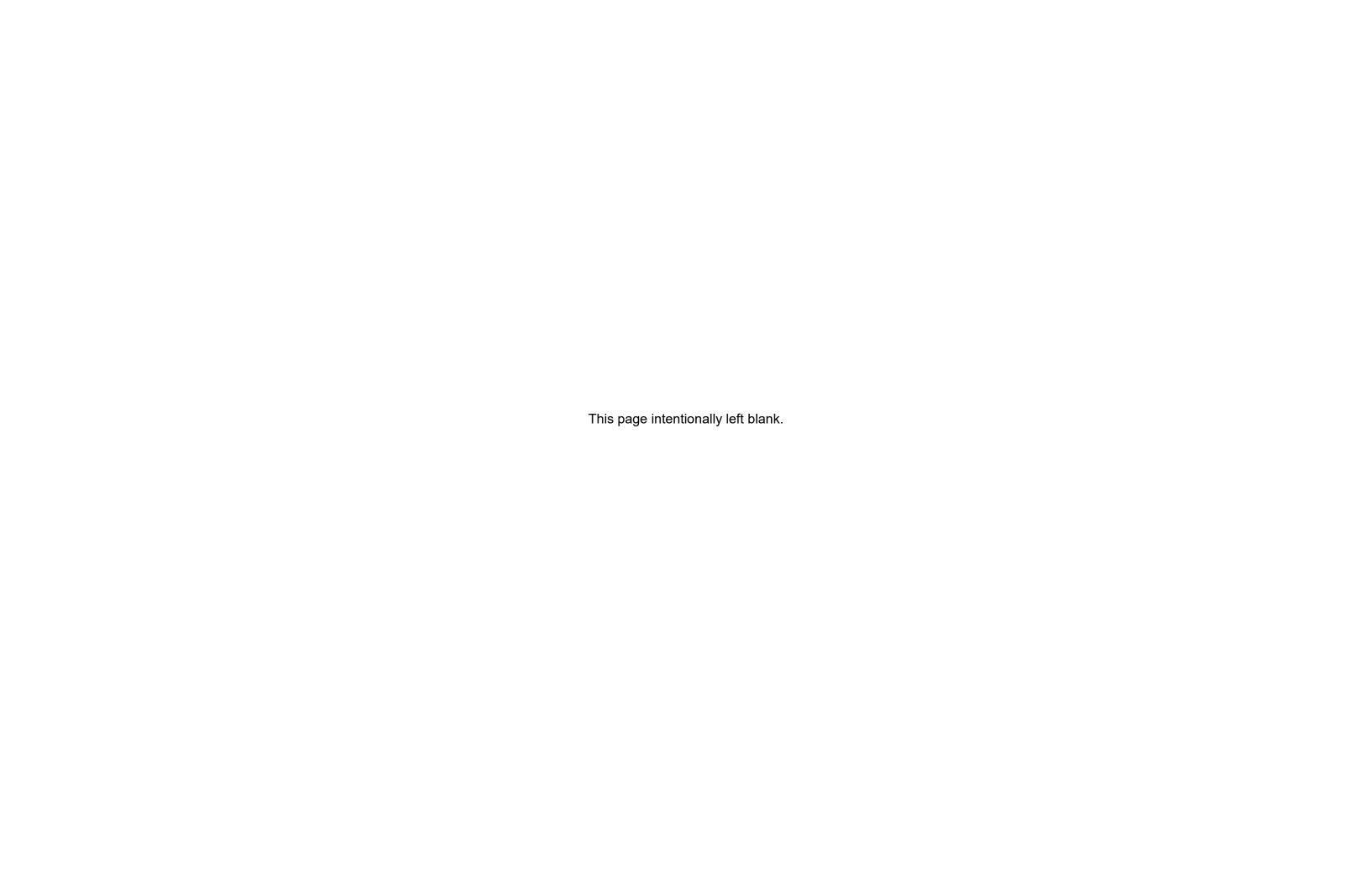


Table 4 - Appendix III (Detection Monitoring) Constituents in Groundwater

			Appen	dix III (Dete	ction Monito	oring) Constit	uents	
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS
F	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	6.9	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
	10/3/2016	<0.2	127	<5	<0.5	7.33	32	542
	11/17/2016	< 0.2	130	<5	1.28	7.19	34	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
NC2MW-4	7/12/2017	< 0.2	104	<5	< 0.5	7.88	32.7	580
	7/13/2017	< 0.2	112	<5	< 0.5	7.98	32.7	664
	11/8/2017	< 0.2	133	<5	<0.5	7.15	43.5	556
	11/9/2017	<0.2	134	<5	<0.5	7.18	42.8	568
	3/13/2018	< 0.2	138	<5	0.53	6.71 / 7.28 **	42.6	478
	6/6/2018	< 0.2	128	<5	< 0.5	7.15	43.9	542
	10/4/2018	<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	6.54	44.5	544
	4/20/2020	<0.1	127	5.05	0.421J	6.61	51.9	526
	4/27/2020	< 0.073	134	5.37	0.315J	6.88	52.6	550
	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	6.53	62.6	486
	3/9/2016	0.811	99.6	<5	< 0.5	7.07	128	468
	6/7/2016	0.704	93.4	5.16	<0.5	7.16	27.1	536
	10/3/2016	1.35	107	<5	<0.5	7.36	122	528
	11/18/2016	1.38	115	<5	0.95	7.32	119	512
	2/14/2017	1.25	118	8.57	2.09	7.18	113	532
	4/25/2017	1.02	102	6.17	1.44	7.26	94.7	508
MW-11	6/20/2017	0.843	76.1	<5	0.562	7.19	80.4	400
	7/13/2017	1.01	69.9	<5	0.538	7.62	74.2	520
	11/8/2017	1.05	87.2	<5	0.62	6.95	120	492
	3/13/2018	0.63	77.1	<5	<0.5	7.00 / 7.69 **	109	302
	6/6/2018	0.737	86.5	5.09	<0.5	7.16	145	428
	10/4/2018	1.14	96.5	5.60	0.568	6.93	148	486
	4/8/2019	0.698	91.3	14.3	<0.5	7.41	126	470
	.,0,2010	0.000	1 01.0	1 7.0	-5.0	7.71	120	1 170

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

			Appen	dix III (Dete	ction Monito	oring) Constit	uents	
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS
F	Reporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
	10/16/2019	1.53	132	15.3	0.558	6.64	164	608
	4/20/2020	1.04	116	14.3	0.430J	6.78	170	556
MW-11	10/6/2020	1.16	84.3	6.82	0.444J	6.82	127	410
	4/13/2021	0.474	52.4	5.42	0.323J	6.78	35.1	212
	10/5/2021	0.335	79.5	5.82	< 0.275	6.53	<2.45	240
	3/9/2016	< 0.2	96.3	11.8	< 0.5	7.20	44.8	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
	10/3/2016	< 0.2	85.4	10.7	< 0.5	7.37	29.7	388
	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	0.789	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
MW-13	7/12/2017	< 0.2	95.8	16.8	< 0.5	8.1	42	676
10100-13	7/13/2017	< 0.2	94.1	12.5	< 0.5	8.09	39.8	592
	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
	3/13/2018	< 0.2	93.8	12.7	< 0.5	6.89 / 7.51**	38.2	388
	6/6/2018	< 0.2	99.4	12.6	< 0.5	6.84	70.4	504
	10/4/2018	< 0.2	87.3	14.1	0.738	6.88	33.6	410
	4/8/2019 ^[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/15/2019 ^[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/30/2020 ^[2]	0.121J	93.7	17.2	< 0.5	6.96	44.5	464
	4/20/2020	0.133J	120	17.3	0.399J	6.93	371	742
	4/27/2020	0.134	102	17.2	0.383J	6.87	271	622
	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
	10/4/2018	0.226	129	9.07	0.751	6.85	59.1	700
	1/15/2019	0.257	116	8.61	<0.5	6.53	51.9	730
	3/5/2019	0.231	155	9.76	<0.5	6.70	59.8	752
	4/8/2019	0.296	156	8.46	<0.5	6.81	43.2	840
MW-14	10/15/2019	0.272	155	6.99	<0.5	6.52	24.2	600
	1/30/2020 ^[2]	0.235	128	7.05	0.298J	6.6	25.4	708
	4/20/2020	0.278	158	7.95	0.52	6.85	27.7	678
	10/5/2020	0.322	157	8.73	0.339J	6.65	19.9	702

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

			Appen	dix III (Dete	ction Monito	oring) Constit	uents	
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS
R	eporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
MW-14	4/13/2021	0.263	152	8.57	0.495J	6.17	12.3	672
10100-14	10/4/2021	0.246	168	9.65	< 0.275	7.07	36.0	706
	3/9/2016	0.301	122	<5	0.664	6.84	90.2	456
	6/7/2016	0.205	94.4	<5	< 0.5	6.99	60.1	404
	10/3/2016	0.327	103	<5	< 0.5	7.29	39.8	370
	11/18/2016	0.333	121	<5	1.82	7.01	59.5	516
	2/14/2017	0.427	122	<5	< 0.5	7.48	99.1	580
	4/25/2017	0.226	87	<5	1.4	7.40	59.8	536
	6/20/2017	< 0.2	112	<5	< 0.5	7.12	54.4	496
	7/13/2017	0.225	110	<5	< 0.5	7.48	44.5	524
NC1MW-2	11/8/2017	< 0.2	135	<5	0.55	7.02	121	592
INC HVIVV-Z	3/13/2018	< 0.2	94	<5	0.57	6.85 / 7.53 **	61	362
	6/6/2018	0.27	88.8	<5	< 0.5	7.06	48.3	344
	10/4/2018	< 0.2	115	<5	< 0.5	6.78	70.0	400
	4/8/2019	< 0.2	111	<5	< 0.5	6.68	66.3	418
	10/18/2019	0.305	112	<5	< 0.5	6.84	52.0	332
	4/20/2020	<0.1	119	2.81J	0.614	6.78	54.4	424
	10/6/2020	0.141	77.7	4.61J	0.301J	6.81	57.4	272
	4/13/2021	0.233	91.6	3.82J	0.294J	6.69	54.4	318
	10/5/2021	0.430	103	5.31	< 0.275	6.54	72.1	340
	3/9/2016	1.88	227	14.3	0.508	6.73	457	1150
	6/7/2016	2.56	213	18.4	< 0.5	6.9	446	1180
	10/3/2016	1.63	147	10.5	< 0.5	7.33	326	794
	11/18/2016	1.66	156	9	3.91	7.05	149	732
	2/14/2017	1.66	170	11	2.97	7.56	286	852
	4/25/2017	1.97	166	10.1	0.974	7.27	338	924
	6/20/2017	2.42	155	10.5	0.591	6.99	361	1070
	7/13/2017	2.55	169	7.81	0.603	7.85	334	1080
NIO 4 N NI 4 O	11/8/2017	2.04	144	9.53	0.648	7.14	339	852
NC1MW-3	3/13/2018	1.97	154	10.8	< 0.5	6.85 / 7.42 **	362	846
	6/6/2018	2.6	155	12.5	< 0.5	6.40	324	948
	10/4/2018	2.32	163	8.88	0.541	7.15	432	944
	4/9/2019	2.33	186	7.96	<0.5	7.32	427	1040
	10/18/2019	2.42	166	9.91	0.527	7.08	361	760
	4/21/2020	2.98	169	9.09	0.693	6.92	346	916
	10/6/2020	2.57	173	7.13	0.520	6.76	354	976
	4/13/2021	3.14	180	9.11	0.557	6.63	372	1000
	10/6/2021	2.77	181	9.86	<0.275	6.34	395	998
	3/9/2016	1.83	227	10.5	<0.5	7.25	373	896
	6/7/2016	1.22	107	<5	<0.5	7.29	344	667
NC1MW-4	·	1.29	104	<5	<0.5	7.52	262	546
	11/18/2016	1.4	124	<5	0.876	7.25	310	712
	2/14/2017	1.59	139	<5	<0.5	7.48	295	760

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

			Appen	dix III (Dete	ction Monito	oring) Constitu	uents	
	Constituent	Boron	Calcium	Chloride	Fluoride*	рН	Sulfate	TDS
R	eporting Unit	mg/L	mg/L	mg/L	mg/L	S.U.	mg/L	mg/L
	4/25/2017	1.39	102	5.19	< 0.5	7.39	244	582
	6/20/2017	1.16	89.9	<5	< 0.5	7.22	210	448
	7/13/2017	1.41	88.2	<5	< 0.5	7.62	196	696
	11/8/2017	1.13	97.6	6.39	< 0.5	7.05	234	480
	3/13/2018	1.21	111	6.04	< 0.5	7.16 / 7.31 **	250	560
	6/6/2018	1.45	145	<5	< 0.5	7.60	294	822
NC1MW-4	10/4/2018	1.15	115	5.39	0.569	7.41	263	580
	4/9/2019	1.28	120	5.78	< 0.5	7.65	231	586
	10/18/2019	1.34	151	5.64	0.501	7.33	238	572
	4/21/2020	1.53	145	5.68	0.507	7.11	229	658
	10/6/2020	1.77	172	6.65	0.535	6.86	272	778
	4/13/2021	1.44	98.4	5.71	0.441J	6.87	165	498
	10/5/2021	1.25	114	6.82	< 0.275	6.68	210	518
	3/9/2016	3.7	125	<5	0.547	7.08	284	808
	6/7/2016	2.44	126	<5	< 0.5	6.90	133	660
	10/3/2016	3.57	149	<5	0.578	7.58	244	740
	11/18/2016	4.44	181	6.31	3.4	7.08	270	944
	2/14/2017	2.5	139	5.95	1.78	7.52	247	770
	4/25/2017	2.5	164	5.8	0.934	7.12	291	1100
	6/20/2017	1.39	174	5.69	< 0.5	7.06	218	870
	7/13/2017	1.68	144	<5	0.68	7.58	159	792
NC1MW-9	11/8/2017	2.65	167	5.77	0.735	7.16	344	846
INCTIVIVV-9	3/13/2018	2.6	132	5.74	< 0.5	6.93 / 7.48 **	276	754
	6/6/2018	2.45	149.0	<5	0.732	5.80	221	708
	10/4/2018	1.28	148	8.56	0.777	7.27	158	678
	4/10/2019	2.59	164	5.34	<0.5	7.03	184	756
	10/18/2019	1.31	157	5.13	0.605	7.06	206	780
	4/21/2020	1.46	169	5.9	0.68	7.1	177	802
	10/6/2020	2.60	160	5.35	0.739	6.87	234	882
	4/13/2021	1.50	160	6.5	0.504	6.7	162	768
	10/6/2021	1.45	174	6.84	< 0.275	6.41	219	822

Notes:

^[1] MW-13 was surrounded by ponding water during the April and October 2019 sampling events, therfore N/A designates the well was not sampled.

^[2]MW-13 and MW-14 were sampled as part of the NC2 verification sampling event in January 2020.

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

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

^{**} The first pH value obtained in the field during the ASD sampling event on March 13, 2018 and was found to be an outlier due to equipment errors. The second pH value was a verification sample obtained in the field on March 19, 2018.

J - Denotes result is less than the Reporting Limit but greater than the Method Detection Limit, therefore the concentration is an approximate value and was not used as a statistically significant detection.

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

		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	0.00239	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	0.00252	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	0.00597	1.04	< 0.005	< 0.001
	10/3/2016	< 0.001	<0.002	0.283	< 0.001	<0.0005	< 0.005	<0.0005	<0.5	< 0.0005	< 0.05	< 0.0002	0.00421	1.19	< 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	0.00393	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	0.300	<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	0.00224	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	0.00422	1.08	<0.005	<0.001
	4/25/2017	<0.001	<0.002	0.300	<0.001	<0.0005	<0.005	<0.0005	<0.5	0.000714	<0.05	<0.0002	0.00323	1.23	<0.005	<0.001
NC2MW-4	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	0.00233	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	0.00587	1.42	<0.005	<0.001
	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
	3/13/2018	<0.001	<0.002	0.297	<0.001	<0.0005	<0.005	<0.0005	0.53	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	0.008	<0.001
	10/4/2018	N.S. ^[1]	<0.002	0.321	N.S. ^[1]	N.S. ^[1]	N.S. ^[1]	<0.0005	< 0.5	0.000565	0.0332	N.S. ^[1]	0.00707	1.13	<0.005	N.S. ^[1]
	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	0.980	<0.005	<0.001
	10/15/2019	< 0.001	<0.002	0.39	<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	0.34	<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	<0.00088	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 [4]	<0.00058	<0.00088	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
	10/5/2020	<0.00051	0.00348	<0.00051	<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 0.420	<0.000270	0.0000580J	<0.00110	0.000256J	0.311J	0.000833	0.023 0.0324	<0.000150	0.0112	0.984 8.39	0.0111	<0.000260
	10/4/2021	<0.00110	0.00275		0.000571J	0.000469	0.00110J	0.00203	<0.275	0.0061		<0.000150	0.00154J		0.00391J	0.000527J
MW-11	3/9/2016	<0.001	<0.002	0.215 0.212	<0.001	<0.0005	<0.005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.00361	0.714 0.589	<0.005	<0.001
	6/7/2016 10/3/2016	<0.001 <0.001	<0.002	0.212	<0.001	<0.0005 <0.0005	<0.005 <0.005	<0.0005 <0.0005	<0.5 <0.5	<0.0005	<0.05 <0.05	<0.0002 <0.0002	0.00477 0.0082	1.1	<0.005 <0.005	<0.001 <0.001
	11/18/2016	<0.001	<0.002	0.253	<0.001	<0.0005	<0.005	<0.0005	0.95	<0.0005 <0.0005	<0.05	<0.0002	0.0062	1.13	< 0.005	<0.001
	2/14/2017	<0.001	<0.002	0.231	<0.001	<0.0005	<0.005	<0.0005	2.09	<0.0005	<0.05	<0.0002	0.00471	0.225	< 0.005	<0.001
	4/25/2017	<0.001	<0.002	0.249	<0.001	<0.0005	<0.005	<0.0005	1.44	<0.0005	<0.05	<0.0002	0.00471	0.358	< 0.005	<0.001
	6/20/2017	0.00235	<0.002	0.156	<0.001	<0.0005	<0.005	0.000549	0.562	<0.0005	<0.05	<0.0002	0.00788	0.398	< 0.005	<0.001
	7/13/2017	< 0.00233	<0.002	0.136	<0.001	<0.0005	<0.005	0.000349	0.538	<0.0005	<0.05	0.000262	0.00765	0.397	< 0.005	<0.001
	3/13/2018	<0.001	0.00272	0.154	<0.001	<0.0005	<0.005	0.00003	<0.5	<0.0005	0.0143	<0.0002	0.00369	0.414	0.00503	<0.001
	6/6/2018	<0.001	<0.002	0.172	<0.001	<0.0005	<0.005	0.000779	<0.5	0.00118	0.0143	<0.0002	0.00203	0.494	0.00303	<0.001
	10/4/2018	N.S. ^[1]	<0.002	0.172	N.S. ^[1]	N.S. ^[1]	N.S. ^[1]	< 0.000773	0.568	<0.0005	0.0123	N.S. ^[1]	0.00883	0.958	< 0.005	N.S. ^[1]
	4/8/2019	<0.001	<0.002	0.163	<0.001	<0.0005	<0.005	<0.0005	<0.5	0.000519	0.0197	<0.0002	0.00609	0.938	< 0.005	<0.001
	10/16/2019	<0.001	0.00497	0.162	<0.001	<0.0003	<0.005	0.00305	0.558	<0.0005	0.0102	<0.0002	0.0120	0.684	<0.005	<0.001
	4/20/2020	<0.0001	0.00497	0.233	<0.001	<0.00039	<0.003	0.00303 0.000452J	0.430J	<0.0003	0.0201	<0.0002	0.00990	0.134U	<0.00300	<0.0001
	10/6/2020	<0.00051	0.00201	0.164	<0.00027	<0.000039	<0.0011	0.0004323	0.4303 0.444J	0.000301J	0.0100	<0.0001	0.0164	0.326U	<0.001	<0.00026
	4/13/2021	<0.00110	0.00963	0.133	<0.00027	0.0000900J	<0.0011	0.00373	0.4443 0.323J	0.000572	0.00252J	<0.0001	0.0299	0.570	0.00138J	<0.00026
																-0.000200

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

Omaha Public Power District - NC1 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	0.00492	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	< 0.002	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	0.00216	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	0.00258	1.09	< 0.005	< 0.001
	10/3/2016	< 0.001	0.00709	0.319	< 0.001	< 0.0005	< 0.005	0.00103	< 0.5	< 0.0005	< 0.05	<0.0002	0.00264	1.01	< 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	0.00221	1.37	< 0.005	< 0.001
	11/18/2016	<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	0.00207	0.407	<0.005	<0.001
	4/24/2017	<0.001	0.0024	0.336	<0.001	<0.0005	<0.005	0.00135	0.789	0.000516	<0.05	<0.0002	<0.002	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	0.0021	0.8	<0.005	<0.001
MW-13	6/20/2017	<0.001	0.00268	0.311	<0.001	<0.0005	<0.005	0.00119	0.51	0.00171	<0.05	<0.0002	<0.002	0.483	<0.005	<0.001
	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	0.00207	1.56	<0.005	<0.001
	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
	3/13/2018	<0.001	0.00283	0.305	<0.001	<0.0005	< 0.005	0.00222	<0.5	0.00102	0.0265	<0.0002	<0.002	0.412	<0.005	<0.001
	6/6/2018 10/4/2018	<0.001 N.S. ^[1]	0.00262 0.00965	0.282	<0.001 N.S. ^[1]	<0.0005 N.S. ^[1]	<0.005 N.S. ^[1]	0.00236	<0.5 0.738	0.00577 0.00216	0.0423 0.0316	<0.0002 N.S. ^[1]	<0.002	1.89	0.00553	<0.001 N.S. ^[1]
		N/A	0.00965 N/A	0.388 N/A	N/A	N/A	N/A	0.00191 N/A	0.736 N/A	0.00216 N/A	0.0316 N/A	N/A	0.00243 N/A	1.62 N/A	<0.005 N/A	N/A
	4/8/2019 ^[2] 10/15/2019 ^[2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/30/2020 ^[3]	<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 ^[4]	<0.00058	0.0111	0.167	<0.00027	<0.000039	<0.0011	0.00208	0.383J	0.000297J	0.0348	<0.0001	0.00335	-0.0922	<0.001	<0.00026
	10/5/2020	<0.00051	0.0111	0.225	<0.00027	<0.000049	<0.0011	0.00200 0.000384J	<0.23	0.0002370 0.000178J	0.0322	<0.0001	<0.0011	0.872	<0.001	<0.00026
	4/12/2021	<0.00031	0.00487	0.225		<0.000049	<0.0011	0.0003043	0.441J	0.0001783 0.000353J	0.0322	<0.0001	0.00443	0.429U	0.00194J	+
			0.00467		<0.000270		<0.00110		<0.275	<0.0003533	0.0199	<0.000150		1.84		<0.000260
	10/4/2021	<0.00110		0.257	<0.000270	<0.0000510		0.00102					<0.00130		<0.000960	<0.000260
	10/4/2018	<0.001	0.0330	0.306	<0.001	<0.0005	<0.005	0.00290	0.751	<0.0005	0.0480	<0.0002	0.00293	1.48	<0.005	<0.001
	1/15/2019	<0.001	0.0301	0.309	<0.001	<0.0005	<0.005	0.00424	<0.5	<0.0005	0.0507	<0.0002	<0.002	1.20	<0.005	<0.001
	3/5/2019	<0.001	0.0253	0.301	<0.001	<0.0005	<0.005	0.00477	<0.5	<0.0005	0.0569	<0.0002	0.00227	1.75	<0.005	<0.001
	4/8/2019 10/16/2019	<0.001	0.0368 0.0893	0.309 0.359	<0.001 <0.001	<0.0005 <0.0001	<0.005	0.00391 0.00265	<0.5 <0.5	<0.0005	0.0557 0.0528	<0.0002 <0.0002	<0.002 <0.002	1.03 1.81	<0.005 <0.005	<0.001
MW-14		<0.001					<0.005		 	<0.0005			+		+	+
	1/30/2020 ^[3]	<0.00058	0.0513 0.0621	0.266 0.306	<0.00027	<0.000039	<0.0011	0.00209 0.00216	0.298J 0.520	<0.00027	0.0453 0.0555	<0.0001	<0.0011	0.976 1.03	<0.001	<0.00026
	4/20/2020 10/5/2020	<0.00058 <0.00051	0.0863	0.335	<0.00027 <0.00027	<0.000039 <0.000049	<0.0011 <0.0011	0.00210	0.320 0.339J	<0.00027 <0.000110	0.0333	<0.0001 <0.0001	<0.0011 <0.0011	2.45	<0.001	<0.00026 <0.00026
	4/13/2021	<0.00031	0.0005	0.333	<0.00027	<0.000049	<0.0011	0.00237	0.339J 0.495J	<0.000110	0.0548	<0.0001	<0.0011	1.51	<0.0001	<0.00020
	10/4/2021	<0.00110	0.0494	0.367	<0.000270	<0.0000510	<0.00110	0.00110	<0.275	0.000210	0.0525	<0.000150	<0.00130	3.90	<0.000960	<0.000260
	3/9/2016	<0.00110	<0.002	0.307	< 0.000270	<0.0005	<0.0001	<0.00107	0.664	<0.0005	< 0.05	<0.000130	0.0444	0.552	<0.005	<0.001
	6/7/2016	<0.001	<0.002	0.123	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0444	0.305	<0.005	<0.001
	10/3/2016	<0.001	<0.002	0.104	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0718	0.586	<0.005	<0.001
						l			 				+		+	
NIC4NAVA	11/18/2016	<0.001	<0.002	0.126	<0.001	<0.0005	<0.0005	<0.0005	1.82	<0.0005	<0.05	<0.0002	0.095	0.415	<0.005	<0.001
NC HVIVV-2	2/14/2017	<0.001	<0.002	0.123	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0654	0.254	<0.005	<0.001
	4/25/2017	<0.001	<0.002	0.0889	<0.001	<0.0005	<0.0005	<0.0005	1.4	<0.0005	<0.05	<0.0002	0.0489	0.396	<0.005	<0.001
	6/20/2017	<0.001	<0.002	0.116	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.038	0.174	<0.005	<0.001
	7/13/2017	< 0.001	<0.002	0.122	<0.001	< 0.0005	<0.0005	<0.0005	<0.5	<0.0005	< 0.05	<0.0002	0.0374	0.375	<0.005	<0.001
	3/13/2018	< 0.001	<0.002	0.125	<0.001	<0.0005	<0.0005	<0.0005	0.57	<0.0005	< 0.01	< 0.0002	0.0446	0.656	< 0.005	< 0.001

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

Omaha Public Power District - NC1 Ash Disposal Area

							Ap	pendix IV (As	sessment Mo	nitoring) Con	stituents					
	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
	6/6/2018	< 0.001	< 0.002	0.122	< 0.001	< 0.0005	< 0.0005	0.00143	< 0.5	0.000713	< 0.01	< 0.0002	0.0711	0.615	< 0.005	< 0.001
	10/4/2018	N.S. ^[1]	<0.002	0.153	N.S. ^[1]	N.S. ^[1]	N.S. ^[1]	<0.0005	<0.5	0.000795	<0.01	N.S. ^[1]	0.0680	1.01	< 0.005	N.S. ^[1]
	4/8/2019	<0.001	<0.002	0.126	<0.001	<0.0005	<0.005	<0.0005	<0.5	<0.0005	<0.01	<0.0002	0.0803	0.494	<0.005	< 0.001
	10/18/2019	<0.001	<0.002	0.179	<0.001	0.000230	<0.005	0.000548	<0.5	<0.0005	0.0117	<0.0002	0.0872	0.334	<0.005	<0.001
NC1MW-2	4/21/2020	<0.00058	<0.000880	0.128	<0.00027	0.0000930J	<0.0011	<0.0000910	0.614	<0.00027	0.00764J	< 0.0001	0.0938	0.192U	<0.001	<0.00026
	10/6/2020	<0.00051	<0.000880	0.108	<0.00027	0.0000650J	<0.0011	0.000133J	0.301J	0.000135J	0.00729J	<0.0001	0.121	0.376U	<0.001	<0.00026
	4/13/2021	<0.00110	0.000878J	0.134	<0.000270	0.000176	<0.00110	0.000238J	0.264J	0.000463J	0.00998J	<0.000150	0.0886	0.552	<0.000960	0.00278
	10/5/2021	0.00111J	0.000700 0.00179J	0.154	0.000387J	0.000592	<0.00110	0.000568	<0.275	0.000968	0.0124	<0.000150	0.102	0.536U	0.00346J	0.00276
	3/9/2016	<0.001	0.0135	0.112	<0.001	< 0.0005	<0.0005	0.00239	0.508	< 0.0005	<0.05	<0.0002	<0.002	0.0759	< 0.005	<0.001
	6/7/2016	<0.001	0.00901	0.112	<0.001	<0.0005	<0.0005	0.00263	<0.5	<0.0005	<0.05	<0.0002	<0.002	0.81	<0.005	< 0.001
	10/3/2016	<0.001	0.00761	0.0887	<0.001	<0.0005	<0.0005	0.00267	<0.5	<0.0005	<0.05	<0.0002	<0.002	0.15	<0.005	<0.001
	11/18/2016	< 0.001	0.031	0.101	< 0.001	<0.0005	< 0.0005	0.00334	3.91	< 0.0005	< 0.05	< 0.0002	<0.002	0.736	< 0.005	< 0.001
	2/14/2017	< 0.001	0.0248	0.092	< 0.001	<0.0005	< 0.0005	0.00268	2.97	0.000553	< 0.05	< 0.0002	<0.002	0.436	< 0.005	< 0.001
	4/25/2017	< 0.001	0.0131	0.106	< 0.001	<0.0005	< 0.0005	0.00144	0.974	< 0.0005	< 0.05	<0.0002	<0.002	0.242	<0.005	< 0.001
	6/20/2017	< 0.001	0.0195	0.115	< 0.001	<0.0005	< 0.0005	0.00196	0.591	< 0.0005	< 0.05	<0.0002	< 0.002	0.711	< 0.005	< 0.001
	7/13/2017	<0.001	0.0302	0.116	<0.001	<0.0005	<0.0005	0.00257	0.603	<0.0005	< 0.05	<0.0002	<0.002	0.339	<0.005	<0.001
NC1MW-3	3/13/2018	<0.001	0.0111	0.0786	<0.001	<0.0005	<0.0005	0.00192	<0.5	<0.0005	0.0262	<0.0002	<0.002	0.728	<0.005	<0.001
	6/6/2018	<0.001	0.0412	0.128	< 0.001	<0.0005	<0.0005	0.00219	<0.5	0.00296	0.0325	<0.0002	0.0021	0.922	<0.005	< 0.001
	10/4/2018	N.S. ^[1]	0.0352	0.141	N.S. ^[1]	N.S. ^[1]	N.S. ^[1]	0.00120	0.541	0.000833	0.0326	N.S. ^[1]	<0.002	1.12	<0.005	N.S. ^[1]
	4/9/2019	<0.001	0.0143	0.0938	<0.001	<0.0005	<0.005	0.00250	<0.5	<0.0005	0.0271	<0.0002	<0.002	0.348	<0.005	<0.001
	10/18/2019	<0.001	0.0333	0.135	<0.001	<0.0001	< 0.005	0.00182	0.527	<0.0005	0.0316	<0.0002	<0.002	0.146	<0.005	<0.001
	4/21/2020	<0.00058	0.0242	0.103	<0.00027	<0.000039	<0.0011	0.00228	0.693	< 0.00027	0.0375	<0.0001	0.00140J	0.0567U	<0.001	<0.00026
	10/6/2020	<0.00051	0.0317	0.126 0.144	<0.00027	<0.00027	<0.0011	0.00153	0.520	<0.000110	0.0361 0.0435	<0.0001	<0.0011	0.994 0.743	<0.001	<0.00026 0.0032
	4/13/2021 10/6/2021	<0.00110 <0.00110	0.0354 0.0368	0.144	<0.000270 <0.000270	0.0000830J <0.0000510	<0.00110 <0.00110	0.00191 0.00137	0.557 <0.275	<0.00210 <0.000210	0.0435	<0.000150 <0.000510	0.00293 0.00179J	0.470U	<0.000960 <0.000960	<0.0032
	3/9/2016	<0.00110	0.00336	0.144	<0.000270	<0.0005	<0.00110	< 0.00137	<0.275	<0.000210	< 0.05	<0.000310	0.001793	0.4700	< 0.005	<0.00026
	6/7/2016	<0.001	0.00336	0.193	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0053	0.755	<0.005	<0.001
	10/3/2016	<0.001	0.0029	0.100	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.017	0.343	<0.005	<0.001
	11/18/2016	<0.001	0.0032	0.030	<0.001	<0.0005	<0.0005	<0.0005	0.876	<0.0005	<0.05	<0.0002	0.0199	0.182	<0.005	<0.001
	2/14/2017	<0.001	0.00433	0.119	<0.001	<0.0005	< 0.0005	<0.0005	<0.5	0.00052	< 0.05	< 0.0002	0.0139	0.301	< 0.005	<0.001
	4/25/2017	<0.001	0.00344	0.0968	<0.001	<0.0005	<0.0005	<0.0005	<0.5	<0.0005	<0.05	<0.0002	0.0249	0.313	<0.005	<0.001
	6/20/2017	< 0.001	0.00334	0.0679	< 0.001	<0.0005	< 0.0005	< 0.0005	<0.5	< 0.0005	< 0.05	< 0.0002	0.0356	0.0408	< 0.005	< 0.001
	7/13/2017	< 0.001	0.00381	0.0687	< 0.001	<0.0005	< 0.0005	<0.0005	<0.5	< 0.0005	< 0.05	< 0.0002	0.0317	0.0901	< 0.005	< 0.001
NC1MW-4	3/13/2018	< 0.001	0.00265	0.0781	< 0.001	<0.0005	< 0.0005	<0.0005	<0.5	<0.0005	0.0114	< 0.0002	0.0207	0.286	< 0.005	< 0.001
	6/6/2018	< 0.001	0.00821	0.129	< 0.001	<0.0005	<0.0005	0.000636	<0.5	<0.0005	0.01	<0.0002	0.0422	0.577	<0.005	< 0.001
	10/4/2018	N.S. ^[1]	0.00641	0.0975	N.S. ^[1]	N.S. ^[1]	N.S. ^[1]	<0.0005	0.569	<0.0005	0.0135	N.S. ^[1]	0.0233	0.802	< 0.005	N.S. ^[1]
	4/9/2019	<0.001	0.00223	0.0652	< 0.001	<0.0005	<0.005	<0.0005	<0.5	< 0.0005	0.011	<0.0002	0.0269	0.0157	< 0.005	< 0.001
	10/18/2019	<0.001	0.00347	0.119	<0.001	<0.0001	<0.005	0.000642	0.501	<0.0005	0.0137	<0.0002	0.0183	-0.000469U	<0.005	<0.001
	4/21/2020	<0.00058	0.00162J	0.0878	<0.00027	0.000310	<0.0011	0.000974	0.507	<0.00027	0.0183	<0.0001	0.00302	0.0118U	<0.001	<0.00026
	10/6/2020	<0.00051	0.00120J	0.152	<0.00027	0.000208	<0.0011	0.00138	0.535	<0.000110	0.0238	<0.0001	<0.0011	0.00604U	0.00199J	<0.00026
	4/13/2021	<0.00110	0.00190J	0.0768	<0.000270	0.000133	<0.00110	0.000976	0.441J	<0.000210	0.019	<0.000150	0.00154J	0.151U	<0.000960	0.000313J
	10/5/2021	<0.00110	0.00125J	0.111	<0.000270	0.000134	<0.00110	0.00200	<0.275	<0.000210	0.0187	<0.000150	0.00664	1.08	<0.000960	<0.00026
	3/9/2016	<0.001	0.00995	0.0865	<0.001	<0.0005	<0.0005	0.00121	0.547	<0.0005	<0.05	<0.0002	0.0111	0.629	0.0634	<0.001
NC1MW-9	6/7/2016 10/3/2016	<0.001	0.00624 0.00605	0.0816 0.0847	<0.001	<0.0005 <0.0005	<0.0005	<0.0005 0.000683	<0.5 0.578	<0.0005	<0.05	<0.0002	0.0204	0.577 0.23	0.00958 0.0388	<0.001
	11/18/2016	<0.001 <0.001	0.00828	0.0647	<0.001	<0.0005	<0.0005 <0.0005	0.000648	3.4	<0.0005 <0.0005	<0.05 <0.05	<0.0002 <0.0002	0.0435 0.0222	1.13	0.0366	<0.001 <0.001

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

Omaha Public Power District - NC1 Ash Disposal Area

							Ар	pendix IV (As	sessment Mo	nitoring) Con	stituents					
	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
	2/14/2017	< 0.001	0.0122	0.0836	< 0.001	< 0.0005	< 0.0005	0.00147	1.78	< 0.0005	< 0.05	<0.0002	0.0169	0.425	0.0138	< 0.001
	4/25/2017	< 0.001	0.0164	0.115	< 0.001	< 0.0005	< 0.0005	0.00124	0.934	< 0.0005	< 0.05	<0.0002	0.0473	0.592	0.0101	< 0.001
	6/20/2017	< 0.001	0.01	0.114	< 0.001	<0.0005	<0.0005	0.00295	< 0.5	<0.0005	< 0.05	<0.0002	0.0486	0.473	< 0.005	< 0.001
	7/13/2017	< 0.001	0.00885	0.0952	< 0.001	<0.0005	<0.0005	0.000878	0.68	< 0.0005	< 0.05	< 0.0002	0.0302	0.294	< 0.005	< 0.001
	3/13/2018	< 0.001	0.0107	0.0838	< 0.001	< 0.0005	< 0.0005	0.00063	< 0.5	< 0.0005	0.0198	<0.0002	0.0354	0.412	< 0.005	< 0.001
	6/6/2018	< 0.001	0.0114	0.111	< 0.001	< 0.0005	< 0.0005	0.00109	0.732	< 0.0005	0.0189	<0.0002	0.0474	0.827	< 0.005	< 0.001
NC1MW-9	10/4/2018	N.S. ^[1]	0.0101	0.109	N.S. ^[1]	N.S. ^[1]	N.S. ^[1]	0.00492	0.777	<0.0005	0.0201	N.S. ^[1]	0.0399	1.39	< 0.005	N.S. ^[1]
	4/10/2019	< 0.001	0.00681	0.153	< 0.001	< 0.0005	< 0.005	0.00559	<0.5	< 0.0005	0.0254	<0.0002	0.0196	0.415	0.0120	< 0.001
	10/18/2019	< 0.001	0.00784	0.165	< 0.001	0.000100	< 0.005	0.00323	0.605	< 0.0005	0.0310	<0.0002	0.0230	0.695	< 0.005	< 0.001
	4/21/2020	<0.00058	0.0104	0.125	<0.000270	0.0000440J	< 0.0011	0.00114	0.680	< 0.00027	0.0314	< 0.0001	0.0266	0.687	0.00328J	<0.000260
	10/6/2020	<0.00051	0.0157	0.134	<0.000270	<0.000049	< 0.0011	0.00115	0.739	<0.000110	0.0269	<0.0001	0.0315	0.828	0.0188	<0.000260
	4/13/2021	< 0.00110	0.011	0.12	<0.000270	0.0000890J	<0.00110	0.00143	0.504	<0.000210	0.0343	<0.000150	0.0234	0.205U	0.00280J	<0.000260
	10/6/2021	< 0.00110	0.0121	0.139	<0.000270	0.0000780J	<0.00110	0.00202	<0.275	<0.00020	0.0318	<0.000150	0.0243	1.54	0.00115J	<0.000260

Notes:

^{*} 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.

[&]quot;U" data qualifier (radium) indicates parameter was analyzed for but not detected above limiting criteria as defined in the analytical laboratory data package.

N.S. = Not Sampled

J - Denotes result is less than the Reporting Limit but greater than the Method Detection Limit, therefore the concentration is an approximate value and was not used as a statistically significant detection.

^[1]Constituent not sampled because only detected Appendix IV constituents were tested, in accordance with 40 CFR 257.95(d)(1).

^[2]MW-13 was submerged under water during April and October 2019 sampling events, therefore N/A designates well not sampled.

^[3]MW-13 and MW-14 were sampled as part of the NC2 verification sampling event in January 2020.

^[4] NC2-MW-4 and MW-13 were sampled as part of the NC2 sampling event on April 27, 2020.

Table 6 - Background Threshold Values for Assessment Monitoring

Omaha Public Power District - NC1 Ash Disposal Area

Constituents	Units	Background Threshold Values (BTVs)						
Appendix III (Detection	Monitoring)							
Boron	mg/l	1.53						
Calcium	mg/l	163						
Chloride	mg/l	17.3						
Fluoride [1]	mg/l	1.18						
pH (LPL) ^[2]	SU	6.27						
pH (UPL) ^[3]	SU	7.86						
Sulfate	mg/l	170						
TDS	mg/l	747						
Appendix IV (Assessment Monitoring)								
Antimony	mg/l	0.00235						
Arsenic	mg/l	0.0893						
Barium	mg/l	0.391						
Beryllium	mg/l	0.001						
Cadmium	mg/l	0.0005						
Chromium	mg/l	0.005						
Cobalt	mg/l	0.00477						
Fluoride [1]	mg/l	1.18						
Lead	mg/l	0.0032						
Lithium	mg/l	0.0569						
Mercury	mg/l	0.000262						
Molybdenum	mg/l	0.0164						
Radium 226 + 228	pCi/l	2.04						
Selenium	mg/l	0.0112						
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).



Table 7 - Established Groundwater Protection Standards

Omaha Public Power District - NC1 Ash Disposal Area

Constituents	Units	Established Groundwater Protection Standard (GWPS) ^[1]
Appendix IV (Assessm	ent Monitoring)	
Antimony	mg/l	0.006
Arsenic	mg/l	0.0893 ^[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
Fluoride	mg/l	4.0
Lead	mg/l	0.015
Lithium	mg/l	0.0569 ^[2]
Mercury	mg/l	0.002
Molybdenum	mg/l	0.1
Radium 226 + 228	pCi/l	5.0
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	4/6/2021	Time of Sampling	15:07	Static Water Level 8.91
NC1MW3	Date of Sampling	4/6/2021	Time of Sampling	15:33	Static Water Level 8.90
NC1MW4	Date of Sampling	4/6/2021	Time of Sampling	15:25	Static Water Level 9.53
NC1MW5	Date of Sampling	4/6/2021	Time of Sampling	11:00	Static Water Level 10.95
NC1MW6	Date of Sampling	4/6/2021	Time of Sampling	11:33	Static Water Level 7.58
NC1MW7	Date of Sampling	4/6/2021	Time of Sampling	14:51	Static Water Level 8.20
NC1MW8	Date of Sampling	4/6/2021	Time of Sampling	14:50	Static Water Level 8.54
NC1MW9	Date of Sampling	4/6/2021	Time of Sampling	15:40	Static Water Level 9.34
NC2MW2	Date of Sampling	4/6/2021	Time of Sampling	14:33	Static Water Level 10.57
NC2MW3	Date of Sampling	4/6/2021	Time of Sampling	14:29	Static Water Level 7.72
NC2MW4	Date of Sampling	4/6/2021	Time of Sampling	10:41	Static Water Level 6.76
NC2MW5	Date of Sampling	4/6/2021	Time of Sampling	14:14	Static Water Level 5.87
NC2MW6	Date of Sampling	4/6/2021	Time of Sampling	14:20	Static Water Level 7.62
NC2MW7	Date of Sampling	4/6/2021	Time of Sampling	14:38	Static Water Level 6.76
NC2MW8	Date of Sampling	4/6/2021	Time of Sampling	14:27	Static Water Level 6.03
MW11	Date of Sampling	4/6/2021	Time of Sampling	14:58	Static Water Level 7.01
MW12	Date of Sampling	4/6/2021	Time of Sampling	15:02	Static Water Level 8.97
MW13	Date of Sampling	4/6/2021	Time of Sampling	10:38	Static Water Level 4.73
MW14	Date of Sampling	4/6/2021	Time of Sampling	10:46	Static Water Level 8.51

NOTES:

TOC = Top of Casing

NM = Not Measured, Inaccessible

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW2 - 5	Date: 4/13/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 46°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	10:27	Pump Start Time	10:30			
Static Water Level (+/- 0.01 feet)*	8.91	Purge Rate (mL/minute)	300			
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:17			
Pump Intake Elevation (+/- 0.01 feet)*	505.55	Purge and Sample Equipment: Dedicated Bladder Pump with QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic Water Level Indicator				
2" Well Casing Volume (L)	1 462					
Actual Volume of Water Purged (mL)	5,100					

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

Groundwater Parameter Data

Volume Purged (mL)	Temperature (°C)	DO (mg/L)	Turbidity (NTU)	рН	Conductivity (mS/cm)	Water Level (feet)
1,500	11.04	0.96	82.7	6.73	0.655	Top of Pump
2,400	11.09	0.93	61.8	6.70	0.658	Top of Pump
3,300	11.14	0.90	44.7	6.70	0.660	Top of Pump
4,200	11.17	0.83	32.7	6.69	0.663	Top of Pump
5,100	11.18	0.80	24.7	6.69	0.665	Top of Pump
	Purged (mL) 1,500 2,400 3,300 4,200	Purged (mL) (°C) 1,500 11.04 2,400 11.09 3,300 11.14 4,200 11.17	Purged (mL) (°C) DO (mg/L) 1,500 11.04 0.96 2,400 11.09 0.93 3,300 11.14 0.90 4,200 11.17 0.83	Purged (mL) (°C) DO (mg/L) (NTU) 1,500 11.04 0.96 82.7 2,400 11.09 0.93 61.8 3,300 11.14 0.90 44.7 4,200 11.17 0.83 32.7	Purged (mL) (°C) DO (mg/L) (NTU) PH 1,500 11.04 0.96 82.7 6.73 2,400 11.09 0.93 61.8 6.70 3,300 11.14 0.90 44.7 6.70 4,200 11.17 0.83 32.7 6.69	Purged (mL) (°C) DO (mg/L) (NTU) PH (mS/cm) 1,500 11.04 0.96 82.7 6.73 0.655 2,400 11.09 0.93 61.8 6.70 0.658 3,300 11.14 0.90 44.7 6.70 0.660 4,200 11.17 0.83 32.7 6.69 0.663

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)
10:47	5,100	11.18	0.80	24.7	6.69	0.665	Top of Pump
Duplicate?	No	Preservation?	Cool on Ice, HNO ₃ for Metals		Pump Rate	300	

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	4/13/2021, 6:30				
Notes / Unusual Occurrences: None	•	-					

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW3 - 8	Date: 4/13/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 47°F

Groundwater Measurements and Purge Data

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Time of Water Level Measurement	11:48	Pump Start Time	11:50
Static Water Level (+/- 0.01 feet)*	8.74	Purge Rate (mL/minute)	400
Bottom of Well Casing (+/- 0.01 feet)*	22.20	Time to Purge Well (hours:minutes)	0:32
Pump Intake Elevation (+/- 0.01 feet)*	NOT MICASUICA	Purge and Sample Equipment: Dedicated Bladder	
2" Well Casing Volume (L)	l 221	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	12 000	Water Level Indicator	ind Liectronic

^{*}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)
11:55	2,000	11.72	1.52	490	6.67	1.49	8.74
11:58	3,200	11.73	1.54	468	6.64	1.53	8.74
12:01	4,400	11.66	0.68	245	6.63	1.55	8.74
12:04	5,600	11.54	0.37	145	6.63	1.57	8.74
12:07	6,800	11.51	0.37	83.8	6.63	1.58	8.74
12:10	8,000	11.55	0.32	54.9	6.63	1.59	8.74
12:13	9,200	11.59	0.30	38.4	6.63	1.60	8.74
12:16	10,400	11.60	0.29	34.2	6.63	1.60	8.74
12:19	11,600	11.60	0.27	27.0	6.63	1.60	8.74
12:22	12,800	11.61	0.27	23.7	6.63	1.61	8.74

Well Evacuated to Dryness?

No

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)
	12:22	12,800	11.61	0.27	23.7	6.63	1.61	8.74
ľ	Duplicate?	Yes, DUP1	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	300

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	4/13/2021, 6:30

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW4 - 6	Date: 4/13/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 46°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	11:03	Pump Start Time	11:06
Static Water Level (+/- 0.01 feet)*	9.38	Purge Rate (mL/minute)	300
Bottom of Well Casing (+/- 0.01 feet)*	17.70	Time to Purge Well (hours:minutes)	0:23
Pump Intake Elevation (+/- 0.01 feet)*	NOT MEasured		•
2" Well Casing Volume (L)	5 1/1	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	C 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)
11:11	1,500	11.73	3.20	72.2	6.90	1.01	9.39
11:14	2,400	11.80	2.04	73.1	6.89	0.925	9.39
11:17	3,300	11.83	1.50	56.2	6.88	0.891	9.39
11:20	4,200	11.87	0.97	41.3	6.87	0.890	9.39
11:23	5,100	11.91	0.77	29.1	6.87	0.888	9.39
11:26	6,000	11.94	0.75	22.9	6.87	0.889	9.39
11:29	6,900	11.92	0.72	18.9	6.87	0.889	9.39

Well Evacuated to Dryness?

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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)
11:29	6,900	11.92	0.72	18.9	6.87	0.889	9.39
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	300

	Sample Physical Characteristics Equipment Inform
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Sample Clarity	Suspended Sand	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	4/13/2021, 6:30

Notes / Unusual Occurrences: None - Suspended Sand in Sample

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: NC2MW4 - 2	Date: 4/12/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Windy, 46°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	9:53	Pump Start Time	9:57
Static Water Level (+/- 0.01 feet)*	6.46	Purge Rate (mL/minute)	250
Bottom of Well Casing (+/- 0.01 feet)*	14.50	Time to Purge Well (hours:minutes)	0:11
Pump Intake Elevation (+/- 0.01 feet)*	INOL IVICASUI CU		•
2" Well Casing Volume (L)	1 96	QED Flow Controller and Nitrogen Gas, Graduated Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	2.750	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)
10:02	1,250	11.33	6.33	51.5	6.32	0.880	7.22
10:05	2,000	11.27	6.31	29.8	6.29	0.881	7.38
10:08	2,750	11.24	6.31	23.8	6.27	0.882	7.58

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)
10:08	2,750	11.24	6.31	23.8	6.27	0.882	7.58
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate ((mL/minute)	250

		-
Sample Physical Characteri	ctics	Fauinment 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	4/12/2021, 6:26

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW9 - 10	Date: 4/13/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, Breezy, 52°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	12:43	Pump Start Time	12:44
Static Water Level (+/- 0.01 feet)*	9.17	Purge Rate (mL/minute)	350
Bottom of Well Casing (+/- 0.01 feet)*	22.40	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	INOL IVICASUI CU	Purge and Sample Equipment: Dedicated Bladder	•
2" Well Casing Volume (L)	I 2/17	QED Flow Controller and Nitrogen Gas, Graduated Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	F 0F0	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 Leve (feet)
12:49	1,750	11.73	1.20	151	6.74	1.33	9.17
12:52	2,800	11.67	0.63	82.8	6.71	1.33	9.17
12:55	3,850	11.64	0.61	39.3	6.71	1.33	9.17
12:58	4,900	11.68	0.55	28.4	6.70	1.34	9.17
13:01	5,950	11.73	0.51	22.9	6.70	1.34	9.17
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				<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)
13:01	5,950	11.73	0.51	22.9	6.70	1.34	9.17
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	350

Jampie r nysicai characteristics	Sample Physical Characteristics Equipment Information
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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	4/13/2021, 6:30

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW11 - 4	Date: 4/13/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, Breezy, 45°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	9:41	Pump Start Time	9:44
Static Water Level (+/- 0.01 feet)*	6.83	Purge Rate (mL/minute)	300
Bottom of Well Casing (+/- 0.01 feet)*	21.85	Time to Purge Well (hours:minutes)	0:26
Pump Intake Elevation (+/- 0.01 feet)*	INOL IVICASUI CU		
2" Well Casing Volume (L)	Q 27	QED Flow Controller and Nitrogen Gas, Graduated Bucket and Cup, Multi-Parameter Water Meter, a	ū
Actual Volume of Water Purged (mL)	7 000	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 Leve (feet)
9:49	1,500	9.18	2.50	103	6.80	0.443	7.01
9:52	2,400	8.99	2.44	67.3	6.82	0.440	7.01
9:55	3,300	8.90	2.38	53.3	6.81	0.442	7.01
9:58	4,200	8.86	2.03	47.2	6.81	0.444	7.01
10:01	5,100	8.86	2.05	42.4	6.80	0.446	7.01
10:04	6,000	8.87	2.07	34.6	6.79	0.449	7.01
10:07	6,900	8.88	2.07	30.3	6.79	0.451	7.01
10:10	7,800	8.89	2.07	20.4	6.78	0.452	7.01
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Well Evacuated to Dryness?

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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)
10:10	7,800	8.89	2.07	20.4	6.78	0.452	7.01
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	300

	Sample Physical Characteristics Equipment Info	mation
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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	4/13/2021, 6:30

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW13 - 1	Date: 4/12/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, Windy, 45°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	9:11	Pump Start Time	9:13	
Static Water Level (+/- 0.01 feet)*	4.43	Purge Rate (mL/minute)	250	
Bottom of Well Casing (+/- 0.01 feet)*	15.19	Time to Purge Well (hours:minutes)	0:11	
Pump Intake Elevation (+/- 0.01 feet)*	908.30	Purge and Sample Equipment: Dedicated Bladder	•	
2" Well Casing Volume (L)	6.64	QED Flow Controller and Nitrogen Gas, Graduate	•	
Actual Volume of Water Purged (mL)	2,750	 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 Leve (feet)
9:18	1,250	11.40	0.99	34.2	6.70	0.640	4.48
9:21	2,000	11.20	0.93	24.1	6.59	0.638	4.49
9:24	2,750	11.12	0.98	23.1	6.58	0.640	4.49
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Well Evacuated to Dryness?

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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)
9:24	2,750	11.12	0.98	23.1	6.58	0.640	4.49
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	250

Jampie r nysicai characteristics	Sample Physical Characteristics Equipment Information
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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	4/12/2021, 6:26

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW14 - 3	Date: 4/12/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Clear, Sunny, Windy, 48°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	10:36	Pump Start Time	10:38
Static Water Level (+/- 0.01 feet)*	8.24	Purge Rate (mL/minute)	150-250
Bottom of Well Casing (+/- 0.01 feet)*	Not Measured	Time to Purge Well (hours:minutes)	0:23
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	red Purge and Sample Equipment: Dedicated Bladder Pump with	
2" Well Casing Volume (L)		ed QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic	
Actual Volume of Water Purged (mL)	4 550	Water Level Indicator	ina Liectronic

^{*}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	Temperature		Turbidity		Conductivity	Water Level
rime	Purged (mL)	(°C)	DO (Mg/L)	(NTU)	рп	(mS/cm)	(feet)
10:43	1,250	10.80	4.06	136	6.17	1.26	9.48
10:46	2,000	10.64	4.00	89.9	6.18	1.27	9.78
10:49	2,750	10.58	1.60	57.0	6.17	1.28	10.19
10:52	3,200	10.53	1.58	50.3	6.18	1.29	10.36
10:55	3,650	10.48	1.50	40.6	6.18	1.29	10.45
10:58	4,100	10.46	1.46	33.7	6.17	1.29	10.53
11:01	4,550	10.53	1.41	22.4	6.17	1.29	10.58
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Well Evacuated to Dryness?

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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)
11:01	4,550	10.53	1.41	22.4	6.17	1.29	10.58
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	150

	Sample Physical Characteristics Equipment Info	mation
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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	Light Sulfur	Instrument Calibration By	Kyle K. Uhing
Immiscible Layer Observed? If so, thickness?	No	Date and Time of Calibration	4/12/2021, 6:26

Date:	4/12/2021
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	4.46	μS/cm
Turbidity	0.0	NTU
DO	9.96	mg/L

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

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Date:	4/13/2021
Time:	6:30

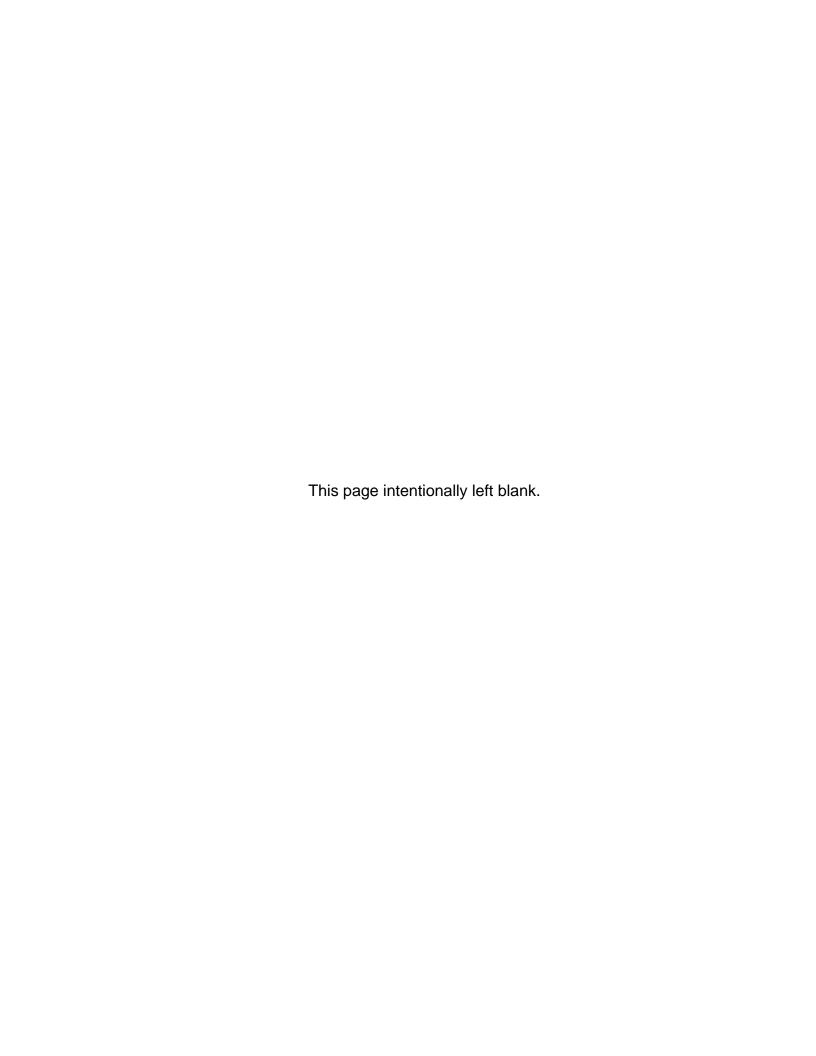
Person Calibrating Instrument: Kyle K. Uhing

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

Parameter:	Reading	Units
pH 4	4.00	NA
Conductivity	4.27	μS/cm
Turbidity	0.0	NTU
DO	8.97	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	10/1/2021	Time of Sampling	13:50	Static Water Level 11.27
NC1MW3	Date of Sampling	10/1/2021	Time of Sampling	14:11	Static Water Level 11.74
NC1MW4	Date of Sampling	10/1/2021	Time of Sampling	13:54	Static Water Level 11.84
NC1MW5	Date of Sampling	10/1/2021	Time of Sampling	14:35	Static Water Level 13.54
NC1MW6	Date of Sampling	10/1/2021	Time of Sampling	14:26	Static Water Level 9.66
NC1MW7	Date of Sampling	10/1/2021	Time of Sampling	13:24	Static Water Level 10.69
NC1MW8	Date of Sampling	10/1/2021	Time of Sampling	13:25	Static Water Level 11.02
NC1MW9	Date of Sampling	10/1/2021	Time of Sampling	14:16	Static Water Level 12.00
NC2MW2	Date of Sampling	10/1/2021	Time of Sampling	13:03	Static Water Level 13.48
NC2MW3	Date of Sampling	10/1/2021	Time of Sampling	12:55	Static Water Level 11.55
NC2MW4	Date of Sampling	10/1/2021	Time of Sampling	12:19	Static Water Level 10.17
NC2MW5	Date of Sampling	10/1/2021	Time of Sampling	12:42	Static Water Level 13.15
NC2MW6	Date of Sampling	10/1/2021	Time of Sampling	12:48	Static Water Level 10.38
NC2MW7	Date of Sampling	10/1/2021	Time of Sampling	13:10	Static Water Level 9.37
NC2MW8	Date of Sampling	10/1/2021	Time of Sampling	13:00	Static Water Level 9.16
MW11	Date of Sampling	10/1/2021	Time of Sampling	13:31	Static Water Level 9.88
MW12	Date of Sampling	10/1/2021	Time of Sampling	13:35	Static Water Level 11.86
MW13	Date of Sampling	10/1/2021	Time of Sampling	12:13	Static Water Level 8.32
MW14	Date of Sampling	10/1/2021	Time of Sampling	12:24	Static Water Level 11.98

NOTES:

TOC = Top of Casing

NM = Not Measured, Inaccessible

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW2 - 5	Date: 10/5/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, Sunny, 75°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	13:27	Pump Start Time	13:27
Static Water Level (+/- 0.01 feet)*	11.40	Purge Rate (mL/minute)	300
Bottom of Well Casing (+/- 0.01 feet)*	16.40	Time to Purge Well (hours:minutes)	0:17
Pump Intake Elevation (+/- 0.01 feet)*	905.59	Purge and Sample Equipment: Dedicated Bladder Pump v QED Flow Controller and Nitrogen Gas, Graduated Measu Bucket and Cup, Multi-Parameter Water Meter, and Elect	
2" Well Casing Volume (L)	3 00		
Actual Volume of Water Purged (mL)	E 100	Water Level Indicator	ind Licetronic

^{*}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 Temperature	DO (mg/L)	Turbidity	рН	Conductivity	Water Level	
111110	(mL)	(°C)	DO (1116/ L)	(NTU)	Pi.	(mS/cm)	(feet)
13:32	1,500	18.19	2.01	37.9	6.64	0.667	11.40
13:35	2,400	18.11	0.91	16.8	6.56	0.718	11.40
13:38	3,300	18.04	0.62	6.9	6.55	0.727	11.40
13:41	4,200	17.90	0.58	4.9	6.54	0.727	11.40
13:44	5,100	17.84	0.55	3.7	6.54	0.727	11.40

Well Evacuated to Dryness?

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)
13:44	5,100	17.84	0.55	3.7	6.54	0.727	11.40
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	300

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	10/5/2021, 11:26

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW3 - 8	Date: 10/6/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Overcast, 61°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	10:42	Pump Start Time	10:44	
Static Water Level (+/- 0.01 feet)*	11.72	Purge Rate (mL/minute)	400	
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:20	
Pump Intake Elevation (+/- 0.01 feet)*	inot ivieasureu			
2" Well Casing Volume (L)	6.47	QED Flow Controller and Nitrogen Gas, Graduated Measu Bucket and Cup, Multi-Parameter Water Meter, and Elect		
Actual Volume of Water Purged (mL)	0 000	Water Level Indicator	ina Licetronic	

^{*}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)
10:49	2,000	15.02	0.65	144	6.34	1.65	11.72
10:52	3,200	14.80	0.41	77.2	6.33	1.64	11.72
10:55	4,400	14.82	0.39	57.0	6.33	1.63	11.72
10:58	5,600	14.77	0.41	28.6	6.35	1.63	11.72
11:01	6,800	14.68	0.39	23.8	6.35	1.62	11.72
11:04	8,000	14.75	0.36	22.7	6.34	1.62	11.72

Well Evacuated to Dryness?

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)
11:04	8,000	14.75	0.36	22.7	6.34	1.62	11.72
Duplicate?	Yes, DUP1	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	300

Sample Physical Characteristics Equipment Information

No

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	10/6/2021, 8:28

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW4 - 6	Date: 10/5/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Mostly Cloudy, 77°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	14:01	Pump Start Time	14:01
Static Water Level (+/- 0.01 feet)*	11.88	Purge Rate (mL/minute)	300
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:20
Pump Intake Elevation (+/- 0.01 feet)*	inot ivieasureu		
2" Well Casing Volume (L)	3 50	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	C 000	Water Level Indicator	ina Licetionic

^{*}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)
14:06	1,500	17.57	1.24	29.9	6.70	0.92	11.88
14:09	2,400	17.17	0.80	33.3	6.70	0.935	11.88
14:12	3,300	17.17	0.52	20.0	6.69	0.945	11.88
14:15	4,200	17.02	0.41	14.8	6.70	0.948	11.88
14:18	5,100	17.00	0.44	10.2	6.69	0.951	11.88
14:21	6,000	16.95	0.40	7.2	6.68	0.955	11.88

Well Evacuated to Dryness?

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)
14:21	6,000	16.95	0.40	7.2	6.68	0.955	11.88
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate	(mL/minute)	300

		-	
Sample Physical Characteristics		Equipment Information	
Sample Clarity	Clear, Sandy	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	10/5/2021, 11:26

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: NC2MW4 - 2	Date: 10/4/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, 65°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	10:21	Pump Start Time	10:24
Static Water Level (+/- 0.01 feet)*	10.11	Purge Rate (mL/minute)	125-350
Bottom of Well Casing (+/- 0.01 feet)*		Time to Purge Well (hours:minutes)	0:29
Pump Intake Elevation (+/- 0.01 feet)*	inot ivieasureu		•
2" Well Casing Volume (L)	1 771	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	•
Actual Volume of Water Purged (mL)	4 750	Water Level Indicator	ina Licetionic

^{*}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	•	DO (mg/L)	Turbidity	рН	Conductivity	Water Leve
	(mL)	(°C)	50 (6/ 2)	(NTU)	Pr.	(mS/cm)	(feet)
10:29	1,750	16.69	1.19	76.6	7.04	0.924	10.80
10:32	2,125	16.96	1.00	66.9	6.99	0.928	10.90
10:35	2,500	17.27	2.01	142	6.97	0.924	11.01
10:38	2,875	17.53	2.15	196	6.96	0.921	11.12
10:41	3,250	17.61	2.36	280	6.97	0.919	11.25
10:44	3,625	17.64	2.39	313	6.95	0.917	11.36
10:47	4,000	17.54	2.44	317	6.94	0.919	11.48
10:50	4,375	17.58	2.39	322	6.93	0.919	11.60
10:53	4,750	17.63	2.34	335	6.93	0.920	11.70

Well Evacuated to Dryness?_

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)
10:53	4,750	17.63	2.34	335	6.93	0.920	11.70
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	125

Sample Physica	l 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	10/4/2021, 6:09

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW9 - 10	Date: 10/6/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Overcast, 64°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	11:33	Pump Start Time	11:36		
Static Water Level (+/- 0.01 feet)*	12.01	Purge Rate (mL/minute)	350		
Bottom of Well Casing (+/- 0.01 feet)*	22.40	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)	6.42	QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic			
Actual Volume of Water Purged (mL)	E 0E0	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 Leve (feet)
11:41	1,750	15.17	0.77	22.6	6.46	1.44	12.01
11:44	2,800	15.11	0.58	13.7	6.41	1.44	12.01
11:47	3,850	15.07	0.40	8.0	6.42	1.43	12.01
11:50	4,900	15.05	0.41	6.5	6.41	1.43	12.01
11:53	5,950	15.05	0.39	5.3	6.41	1.43	12.01

Well Evacuated to Dryness?

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)
11:53	5,950	15.05	0.39	5.3	6.41	1.43	12.01
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate ((mL/minute)	350

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	10/6/2021, 8:28

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW11 - 4	Date: 10/5/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Partly Cloudy, 73°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	12:15	Pump Start Time	12:16		
Static Water Level (+/- 0.01 feet)*	9.90	Purge Rate (mL/minute)	200-250		
Bottom of Well Casing (+/- 0.01 feet)*	21.85	Time to Purge Well (hours:minutes)	0:50		
Pump Intake Elevation (+/- 0.01 feet)*	Not Measured	Purge and Sample Equipment: Dedicated Bladder Pump with			
2" Well Casing Volume (L)	7 3 2	 QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electroni 			
Actual Volume of Water Purged (mL)	10.250	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 Leve (feet)
12:21	1,250	17.27	1.72	44.8	6.59	0.545	11.75
12:24	1,850	17.60	0.72	64.6	6.60	0.555	11.44
12:27	2,450	18.20	0.69	72.2	6.56	0.551	11.02
12:30	3,050	18.16	0.76	76.6	6.56	0.548	11.10
12:33	3,650	17.94	0.82	72.3	6.56	0.545	11.28
12:36	4,250	17.95	1.19	63.7	6.52	0.548	11.32
12:39	4,850	17.92	1.38	60.8	6.51	0.550	11.33
12:42	5,450	17.87	1.41	53.5	6.51	0.555	11.33
12:45	6,050	17.94	1.45	52.8	6.52	0.557	11.32
12:48	6,650	17.95	1.51	51.7	6.52	0.560	11.32
12:51	7,250	17.91	1.62	48.5	6.52	0.566	11.31
12:54	7,850	17.88	1.66	46.2	6.51	0.569	11.31
12:57	8,450	17.93	1.72	45.3	6.51	0.569	11.31
13:00	9,050	17.99	1.84	36.4	6.51	0.568	11.31
13:03	9,650	18.08	1.88	36.2	6.52	0.568	11.29
13:06	10,250	18.11	1.90	37.3	6.53	0.568	11.29

Well Evacuated to Dryness?

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)
13:06	10,250	18.11	1.90	37.3	6.53	0.568	11.29
Duplicate?	No	Preservation?	Cool on Ice, HI	NO ₃ for Metals	Pump Rate ((mL/minute)	250

Sample Physica	l 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	10/5/2021, 11:26

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)
Monitoring Well Identification - Sample Number: MW13 - 1	Date: 10/4/2021
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, 61°F

Groundwater Measurements and Purge Data

Time of Water Level Measurement	9:33	Pump Start Time	9:39		
Static Water Level (+/- 0.01 feet)*	8.23	Purge Rate (mL/minute)	200		
Bottom of Well Casing (+/- 0.01 feet)*	15.19	Time to Purge Well (hours:minutes)			
Pump Intake Elevation (+/- 0.01 feet)*	300.30	Purge and Sample Equipment: Dedicated Bladder Pump with			
2" Well Casing Volume (L)	1 130	QED Flow Controller and Nitrogen Gas, Graduated Measuring Bucket and Cup, Multi-Parameter Water Meter, and Electronic			
Actual Volume of Water Purged (mL)	4 000	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	•	DO (mg/L)	Turbidity	рН	Conductivity	Water Level
	(mL)	(°C)		(NTU)		(mS/cm)	(feet)
9:44	1,000	17.13	1.47	21.5	7.05	1.03	8.27
9:47	1,600	17.06	1.22	11.5	7.01	1.04	8.27
9:50	2,200	17.07	0.97	7.4	6.99	1.04	8.27
9:53	2,800	17.09	0.95	6.2	6.99	1.03	8.27
9:56	3,400	17.10	0.90	5.3	6.99	1.03	8.27
9:59	4,000	17.09	0.89	5.0	6.99	1.02	8.27
	+						
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Well Evacuated to Dryness?

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)
9:59	4,000	17.09	0.89	5.0	6.99	1.02	8.27
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	200

Sample Physical	Characteristics	Equipment Info	rmation
Janupie Filysica	Ciiai actei istics	Equipment into	IIIauoii

No

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	10/4/2021, 6:09

Facility Name: OPPD Nebraska City Station 1	Sampler Name(s): Kyle K. Uhing (29481)	
Monitoring Well Identification - Sample Number: MW14 - 3	Date: 10/4/2021	
Wellhead Inspection (Condition): Compliant	Weather Conditions: Clear, Sunny, 73°F	

Groundwater Measurements and Purge Data

Time of Water Level Measurement	11:48	Pump Start Time	11:39
Static Water Level (+/- 0.01 feet)*	11.89	Purge Rate (mL/minute)	200
Bottom of Well Casing (+/- 0.01 feet)*	Not Measured	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)	Not Measured	QED Flow Controller and Nitrogen Gas, Graduate Bucket and Cup, Multi-Parameter Water Meter, a	d Measuring
Actual Volume of Water Purged (mL)	2 000	Water Level Indicator	ina Licetionic

^{*}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)
11:44	1,000	15.90	1.17	24.3	7.08	1.33	12.50
11:47	1,600	15.87	0.99	16.5	7.08	1.33	12.64
11:50	2,200	15.94	0.96	12.6	7.07	1.33	12.78
11:53	2,800	16.02	0.90	19.1	7.07	1.33	12.89

Well Evacuated to Dryness?

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)
11:53	2,800	16.02	0.90	19.1	7.07	1.33	12.89
Duplicate?	No	Preservation?	Cool on Ice, H	NO ₃ for Metals	Pump Rate	(mL/minute)	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	10/4/2021, 6:09

Date:	10/4/2021
Time:	6:09

Person Calibrating Instrument: Kyle K. Uhing

Instrument Type	Instrument Brand	Instrument Model	Instrument Serial Number
Multi-Parameter Water	Horiba	U-5000/U-52	KE3AGWPR/NTKDC76Y
Meter	Horiba	0-3000/0-32	RESAGWFN/NTRDC/01

Parameter:	Reading	Units
pH 4	4.00	NA
Conductivity	4.46	μS/cm
Turbidity	0.0	NTU
DO	10.09	mg/L

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

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Date:	10/5/2021
Time:	11:26

Person Calibrating Instrument: Kyle K. Uhing

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

Parameter:	Reading	Units
pH 4	4.00	NA
Conductivity	4.28	μS/cm
Turbidity	0.0	NTU
DO	10.62	mg/L

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

•

Date:	10/6/2021
Time:	8:28

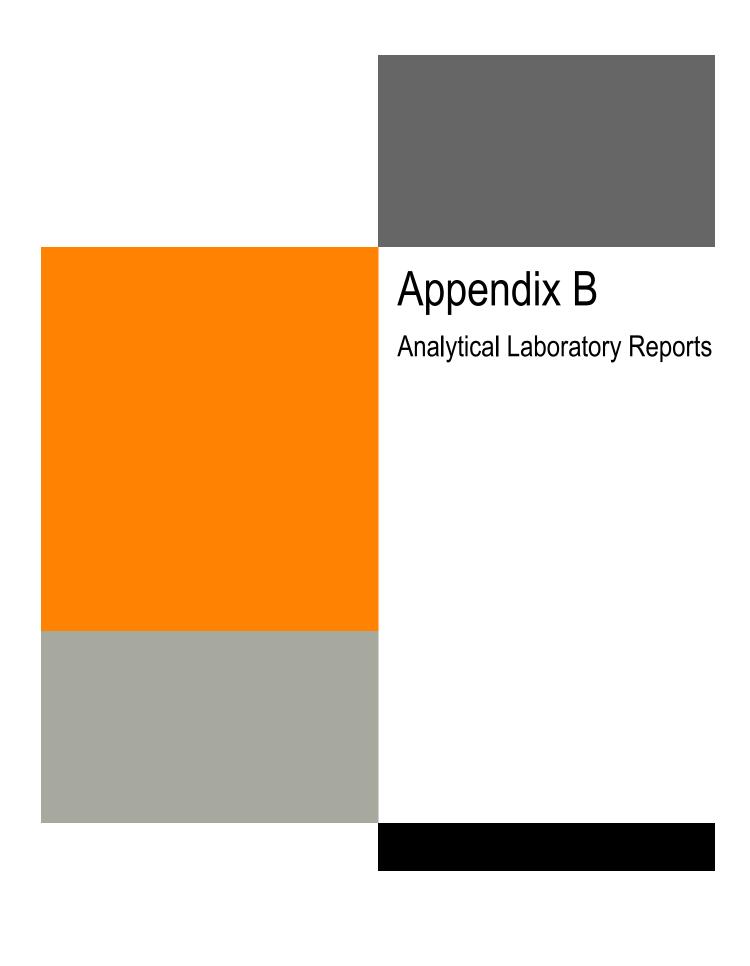
Person Calibrating Instrument: Kyle K. Uhing

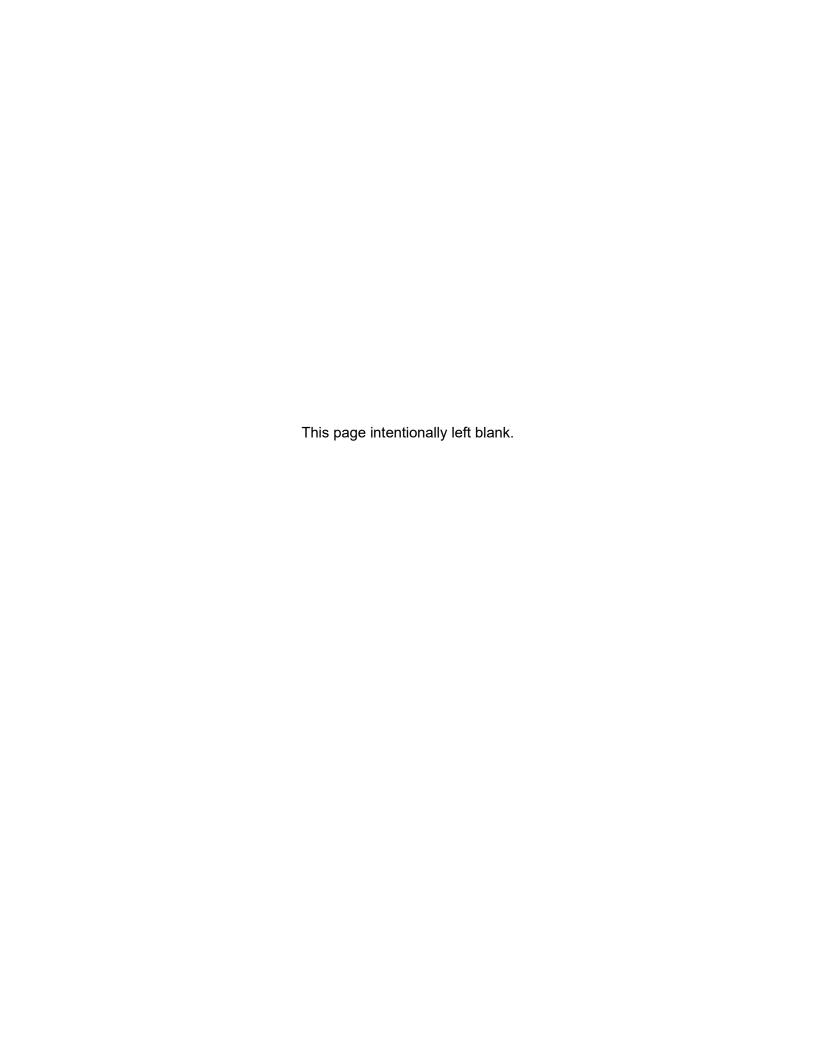
Instrument Type	Instrument Brand	Instrument Model	Instrument Serial Number
Multiparameter Water	Horiba	U-5000/U-52	KE3AGWPR/NTKDC76Y
Meter	Horiba		

Parameter:	Reading	Units
pH 4	4.00	NA
Conductivity	4.54	μS/cm
Turbidity	0.0	NTU
DO	9.48	mg/L

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

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-204259-1

Client Project/Site: Nebraska City Unit 1 and 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: 4/27/2021 9:56:40 AM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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 Unit 1 and 2	CCR/Landfill	

Laboratory Job ID: 310-204259-1

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Detection Summary	5
Client Sample Results	6
	8
QC Sample Results	9
QC Association	11
Chronicle	12
Certification Summary	13
Method Summary	14
Chain of Custody	15
Receipt Checklists	18

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Job ID: 310-204259-1

Job ID: 310-204259-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-204259-1

Comments

No additional comments.

Receipt

The samples were received on 4/14/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 0.7° 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 Unit 1 and 2 CCR/Landfill Job ID: 310-204259-1

Lab Sample ID Client Sample ID Received 310-204259-1 NC2MW4 Water 04/12/21 10:08 04/14/21 09:30 310-204259-2 MW13 Water 04/12/21 09:24 04/14/21 09:30

Detection Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Job ID

):	310-204259-1	

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	4.93	j	5.00	2.15	mg/L	5	9056A	Total/NA
Fluoride	0.311	J	0.500	0.275	mg/L	5	9056A	Total/NA
Sulfate	61.6		5.00	2.45	mg/L	5	9056A	Total/NA
Arsenic	0.00113	J	0.00200	0.000750	mg/L	1	6020A	Total/NA
Barium	0.268		0.00200	0.000300	mg/L	1	6020A	Total/NA
Boron	0.0838	J	0.100	0.0580	mg/L	1	6020A	Total/NA
Cadmium	0.0000580	J	0.000100	0,0000510	mg/L	1	6020A	Total/NA
Calcium	103		0.500	0.190	mg/L	1	6020A	Total/NA
Cobalt	0.000256	J	0.000500	0.0000910	mg/L	1	6020A	Total/NA
Lead	0.000833		0.000500	0.000210	mg/L	1	6020A	Total/NA
Lithium	0.0230		0.0100	0.00250	mg/L	1	6020A	Total/NA
Molybdenum	0.0112		0.00200	0.00130	mg/L	1	6020A	Total/NA
Selenium	0.0111		0.00500	0.000960	mg/L	1	6020A	Total/NA
Total Dissolved Solids	448		30.0	26.0	mg/L	1	SM 2540C	Total/NA

lient Sample ID: MW13 Lab Sample ID: 310-20425									310-204259-2	
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type	
Chloride	5.50		5.00	2.15	mg/L	5		9056A	Total/NA	

Analyte	Result	Qualifier	KL	MDL	Unit	Dil Fac	U	Method	Prep Type
Chloride	5.50		5.00	2.15	mg/L	5		9056A	Total/NA
Fluoride	0,441	J	0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	101		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.00487		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.0815		0.00200	0.000300	mg/L	1		6020A	Total/NA
Boron	0.0653	J	0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	66.9		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000990		0.000500	0.0000910	mg/L	1		6020A	Total/NA
Lead	0.000353	J	0.000500	0.000210	mg/L	1		6020A	Total/NA
Lithium	0.0199		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00443		0.00200	0.00130	mg/L	1		6020A	Total/NA
Selenium	0.00194	J	0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	350		30.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample Results

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

Job ID: 310-204259-1

Client Sample ID: NC2MW4 Date Collected: 04/12/21 10:08

Lab Sample ID: 310-204259-1

Date Received: 04/14/21 09:30

Method: 7470A - Mercury (CVAA)

Analyte

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.93	J	5.00	2.15	mg/L	1000		04/19/21 21:43	5
Fluoride	0.311	J	0.500	0.275	mg/L			04/19/21 21:43	5
Sulfate	61.6		5.00	2.45	mg/L			04/19/21 21:43	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110	400000000000000000000000000000000000000	0.00200	0.00110	mg/L	-	04/16/21 08:45	04/20/21 21:11	1
Arsenic	0.00113	J	0.00200	0.000750	mg/L		04/16/21 08:45	04/20/21 21:11	1
Barium	0.268		0.00200	0.000300	mg/L		04/16/21 08:45	04/20/21 21:11	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/16/21 08:45	04/20/21 21:11	1
Boron	0.0838	J	0.100	0.0580	mg/L		04/16/21 08:45	04/20/21 21:11	1
Cadmium	0.0000580	J	0.000100	0.0000510	mg/L		04/16/21 08:45	04/20/21 21:11	1
Calcium	103		0.500	0.190	mg/L		04/16/21 08:45	04/20/21 21:11	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/16/21 08:45	04/20/21 21:11	31
Cobalt	0.000256	J	0.000500	0.0000910	mg/L		04/16/21 08:45	04/20/21 21:11	4
Lead	0.000833		0.000500	0.000210	mg/L		04/16/21 08:45	04/20/21 21:11	1
Lithium	0.0230		0.0100	0.00250	mg/L		04/16/21 08:45	04/20/21 21:11	1
Molybdenum	0.0112		0.00200	0.00130	mg/L		04/16/21 08:45	04/20/21 21:11	
Selenium	0.0111		0.00500	0.000960	mg/L		04/16/21 08:45	04/20/21 21:11	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/16/21 08:45	04/20/21 21:11	1

	Mercury	<0.000150		0.000200	0.000150	mg/L		04/20/21 14:04	04/21/21 12:41	1
Г	General Chemistry									
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1	Total Dissolved Solids	448		30.0	26.0	mg/L			04/15/21 13:32	1

MDL Unit

Prepared

Result Qualifier

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls Eurofins TestAmerica, Cedar Falls

Page 5 of 18 4/27/2021 Page 6 of 18 4/27/2021

Client	Sample	Results
CHEIL	Sample	

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

Lab Sample ID: 310-204259-2

Client Sample ID: MW13 Date Collected: 04/12/21 09:24 Date Received: 04/14/21 09:30

Method: 7470A - Mercury (CVAA)

Analyte

Mercury

General Chemistry Analyte

Total Dissolved Solids

Matrix: Water

Job ID: 310-204259-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.50		5.00	2.15	mg/L	1332	581	04/19/21 21:59	5
Fluoride	0.441	J	0.500	0.275	mg/L			04/19/21 21:59	5
Sulfate	101		5.00	2.45	mg/L			04/19/21 21:59	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		04/16/21 08:45	04/20/21 21:14	1
Arsenic	0.00487		0.00200	0.000750	mg/L		04/16/21 08:45	04/20/21 21:14	1
Barium	0.0815		0.00200	0.000300	mg/L		04/16/21 08:45	04/20/21 21:14	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/16/21 08:45	04/20/21 21:14	1

Analyte	Result	Qualifier	NL.	MIDL	Office	Frepared	Analyzed	Direc
Antimony	<0.00110	ALCOHOLD	0.00200	0.00110	mg/L	04/16/21 08:45	04/20/21 21:14	1
Arsenic	0.00487		0.00200	0.000750	mg/L	04/16/21 08:45	04/20/21 21:14	1
Barium	0.0815		0.00200	0.000300	mg/L	04/16/21 08:45	04/20/21 21:14	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L	04/16/21 08:45	04/20/21 21:14	1
Boron	0.0653	J	0.100	0.0580	mg/L	04/16/21 08:45	04/20/21 21:14	3
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L	04/16/21 08:45	04/20/21 21:14	- 1
Calcium	66.9		0.500	0.190	mg/L	04/16/21 08:45	04/20/21 21:14	1
Chromium	< 0.00110		0.00500	0.00110	mg/L	04/16/21 08:45	04/20/21 21:14	- 3
Cobalt	0.000990		0.000500	0.0000910	mg/L	04/16/21 08:45	04/20/21 21:14	1
Lead	0.000353	J	0.000500	0.000210	mg/L	04/16/21 08:45	04/20/21 21:14	1
Lithium	0.0199		0.0100	0.00250	mg/L	04/16/21 08:45	04/20/21 21:14	- 1
Molybdenum	0.00443		0.00200	0.00130	mg/L	04/16/21 08:45	04/20/21 21:14	
Selenium	0.00194	J	0.00500	0.000960	mg/L	04/16/21 08:45	04/20/21 21:14	1
Thallium	< 0.000260		0.00100	0.000260	mg/L	04/16/21 08:45	04/20/21 21:14	1

0.000200

RL

30.0

MDL Unit

MDL Unit

26.0 mg/L

0.000150 mg/L

Prepared

04/20/21 14:04

Analyzed

04/21/21 12:43

Analyzed

04/15/21 13:32

Result Qualifier

Result Qualifier

350

<0.000150

Definitions/Glossary

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

Job ID: 310-204259-1

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

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.
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)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 7 of 18 4/27/2021 Page 8 of 18 4/27/2021

QC	Samp	e R	esults
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Client: Omaha Public Power District	Job ID: 310-204259-1
Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill	
Method: 9056A - Anions, Ion Chromatography	

Lab Sample ID: MB 310-313953/3	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 313953	

Allalysis Batch, 515955		мв							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	< 0.430		1.00	0.430	mg/L			04/19/21 18:36	1
Fluoride	< 0.0550		0.100	0.0550	mg/L			04/19/21 18:36	1
Sulfate	< 0.490		1.00	0.490	mg/L			04/19/21 18:36	1

Lab Sample ID: LCS 310-313953/4 Matrix: Water Analysis Batch: 313953					Client	t Sample	Prep Type	ol Sample : Total/NA
Millian A contract contract of the contract of	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10.0	9.751		mg/L		98	90 - 110	
Fluoride	2.00	2.180		mg/L		109	90 - 110	
Sulfate	10.0	10.47		ma/L		105	90 - 110	

Lab Sample ID: MB 310-312812/1-A	
Lab Sample ID: MR 240 242942/4 A	Client Sample ID: Method Blank
Lab Sample ID: MB 310-312812/1-A	Client Sample ID: Method Blank

Matrix: Water

Molybdenum

Analysis Batch: 313453								Prep Batch:	312812
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		04/16/21 08:45	04/20/21 20:02	1
Arsenic	< 0.000750		0.00200	0.000750	mg/L		04/16/21 08:45	04/20/21 20:02	31
Barium	0.0006360	J	0.00200	0.000300	mg/L		04/16/21 08:45	04/20/21 20:02	31
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/16/21 08:45	04/20/21 20:02	- 1
Boron	< 0.0580		0.100	0.0580	mg/L		04/16/21 08:45	04/20/21 20:02	1
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		04/16/21 08:45	04/20/21 20:02	1
Calcium	<0.190		0.500	0.190	mg/L		04/16/21 08:45	04/20/21 20:02	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/16/21 08:45	04/20/21 20:02	1
Cobalt	< 0.0000910		0.000500	0.0000910	mg/L		04/16/21 08:45	04/20/21 20:02	1
Lead	< 0.000210		0.000500	0.000210	mg/L		04/16/21 08:45	04/20/21 20:02	- 31
Lithium	< 0.00250		0.0100	0.00250	mg/L		04/16/21 08:45	04/20/21 20:02	1

Selenium	<0.000960	0.00500	0.000960	mg/L	04/16/21 08:45	04/20/21 20:02	1
Lab Sample ID: MB 310-3	312812/1-A				Client Sa	mple ID: Method E	Blank
Matrix: Water						Prep Type: Tot	al/NA
Analysis Batch: 313497						Prep Batch: 31	2812
The state of the s	MR MR						

0.00200

0.00130 mg/L

< 0.00130

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.0006770		0.00100	0.000260	mg/L		04/16/21 08:45	04/21/21 14:27	1
The second state of the se									

Lab Sample ID: LCS 310-312812/2-A Matrix: Water Analysis Batch: 313453					Client	Sample		ntrol Sample pe: Total/NA atch: 312812
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.200	0.1946		mg/L		97	80 - 120	
Arsenic	0.200	0.1978		mg/L		99	80 - 120	
Barium	0.100	0.1049		mg/L		105	80 - 120	
Beryllium	0.100	0.08988		mg/L		90	80 - 120	

Eurofins TestAmerica, Cedar Falls

04/16/21 08:45 04/20/21 20:02

QC Sample Results

Client: Omaha Public Power District Job ID: 310-204259-1 Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill

Method:	6020A -	Metals	(ICP/MS)	(Continued)
-				The same of the sa

Lab Sample ID: LCS 310-312812/2-A Matrix: Water					Client	Sample	Prep Type: Total/NA
Analysis Batch: 313453							Prep Batch: 312812
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Boron	0.200	0.2067		mg/L		103	80 - 120
Cadmium	0.100	0.09903		mg/L		99	80 - 120
Calcium	2.00	1.659		mg/L		83	80 - 120
Chromium	0.100	0.09726		mg/L		97	80 - 120
Cobalt	0.100	0.09749		mg/L		97	80 - 120
Lead	0.200	0.1937		mg/L		97	80 - 120
Lithium	0.200	0.1753		mg/L		88	80 - 120
Molybdenum	0.200	0.1925		mg/L		96	80 - 120
Selenium	0.400	0.3976		mg/L		99	80 - 120
Lab Sample ID: LCS 310-312812/2-A					Client	Sample	ID: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 313497							Prep Batch: 312812

Method: 7470A - Mercury (CVAA)

Analyte

Thallium

8

Prep Type: Total/NA

Lab Sample ID: MB 310-313366/	Lab Sample ID: MB 310-313366/1-A						Client Sample ID: Method Blank				
Matrix: Water	Prep Type: Total/						Total/NA				
Analysis Batch: 313498								Prep Batch:	313366		
	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Mercury	< 0.000150		0.000200	0.000150	mg/L		04/20/21 14:04	04/21/21 11:50	1		

Added

0.200

LCS LCS

0.2039

Result Qualifier

mg/L

Lab Sample ID: LCS 310-313366/2-A Matrix: Water Analysis Batch: 313498					Client	Sample	Prep	ontrol Sample Type: Total/NA Batch: 313366
100	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	0.00167	0.001752		mg/L		105	80 - 120	

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

Lab Sample ID: MB 310-312885/1

Matrix: Water

Analysis Batch: 312885									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26.0	= = = = = = = = = = = = = = = = = = = =	30.0	26.0	mg/L	00.5050		04/15/21 13:32	1
Lab Sample ID: LCS 310-312885/2						C	ient Sample	ID: Lab Control	Sample
Matrix: Water				O.	ient Gampie	Prep Type:	O 201 698		
Analysis Batch: 312885								U.O. Raid Resail	

Spike LCS LCS %Rec. Analyte Added Result Qualifier Total Dissolved Solids

Eurofins TestAmerica, Cedar Falls

Client Sample ID: Method Blank

Prep Type: Total/NA

Limits

80 - 120

%Rec

102

Page 9 of 18 4/27/2021 Page 10 of 18 4/27/2021

QC Association	Summary
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Client:	Omal	na Public	Power	District	
Project	/Site:	Nehraska	City I	Init 1 and 2	CCR/I andfill

Job ID: 310-204259-1

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

Job ID: 310-204259-1

Client Sample ID: NC2MW4 Date Collected: 04/12/21 10:08

Lab Sample ID: 310-204259-1 Matrix: Water

Date Received: 04/14/21 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	82	5	313953	04/19/21 21:43	SAD	TAL CF
Total/NA	Prep	3010A			312812	04/16/21 08:45	CJT	TAL CF
Total/NA	Analysis	6020A		1	313453	04/20/21 21:11	SAD	TAL CF
Total/NA	Prep	7470A			313366	04/20/21 14:04	HED	TAL CF
Total/NA	Analysis	7470A		1	313498	04/21/21 12:41	HED	TAL CF
Total/NA	Analysis	SM 2540C		1:	312885	04/15/21 13:32	SAS	TAL CF

Lab Chronicle

Client Sample ID: MW13 Date Collected: 04/12/21 09:24 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204259-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	313953	04/19/21 21:59	SAD	TAL CF
Total/NA	Prep	3010A			312812	04/16/21 08:45	CJT	TAL CF
Total/NA	Analysis	6020A		1	313453	04/20/21 21:14	SAD	TAL CF
Total/NA	Prep	7470A			313366	04/20/21 14:04	HED	TAL CF
Total/NA	Analysis	7470A		t:	313498	04/21/21 12:43	HED	TAL CF
Total/NA	Analysis	SM 2540C		1	312885	04/15/21 13:32	SAS	TAL CF

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

Project/Site:	Nebraska City	Unit 1 and 2	CCR/Landfill	

HPLC/IC

Analysis Batch: 313953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204259-1	NC2MW4	Total/NA	Water	9056A	
310-204259-2	MW13	Total/NA	Water	9056A	
MB 310-313953/3	Method Blank	Total/NA	Water	9056A	
LCS 310-313953/4	Lab Control Sample	Total/NA	Water	9056A	

Prep Batch: 312812

Metals

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204259-1	NC2MW4	Total/NA	Water	3010A	- 3.0
310-204259-2	MW13	Total/NA	Water	3010A	
MB 310-312812/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-312812/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 313366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204259-1	NC2MW4	Total/NA	Water	7470A	
310-204259-2	MW13	Total/NA	Water	7470A	
MB 310-313366/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-313366/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 313453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204259-1	NC2MW4	Total/NA	Water	6020A	312812
310-204259-2	MW13	Total/NA	Water	6020A	312812
MB 310-312812/1-A	Method Blank	Total/NA	Water	6020A	312812
LCS 310-312812/2-A	Lab Control Sample	Total/NA	Water	6020A	312812

Analysis Batch: 313497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-312812/1-A	Method Blank	Total/NA	Water	6020A	312812
LCS 310-312812/2-A	Lab Control Sample	Total/NA	Water	6020A	312812

Analysis Batch: 313498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204259-1	NC2MW4	Total/NA	Water	7470A	313366
310-204259-2	MW13	Total/NA	Water	7470A	313366
MB 310-313366/1-A	Method Blank	Total/NA	Water	7470A	313366
LCS 310-313366/2-A	Lab Control Sample	Total/NA	Water	7470A	313366

General Chemistry

Analysis Batch: 312885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204259-1	NC2MW4	Total/NA	Water	SM 2540C	15/2
310-204259-2	MW13	Total/NA	Water	SM 2540C	
MB 310-312885/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-312885/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 11 of 18 4/27/2021 Page 12 of 18 4/27/2021

Accreditation/Certification Summary

Client: Omaha Public Power District

Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill

Job ID: 310-204259-1

Laboratory: Eurofins TestAmerica, 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)	09-29-21
Georgia	State	IA100001 (OR)	09-29-21
Illinois	NELAP	200024	11-29-21
lowa	State	007	12-01-21
Kansas	NELAP	E-10341	01-31-22
Minnesota	NELAP	019-999-319	12-31-21
Minnesota (Petrofund)	State	3349	08-22-21
North Dakota	State	R-186	09-29-21
Oregon	NELAP	IA100001	09-29-21
USDA	US Federal Programs	P330-19-00003	01-02-22

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Job ID: 310-204259-1

Laboratory

TAL CF

TAL CF

TAL CF

TAL CF

TAL CF

TAL CF

SW846

SW846

 Method
 Method Description
 Protocol

 9056A
 Anions, Ion Chromatography
 SW846

 6020A
 Metals (ICP/MS)
 SW846

 7470A
 Mercury (CVAA)
 SW846

 SM 2540C
 Solids, Total Dissolved (TDS)
 SM

Protocol References:

7470A

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

Preparation, Total Metals

Preparation, Mercury

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

Laboratory References:

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



11

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 13 of 18 4/27/2021 Page 14 of 18 4/27/2021

neurofins

Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client information		N 1739	egara arcere	TO STATE OF THE	4. 人名阿尔克克
Client: UMaha	Public-	Howe	V		
City/State: CITY DWL	M	STATE	Project: 10	brasca Ci	Ly
Receip information	STATE PLANE	MIZI AW	A STATE OF THE STA		
Date/Time Received:	4/13/21	TO 93	Received By:	pm	
Delivery Type: Dups	FedEx	950 (FedEx Ground	US Mail	☐ Spee-Dee
☐ Lab Co	ourier Lab Fiel	ld Services	Client Drop-off	Other:	
Condition of Cooler/Contain	ners	PEN HAR	的被外面行动。	A SECTION OF	ELENWITES
Sample(s) received in Coo	~ /	☐ No	If yes: Cooler ID:		
Multiple Coolers?	Yes	□No	#yes: Cooler#	2 of 5	
Cooler Custody Seals Pres	sent? Yes	□ No	If yes: Cooler cu	stody seals intact? [ZYes □ No
Sample Custody Seals Pre	esent? Yes	No	If yes: Sample co	ustody seals intact?[Yes No
Trip Blank Present?	Yes	No	If yes: Which VO	A samples are in co	oler? 1
Temperature Record:	CAN - The Grant St.	3000	ing side way	er er ei tag defte	
Coolant: Wet ice	☐ Blue ice	☐ Dry ice	Other:	UN	ONE
Thermometer ID:	P		Correction Factor).
• Temp Blank Temperature	If no temp blank, or	temp blank ter			alner Temperature
Uncorrected Temp (°C):	0.	6	Corrected Temp	0.	1 / To
Sample Container Temper	container 1	The arest		TAINER 2	
Container(s) used:	CONTAINED			acon successful	
Uncorrected Temp (°C):				(
Corrected Temp (°C):					
Exceptions Noted	green with the said	475	83.196-2000 F. 100	And the Transfer of	75001 11
If temperature exceeds				mpling? Yes	☐ No
a) If yes: Is there evid	dence that the chi	illing proces	s began?	☐ Yes	□ No
2) If temperature is <0°C,	are there obvious	e elans that	the integrity of sam	ple containers is co	mpromised?
(e.g., bulging septa, br	oken/cracked bot	tles, frozen	solid?)	Yes	□No
Note: If yes, contact PM	before proceeding.	. If no, proce	ed with login	The second second	4 4
Additional Comments	Part -		mu)11	10000	
לושוש			111019		
Pro 1	-				
NCIMU	NY				

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

religional fields				Manager
Client: UMana 1	ublic fow	e y	1 0	
City/State: CITY DWWW	a state	Project:	raska Ci	Ly
BORELLA TIGHTERON			40 4 4 4	
Date/Time Received:	43/21 199	Received By:	(MM)	
Delivery Type: Dups	FedEx	☐ FedEx Ground	US Mail	Spee-Dee
☐ Lab Cour	rier Lab Field Service	s Client Drop-off	Other:	
Condition of Cooler/Container			STATE SHAPE AND ADDRESS OF	国际中国企业的
Sample(s) received in Cooler	- /	If yes: Cooler ID:	_	
Multiple Coolers?	Yes No	If yes: Cooler # _5	of <u>5</u>	,
Cooler Custody Seals Preser	nt? Yes No	If yes: Cooler custo	ody seals intact?	Yes No
Sample Custody Seals Prese	ent? Yes No	If yes: Sample cust	tody seals intact?[☐ Yes ☐ No
Trip Blank Present?	☐ Yes ØNo	If yes: Which VOA	samples are in co	oler? ↓
Coolant: DeWet ice Thermometer ID:	Blue ice Dry ic	Correction Factor (*		ainer Temperature
• TempiBlank Temperature ≫i Uncorrected Temp (°C):	~ D. I	Corrected Temp (°C	C): +C	0.0
Sample Container Temperatu	Maria Cara Cara Cara Cara Cara Cara Cara	SOUTH AND STREET	THE CHARLES	NORTHEADERS OF
Container(s) used:	NTAINER 1	CONTA	INER 2	
Uncorrected Temp (°C):			7.	
Corrected Temp (°C):		was now a service of the service of		
Exceptions Noted	10 ALL # Par # 10 M TO 10 LEVE	是一种人们的人们的	的形式活动的模型特别	的工程的程序可以由
 if temperature exceeds cri a) If yes: Is there evider 	iteria, was sample(s) rec nce that the chilling proce	eived same day of sam ess began?	pling? Yes	□ No
2) If temperature is <0°C, ar (e.g., bulging septa, broke	e there obvious signs the en/cracked bottles, froze	at the integrity of sample n solid?)	e containers is cor	npromised?
Note: If yes, contact PM be	fore proceeding. If no, proc	eed with login	selection by Helyle Vi	same it with the
Additional Comments		N// Ino. 20	*	N. S.
pc	anw4	MINIMS		
NC.	2 Mars 160			
	1 4 4 1 4			

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

TestAmerica Cedar Falls 704 Enlerprae Drive Cedar Falls. IA 50813	o	hain c	Chain of Custody Record	ody R	ecor	ъ	TestAr	nerica O 268	TestAmerica Omaha SC 268	Test,	stAmeric	TestAmerica
Phone (319) 277-2401 Fax (319) 277-2425	Sampler			Lab PM	×			Camer	Camer Tracking No(s):	COC No.		
Client Information	Kyle K. Uhing			Hay	Hayes, Shawn M	M		T				
Cient Contact Kyle Uhling	(531) 226-2515			shav	m.hayes(Qtestam	e-Mail. shawn.hayes@testamencainc.com	-				
Company. Ownsha Public Prower District							Analys	Analysis Requested	pe	Job #		
Address Addres	Due Date Requested:									Preserv	3	TO THE PARTY OF TH
Ornaha	TAT Requested (days)	4								B - NaOH C - Zn Acetate		N - Norse N - Norse O - Asha O2
Sans, Zp. NE 68102-3247						_	***	_		D-Nimo E-NaHS		2045 0500
Phone (531) 226-2515	PO#						illus ,a	_		G - Amchior H - Ascorbic	32	SOH P Dodecalydinia
Very Jane were	WOR				(0)	_	jnosjqi		-			SHORE
Project Name: Nebraska City Station Unit 1 and 2 CCR / Landfill	TestAmerica Project # 31007559				10 06		l ,abinol					(Apoedy) and
Side: Nebraska City Station Unit 1 and 2	880We-				N) OS	_	40 4 9			00 00		
Oceanic Linealities aline	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (www. seeds, consists,	besettit bleit Michierani	9318 RAZZE, 932 Total 6020A CCI	S640C TDS, 905			redmuM latoT	Special Instructions/Note:	Sons/Note:
odinista politicamon	X	X	1 99	Preservation Code:	X	0	2				\mathbb{N}	V
NC28/NV4	CON	10:08	9	W	z	×	×			4 CCR Ap	CCR Appendix III and IV Constituents	Constituents
MW13		res	9	*	z	×	×			4 CCR Ap	CCR Appendix III and IV Consillusints	Constituents
Possible Hazard Identification Non-Hazard — Flammable — Skin Imlant — Deliverable Requested: I. III, IV, Other (specify)	☐ Poison B ☐ Unknown		Radickogical		Spe	AReturn Gial Instr	Sample Disposal (A fee may be ass Return To Client Disp Special Instructions/QC Requirements	nay be assessed if sam Disposal By Lab quirements:	sed if samples a a By Lab	Sample Disposal (A fise may be assessed if samples are retained longer than 1 month) Return To Client Disposal by Lab Archive For Month Special Instructions/OC Requirements.	er than 1 mon	Months
Empty Kit Relinquished by:		Date:			Time:		-		Method of Shipment.			
Reinspainted by A. P. Reinspainted by A. Reinspaint	Desertions (4)175/26231	1800	1700	200	10	Received	the the	#10	Deterim Deterim	2021	0/14	Content
Refrequence (M. Constructor Speak Interest Const	DateTime	1		Company		Reference Jr.	2	Me Male Land	W. Date/Trans	114/51	138	AL Timento
A Yes A No					1							

Page 17 of 18 4/27/2021

Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-204259-1 SDG Number:

List Source: Eurofins TestAmerica, Cedar Falls

Login Number: 204259 List Number: 1

Creator: Homolar, Dana J

orodon montal para e		
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	

Eurofins TestAmerica, Cedar Falls

Page 18 of 18

4/27/2021

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7











Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-204259-2

Client Project/Site: Nebraska City Unit 1 and 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: 5/13/2021 4:04:04 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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 Unit 1 and 2	CCR/Landfi

Laboratory Job ID: 310-204259-2

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	7
QC Sample Results	8
QC Association	10
Chronicle	11
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	17
Tracer Carrier Summary	19

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Job ID: 310-204259-2

Job ID: 310-204259-2

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-204259-2

Comments

No additional comments.

Receipt

The samples were received on 4/14/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 0.7° C.

RAD

Method PrecSep 0: Radium 228 Prep batch 160-506115:

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW4 (310-204259-1) and MW13 (310-204259-2).

Method PrecSep_0: Radium 228 Prep Batch 160-506115:

During the in-growth process, the following samples needed to be filtered due to sediment present in the sample: NC2MW4 (310-204259-1) and MW13 (310-204259-2). This is an indicator of matrix interference.

Method PrecSep-21: Radium 226 Prep Batch 160-506114:

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW4 (310-204259-1) and MW13 (310-204259-2).

Method PrecSep-21: Radium 226 Prep Batch 160-506114:

During the in-growth process, the following samples needed to be filtered due to sediment present in the sample: NC2MW4 (310-204259-1) and MW13 (310-204259-2). This is an indicator of matrix interference.

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 and 2 CCR/Landfill Job ID: 310-204259-2

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Asset ID

 310-204259-1
 NC2MW4
 Water
 04/12/21 10:08
 04/14/21 09:30

 310-204259-2
 MW13
 Water
 04/12/21 09:24
 04/14/21 09:30

8

11

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Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls 5/13/2021

Page 3 of 19

Page 4 of 19

5/13/2021

lient: Omaha Public F	Power Dietrice		Clie	nt Samp	ie Kest	uts			Job ID: 310-2	04250.2
roject/Site: Nebraska			_andfill						J00 ID. 310-2	04233-2
Client Sample ID:	NC2MW4							Lab Samp	le ID: 310-20	4259-1
ate Collected: 04/12/	/21 10:08								Matri	x: Water
ate Received: 04/14/	21 09:30									
Method: 9315 - Radi	um-226 (GFF	C)								
	1	100	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.279	8.2	0.142	0.144	1.00	0.165	pCi/L	04/19/21 11:16	05/11/21 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier	85.8		40 - 110					04/19/21 11:16	05/11/21 09:58	1
en e										
Method: 9320 - Radi	um-228 (GFF	PC)	828883	12.00						
			Count	Total						
\$20000	9255990		Uncert.	Uncert.	200	71,000,000		20000000	20100000000	2002
Analyte	0.000	Qualifier	(2 0+/-) 0.374	(2 0+/-) 0.380	1.00	MDC 0.554	Unit pCi/L	Prepared 04/19/21 11:53	Analyzed 05/06/21 14:24	Dil Fac
Radium-228	0.705		0.374	0.380	1.00	0.554	PCIL	04/19/21 11:53	05/06/21 14:24	37
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					04/19/21 11:53	05/06/21 14:24	1
Y Carrier	86.0		40 - 110					04/19/21 11:53	05/06/21 14:24	1
The same of the same of the same of		- Contraction of the Contraction	erregion in company	animates						
Method: Ra226_Ra2	28 - Combine	ed Radium-								
			Count	Total						
1270121-0-01	12400000	0.270003023450	Uncert.	Uncert.	200	17202707	012201203	1200 CO 000 CO	12/09/2005/05/2017	2222200
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL		Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.984		0.400	0.406	5.00	0.554	pCl/L		05/11/21 23:07	1

Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Client Sample ID: MW13 Lab Sample ID: 310-204259-2 Date Collected: 04/12/21 09:24 Matrix: Water Date Received: 04/14/21 09:30 Method: 9315 - Radium-226 (GFPC) Total Uncert. Uncert. (20+/-) MDC Unit Dil Fac Result Qualifier (20+/-) Prepared Analyzed 0.00130 U 0.0821 0.0821 1.00 0.173 pCi/L 04/19/21 11:16 05/11/21 09:59

MDC Unit

0.600 pCi/L

Job ID: 310-204259-2

Analyzed

Analyzed

05/11/21 23:07

04/19/21 11:16 05/11/21 09:59

Prepared

DII Fac

Dil Fac

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.428	U	0.375	0.377	1.00	0.600	pCi/L	04/19/21 11:53	05/06/21 14:24	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.0		40 - 110					04/19/21 11:53	05/06/21 14:24	- 1
Y Carrier	86.0		40 - 110					04/19/21 11:53	05/06/21 14:24	- 11

Uncert.

(20+/-)

0.386

RL

5.00

Client Sample Results

Eurofins TestAmerica, Cedar Falls Eurofins TestAmerica, Cedar Falls

Page 5 of 19 5/13/2021 Page 6 of 19 5/13/2021

Client: Omaha Public Power District

%Yield Qualifier

Result Qualifier

0.429 U

83.0

Limits

40 - 110

Uncert.

(20+/-)

0.384

Analyte

Carrier

Ba Carrier

Analyte

+ 228

Combined Radium 226

Radium-226

Definitions/Glossary

Deministration	
Client: Omaha Public Power District	Job ID: 310-204259-2
Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill	
The state of the s	

Qualifiers Rad

Nau				
Qualifier	Qualifier Description			
Ü	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	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
2.41	Mariana Land (Diada)

ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting

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) 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: Omana Public Power District	
Project/Site: Nebraska City Unit 1 and 2	CCR/Landfill

0.5137

Method: 9315 - Radium-226 (GFPC)

ab Sample ID:	MB 160-506114/23-A
latrix: Water	

Analysi

Analyte

Radium-226

is Batch: 509146						
			Count	Total		
	MB	MB	Uncert.	Uncert.		
	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC

	МВ	мв			
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed
Ba Carrier	87.0		40 - 110	04/19/21 11:16	05/11/21 17:27

Unit

0.137 pCi/L

Prepared

04/19/21 11:16 05/11/21 17:27

Client Sample ID: Lab Control Sample Dup

Limits

Prep Type: Total/NA

Prep Batch: 506114

0.14

RER Limit

The state of the s										
Lab Sample ID: LCS 1	60-506114/1-A						Clien	t Sample I	D: Lab Contro	I Sample
Matrix: Water									Prep Type:	Total/NA
Analysis Batch: 5091	45								Prep Batcl	h: 506114
555-341-4595504-659-459-344-34-34-45-45-45-45-45-45-45-45-45-45-45-45-45				Total						
	Spike	LCS	LCS	Uncert.					%Rec.	
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	
Padium-226	11.3	11.48		1.23	1.00	0.141	nCi/I	101	75 125	

	LCS	LUS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	80.0		40 - 110

Lab Sar	nple ID: LCSD 160-506114/2-A
Matrix:	Water
Analysi	s Batch: 509146

Analysis Batch: 509146							
				Total			
	Spike	LCSD	LCSD	Uncert.			
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit
Radium-226	11.3	11.13		1.20	1.00	0.137	pCi/L

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	84.8		40 - 110

Mathadi 0220	Padium 220	(CEDC)
Method: 9320	- Radium-228	IGFPLI

Lab Sample ID: MB 160-	506115/2	23-A						Client Sa	mple ID: Metho	d Blank
Matrix: Water									Prep Type: 7	Total/NA
Analysis Batch: 508608									Prep Batch:	506115
			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1570	U	0.260	0.261	1.00	0.439	pCi/L	04/19/21 11:53	05/06/21 14:35	1
	мв	МВ								
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		40 - 110					04/19/21 11:53	05/06/21 14:35	1
Y Carrier	90.8		40 - 110					04/19/21 11:53	05/06/21 14:35	1

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Job ID: 310-204259-2

Prep Batch: 506114

Dil Fac

Dil Fac

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

Analyzed

Page 7 of 19 5/13/2021 Page 8 of 19 5/13/2021

				Q	C Sam	ple Resu	lts						
lient: Omaha roject/Site: Ne			2 CCR/Land	afill							Job ID: 3	310-204	259-2
Method: 932	0 - Radiu	m-228 (G	FPC) (Con	tinued)	0.)								
Lab Sample I Matrix: Water Analysis Bat	r		Spike	LCS	LCS	Total Uncert.			Clien	t Sample I	Prep T		tal/NA
Analyte			Added	Result	855Tes	(2σ+/-)	RL	MDC	Unit	%Rec	Limits		
Radium-228	7	7 - 12	7.23	7.498	don.	0.959	1.00	0.480	-	104	75 - 125		
Carrier		LCS Qualifier	Limits										
Ba Carrier	80.0	Secumen	40 - 110										
Y Carrier	90.5		40 - 110										
Lab Sample I	ID: LCSD 1	60-506115/2	-A					CI	ent San	nple ID: La	ab Control	Sampl	e Dup
Matrix: Water Analysis Bat	200					Total					Prep B	ype: To latch: 5	
			Spike	LCSD	LCSD	Uncert.					%Rec.		RER
Analyte			Added	Result		(20+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
Radium-228			7.23	7.543		0.952	1.00	0.441	pCi/L	104	75 - 125	0.02	1
	LCSD	LCSD											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	84.8		40 - 110										
Y Carrier	88.6		40 - 110										

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Job ID: 310-204259-2

Rad

rep B	atch	: 50	6114	
-------	------	------	------	--

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bat
310-204259-1	NC2MW4	Total/NA	Water	PrecSep-21	
310-204259-2	MW13	Total/NA	Water	PrecSep-21	
MB 160-506114/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-506114/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-506114/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 506115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Ba
310-204259-1	NC2MW4	Total/NA	Water	PrecSep_0	
310-204259-2	MW13	Total/NA	Water	PrecSep_0	
MB 160-506115/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-506115/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-506115/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

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Page 9 of 19 5/13/2021 Page 10 of 19 5/13/2021

Lab Chronicle

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

Client Sample ID: NC2MW4 Date Collected: 04/12/21 10:08 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204259-1

Matrix: Water

Job ID: 310-204259-2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	8%	- 100	506114	04/19/21 11:16	RBR	TAL SL
Total/NA	Analysis	9315		1	509146	05/11/21 09:58	FLC	TAL SL
Total/NA	Prep	PrecSep_0			506115	04/19/21 11:53	RBR	TAL SL
Total/NA	Analysis	9320		1	508606	05/06/21 14:24	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509278	05/11/21 23:07	SCB	TAL SL

Client Sample ID: MW13 Date Collected: 04/12/21 09:24 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204259-2

Matrix: Water

Prep Type Method or Analyzed Total/NA Pren PrecSep-21 506114 04/19/21 11:16 RBR TAL SL Total/NA Analysis Total/NA Prep PrecSep_0 TAL SL 506115 04/19/21 11:53 RBR Total/NA Analysis 9320 508606 05/06/21 14:24 ANW TAL SL Total/NA Analysis Ra226_Ra228 509278 05/11/21 23:07 SCB

Laboratory References:

TAL SL = Eurofins TestAmerica, 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 and 2 CCR/Landfill Job ID: 310-204259-2

Laboratory: Eurofins TestAmerica, 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	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
lowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

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5/13/2021

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Page 11 of 19

Page 12 of 19

5/13/2021

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

Method Summary

Client: Omaha Public Power District

Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill

Job ID: 310-204259-2

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 TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

de eurofins

Environment Testing TestAmerica

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client: DMake Pu	blic Powe	7
City/State: CITY DWLLA	STATE	Project: Noblaska City
Recalip Information	LA LANZIAN	
Date/Time Received: DATE	3 21 " 093	Received By:
Delivery Type: Qups	☐ FedEx ☐ Lab Field Services	☐ FedEx Ground ☐ US Mail ☐ Spee-Det ☐ Client Drop-off ☐ Other:
Condition of Cooler/Containers	CHARACTER CONTRACTOR	(1) 10 10 10 10 10 10 10 10 10 10 10 10 10
Sample(s) received in Cooler?	Yes No	If yes: Cooler ID:
Multiple Coolers?	Yes No	Hyes: Cooler# 2 of 5
Cooler Custody Seals Present?	Yes No	If yes: Cooler custody seals intact? Yes No
Sample Custody Seals Present?	☐ Yes No	# yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	Yes No	If yes: Which VOA samples are in cooler? 1
Thermometer ID:	P emp blank, ör tèmp blank ten	Correction Factor (°C): +O . negrature above criteria; proceed to Sample Container Temperature
	emp blank, or temp blank ten	perature above criteria; proceed to Sample Container Temperature
Uncorrected Temp (°C):	0.6	Corrected Temp (°C): 0, 7
· Sample Container Temperature	Secretary of the second	CONTAINER 2
Container(s) used:	INER 1	SOMME
Uncorrected Temp (°C):		1
Corrected Temp (°C):		
Exceptions Noted	are the state of the second	Street, and the state of the street, the street of the
If temperature exceeds criteri a) If yes: Is there evidence	a, was sample(s) recei that the chilling proces	ved same day of sampling? Yes No S began? Yes No
(e.g., bulging septa, broken/o	cracked bottles, trozen	
NOTE: If yes, contact PM before	proceeding. If no, proce	ed with login
MW13		mw14
Pro I		
11/1 haulit		

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Eurofins TestAmerica, Cedar Falls

E

5

7

9

12

1/4

	eu	ro	fir	15
9.0				

Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

School Modulation	ic Howen		. 275 1 2 G H	CHARLES IN
Client: UMAMA TUBI	STATE	1.1.1.	01. 01	
City/State: DWWWA	1 NO	Project: VIVIII	BLA M	М
Is created in contraction	TIMO A Z	D	40 44.0	Acres de la contra de
Date/Time Received:	21 0130	Received By:	(MM)	
	FedEx [FedEx Ground	US Mail	Spee-Dee
Lab Courier L			Other:	
Conclusion of Cooler (Contain as			的	的中华。在特別的一下
Sample(s) received in Cooler?	Yes No	If yes: Cooler ID:		
Multiple Coolers?	Yes No	If yes: Cooler # 5	_of	
Cooler Custody Seals Present?	Yes No	If yes: Cooler custody		12-55
Sample Custody Seals Present?	Yes No	If yes: Sample custod		
Trip Blank Present?	Yes ZWo	If yes: Which VOA sar	mples are in coo	er? ↓
				W-007-W-08-00-
Temperature Records	战争的人产品的企业	以外,为国际中心 的。	电影系统的建筑的	alsal troubles some
Coolant: Wet ice Blue	ice Dry ice	Other:	DNC	NE
Thermometer ID:	>	Correction Factor (°C)		· I FIRE PROPERTY IN SE
* TempiBlank Temperature - If no temp t	olanic or temp blank tem	parature above criteria, proce	ed to Sample Conta	ner-Temperature
Uncorrected Temp (°C):	-D.1	Corrected Temp (°C):	40,	0
Sample Container Temperature	10年7月19年1	建设的基本企业的基本方式		CHEROLES CO.
Container(s) used:	<u>81</u>	CONTAINE	K2	
Uncorrected Temp (°C):			7.	
Corrected Temp (°C):	1000			
Exceptions Noted	经 通过的基础。	图4000年的中国 1975年的	了行为,仍整理当场 的	是一种的全部。17.145
If temperature exceeds criteria, w a) If yes: Is there evidence that	as sample(s) receiv the chilling process	ed same day of samplin began?	g? Yes	□ No
If temperature is <0°C, are there (e.g., bulging septa, broken/crack)	obvious signs that t sed bottles, frozen s	he integrity of sample co olid?)	ontainers is com	promised?
Note: If yes, contact PM before proc	eeding. If no, procee	d with login	Totale Holle Ville	s no-th-law/informer
Additional Comments	語思數學文字學。方式可能	1000 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.4294A47.24472.9.2	- Demo
NCAMU)4	NUMW8		
NC2MUS	16			
NOMI	08			

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falis

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

TestAmerica Cedar Falls 704 Enterprise Drive Cedar Falls, IA 50613	טֿ	Chain of Custody Record	Cust	ody R	ecor	ъ	Test	TestAmerica Omaha SC 268	ca Oma 268	ha SC	211	TestAmerica	erica
Phone (319) 277-2401 Fax (319) 277-2425	a de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición del composición dela co			Me de B		1			Carrier Tracking No(s)	na No(s):	000	COC No.	
Client Information	Kyle K. Uhing			Haye	Hayes, Shawn M	W							
Giert Contact Kole Libino	Phone (531) 226-2515			E-Mai shav	n.hayes(Qtestam	E-Mail: shawn.hayes@testamencainc.com	E			Page		
Company Company Company							Ans	Analysis Requested	nested		Job #:	46	
Address:	Due Date Requested:				E		F				Pre	2	1000
Gity. Omaha	TAT Requested (days):										480	B. NaOH N-9 G-Zn Acetate 0-7	M - Heserve N - Nove 0 - Ashei02
Suna. Zp. NE. 68102-2247							eye				6.00		(4250) (4250)
Phone: (4531) 228-2515	#04						dluë ,a				6 i	38	SP Dodeostytimis
Email: Em	WO E.				(0)		procją			_		J. Di Wates V - 6	CAA
Project Name Nebraska City Station Unit 1 and 2 CCR / Landfill	TestAmerica Project #: 31007559				t no off		l ,abinol						(Append) and
Sale: Nebraska City Station Unit 1 and 2	SSOWE				n) as		40 4 9				00,00		
	Sample Date	Sample	Sample Type (C=comp, G=crab)	Matrix (www.	benetii'i biel' Misti unginel	206, 9328, 932 Tutal 6020A CCI	108' 802 309				redmuM latoT	Special Instructions/Note:	Sons/Note:
Sample IOPTUTICATION	+	-	79	Preservation Code:	X	+	Z	-		-		\backslash	V
NG28/NV4	TE COL	10:08	9	A	Z	×	×				4	CCR Appendix III and IV Constituents	/ Constituents
MW13		nes	9	*		×	×				9	CCR Appendix III and IV Consittuents	Constituents
										#			
tant	Doison B Unknown		Radiological		San	Petur	posal (A I	ee may be	be assessed if sam	samples a	re retained long	er then 1 mo	nth) Months
Deliverable Requested: I, II, III, IV, Other (specify)					eds	cial Instr	notions/CK	Special Instructions/QC Requirements	a li				
Empty Kit Relinquished by:		Date:			Time:		+		Wetho	Method of Shipmant		100	
Refinquested by	Department 173/3631	1 1 000	1700	03	10	Rade	*	サス	1	Determine	4.13.202.	0/1/1	CULD
Raimpuintent/def	Date/Tima			Company		Republic	0	Mu	11/11/11	T Date/Tigh	2/5/	1138	417
Custody Seals Intact. Custody Seal No.: A Yes A No						Cooler Temps	를	re(s) "C and Other Remarks:	Ometra C				
		10.00				j							

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-204259-2

SDG Number:

List Source: Eurofins TestAmerica, Cedar Falls

Login Number: 204259 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: 310-204259-2 SDG Number:

Login Number: 204259 List Source: Eurofins TestAmerica, St. Louis List Number: 2 List Creation: 04/15/21 01:00 PM

Creator: Worthington, Sierra M

Residual Chlorine Checked.

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td>mentato contratato</td>	True	mentato contratato
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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 TestAmerica, Cedar Falls Eurofins TestAmerica, Cedar Falls Page 17 of 19 5/13/2021 Page 18 of 19 5/13/2021

Tracer/Carrier Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 and 2 CCR/Landfill Job ID: 310-204259-2

Method: 9315 - Radium-226 (GFPC)

Matrix: Water Prep Type: Total/NA

			Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)				
310-204259-1	NC2MW4	85.8	200		148	8.51
310-204259-2	MW13	83.0				
LCS 160-506114/1-A	Lab Control Sample	80.0				
LCSD 160-506114/2-A	Lab Control Sample Dup	84.8				
MB 160-506114/23-A	Method Blank	87.0				

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)	
310-204259-1	NC2MW4	85.8	86.0	
310-204259-2	MW13	83.0	86.0	
LCS 160-506115/1-A	Lab Control Sample	80.0	90.5	
LCSD 160-506115/2-A	Lab Control Sample Dup	84.8	88.6	
MB 160-506115/23-A	Method Blank	87.0	90.8	

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-204263-1

Client Project/Site: Nebraska City Unit 1 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: 4/27/2021 9:57:59 AM

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

Shawn.Hayes@Eurofinset.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 TestAmerica, Cedar Falls

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Laboratory Job ID: 310-204263-1

Table of Contents

Cover Page	1
Table of Contents	
Case Narrative	3
Sample Summary	4
Detection Summary	
	8
Definitions	15
QC Sample Results	16
	19
Chronicle	21
Certification Summary	23
	24
Chain of Custody	25
Receipt Checklists	29

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

Job ID: 310-204263-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-204263-1

Comments

No additional comments.

Receip

The samples were received on 4/14/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.8° C, -0.4° C and 0.7° C.

HDI CIL

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.

Eurofins TestAmerica, Cedar Falls 4/27/2021

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-204263-1	NC1MW2	Water	04/13/21 10:47	04/14/21 09:30	
310-204263-2	NC1MW3	Water	04/13/21 12:22	04/14/21 09:30	
310-204263-3	NC1MW4	Water	04/13/21 11:29	04/14/21 09:30	
310-204263-4	NC1MW9	Water	04/13/21 13:01	04/14/21 09:30	
310-204263-5	MW11	Water	04/13/21 10:10	04/14/21 09:30	
310-204263-6	MW14	Water	04/13/21 11:01	04/14/21 09:30	
310-204263-7	DUP1	Water	04/13/21 00:00	04/14/21 09:30	

Detection Summary

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

Job ID: 310-204263-1

mple ID: 310-204263-1

Lab Sample ID: 310-204263-2

Lab Sample ID: 310-204263-3

Client Sample ID: NC1MW2				Lab Sam
Anshite	Paguit Ousillias	DI	MDI Unit	Dil Fac D Mell

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.82	J	5.00	2.15	mg/L	5		9056A	Total/NA
Fluoride	0.294	J	0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	54.4		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.000878	J	0.00200	0.000750	mg/L			6020A	Total/NA
Barium	0.134		0.00200	0.000300	mg/L	1		6020A	Total/NA
Boron	0.233		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.000176		0.000100	0,0000510	mg/L	1		6020A	Total/NA
Calcium	91.6		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000238	J	0.000500	0.0000910	mg/L	1		6020A	Total/NA
Lead	0.000463	J	0.000500	0.000210	mg/L	1		6020A	Total/NA
Lithium	0.00998	J	0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.0886		0.00200	0.00130	mg/L	1		6020A	Total/NA
Thallium	0.00278		0.00100	0.000260	mg/L	1		6020A	Total/NA
Total Dissolved Solids	318		30.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: NC1MW3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.11		5.00	2.15	mg/L	5	7	9056A	Total/NA
Fluoride	0.557		0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	372		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.0354		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.144		0.00200	0.000300	mg/L	1		6020A	Total/NA
Boron	3.14		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.0000830	J	0.000100	0.0000510	mg/L	1		6020A	Total/NA
Calcium	180		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00191		0.000500	0.0000910	mg/L	1		6020A	Total/NA
Lithium	0.0435		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00293		0.00200	0.00130	mg/L	1		6020A	Total/NA
Thallium	0.00320		0.00100	0.000260	mg/L	1		6020A	Total/NA
Total Dissolved Solids	1000		30.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: NC1MW4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.71		5.00	2.15	mg/L	5		9056A	Total/NA
Fluoride	0.441	J	0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	165		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.00109	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.0768		0.00200	0.000300	mg/L	1		6020A	Total/NA
Boron	1,44		0,100	0,0580	mg/L	1		6020A	Total/NA
Cadmium	0.000133		0.000100	0.0000510	mg/L	1		6020A	Total/NA
Calcium	98.4		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000976		0.000500	0.0000910	mg/L	1		6020A	Total/NA
Lithium	0.0190		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00154	J	0.00200	0.00130	mg/L	1		6020A	Total/NA
Thallium	0.000313	J	0.00100	0.000260	mg/L	11		6020A	Total/NA
Total Dissolved Solids	498		30.0	26.0	mg/L	- 1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 4 of 29 4/27/2021 4/27/2021

Detection Summary

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

U.	31	0-2	U4,	500	61

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	6.50	200000000000000000000000000000000000000	5.00	2.15	mg/L	5	9056A	Total/NA
Fluoride	0.504		0.500	0.275	mg/L	5	9056A	Total/NA
Sulfate	162		5.00	2.45	mg/L	5	9056A	Total/NA
Arsenic	0.0110		0.00200	0.000750	mg/L	1	6020A	Total/NA
Barium	0.120		0.00200	0.000300	mg/L	1	6020A	Total/NA
Boron	1.50		0.100	0.0580	mg/L	1	6020A	Total/NA
Cadmium	0,0000890	J	0.000100	0,0000510	mg/L	1	6020A	Total/NA
Calcium	160		0.500	0.190	mg/L	1	6020A	Total/NA
Cobalt	0.00143		0.000500	0.0000910	mg/L	1	6020A	Total/NA
Lithium	0.0343		0.0100	0.00250	mg/L	1	6020A	Total/NA
Molybdenum	0.0234		0.00200	0.00130	mg/L	1	6020A	Total/NA
Selenium	0.00280	J	0.00500	0.000960	mg/L	1	6020A	Total/NA
Total Dissolved Solids	768		30.0	26.0	mg/L	1	SM 2540C	Total/NA

Lab Sample ID: 310-204263-5

Lab Sample ID: 310-204263-6

Lab Sample ID: 310-204263-7

Eurofins TestAmerica, Cedar Falls

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.42		5.00	2.15	mg/L	5		9056A	Total/NA
Fluoride	0.323	J	0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	35.1		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.00452		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.131		0.00200	0.000300	mg/L	1		6020A	Total/NA
Boron	0.474		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.0000900	J	0.000100	0.0000510	mg/L	1		6020A	Total/NA
Calcium	52,4		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.000873		0.000500	0.0000910	mg/L	1		6020A	Total/NA
Lead	0.000572		0.000500	0.000210	mg/L	1		6020A	Total/NA
Lithium	0.00252	J	0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.0299		0.00200	0.00130	mg/L	1		6020A	Total/NA
Selenium	0.00138	J	0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	212		30.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW14

Client Sample ID: MW11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.57		5.00	2.15	mg/L	5	_	9056A	Total/NA
Fluoride	0.495	J	0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	12.3		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.0455		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.318		0.00200	0.000300	mg/L	1		6020A	Total/NA
Boron	0.263		0,100	0,0580	mg/L	1		6020A	Total/NA
Calcium	152		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00116		0.000500	0.0000910	mg/L	1		6020A	Total/NA
Lithium	0.0548		0.0100	0.00250	mg/L	1		6020A	Total/NA
Total Dissolved Solids	672		30.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.14		5.00	2.15	mg/L	5		9056A	Total/NA
Fluoride	0.549		0.500	0.275	mg/L	5		9056A	Total/NA
Sulfate	372		5.00	2.45	mg/L	5		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

Client Sample ID: DUP1 (Continued)

Lab Sample ID: 310-204263-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	DN	Method	Prep Type
Arsenic	0.0347		0.00200	0.000750	mg/L	1	6	5020A	Total/NA
Barium	0.138		0.00200	0.000300	mg/L	1	6	5020A	Total/NA
Boron	3.05		0.100	0.0580	mg/L	1	6	5020A	Total/NA
Calcium	176		0.500	0.190	mg/L	1	6	6020A	Total/NA
Cobalt	0.00178		0.000500	0.0000910	mg/L	1	6	5020A	Total/NA
Lithium	0.0417		0.0100	0.00250	mg/L	1	6	6020A	Total/NA
Molybdenum	0,00136	J	0.00200	0.00130	mg/L	1	6	5020A	Total/NA
Total Dissolved Solids	1000		30.0	26.0	mg/L	1	S	SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Page 6 of 29 4/27/2021 Page 7 of 29 4/27/2021

lient: Omaha Public Power District roject/Site: Nebraska City Unit 1 CCF	R/Landfill							Job ID: 310-2	04263-1
Client Sample ID: NC1MW2							Lab Samp	le ID: 310-20	4263-1
Pate Collected: 04/13/21 10:47								Matrix	: Water
Date Received: 04/14/21 09:30									
Method: 9056A - Anions, Ion Chron	natography								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.82	J	5.00	2.15	mg/L			04/20/21 00:04	5
Fluoride	0.294	J	0.500	0.275				04/20/21 00:04	5
Sulfate	54.4		5.00	2.45	mg/L			04/20/21 00:04	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00110	-	0.00200	0.00110	mg/L	_	04/15/21 09:19	04/21/21 20:58	1
Arsenic	0.000878	J	0.00200	0.000750			04/15/21 09:19	04/21/21 20:58	1
Barium	0.134		0.00200	0.000300	9.7		04/15/21 09:19	04/21/21 20:58	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 20:58	1
Boron	0.233		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 20:58	3
Cadmium	0.000176		0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 20:58	1
Calcium	91.6		0.500	0.190	mg/L		04/15/21 09:19	04/21/21 20:58	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 20:58	25
Cobalt	0.000238	J	0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 20:58	4
Lead	0.000463	J	0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 20:58	1
Lithium	0.00998	J	0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 20:58	1
Molybdenum	0.0886		0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 20:58	
Selenium	< 0.000960		0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 20:58	1
Thallium	0.00278		0.00100	0.000260	mg/L		04/15/21 09:19	04/21/21 20:58	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150	Market (0)	0.000200	0.000150	100000		04/20/21 14:33	04/21/21 15:58	1
			0.5300000000000000000000000000000000000						9.0
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	318		30.0	26.0	mg/L			04/19/21 09:05	- 1

Client Sample Results

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

Client Sample ID: NC1MW3

Lab Sample ID: 310-204263-2

04/20/21 14:33 04/21/21 16:00

Date Collected: 04/13/21 12:22 Date Received: 04/14/21 09:30

Mercury

Matrix: Water

Job ID: 310-204263-1

Method: 9056A - Anions, Ion Chron	natography								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.11	= =	5.00	2.15	mg/L			04/20/21 00:19	5
Fluoride	0.557		0.500	0.275	mg/L			04/20/21 00:19	5
Sulfate	372		5.00	2.45	mg/L			04/20/21 00:19	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		04/15/21 09:19	04/21/21 21:08	1
Arsenic	0.0354		0.00200	0.000750	mg/L		04/15/21 09:19	04/21/21 21:08	1
Barium	0.144		0.00200	0.000300	mg/L		04/15/21 09:19	04/21/21 21:08	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 21:08	1
Boron	3.14		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 21:08	31
Cadmium	0.0000830	J	0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 21:08	1

Cadmium	0.0000830 J	0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 21:08	1
Calcium	180	0.500	0.190	mg/L		04/15/21 09:19	04/21/21 21:08	
Chromium	<0.00110	0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 21:08	31
Cobalt	0.00191	0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 21:08	1
Lead	<0.000210	0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 21:08	1
Lithium	0.0435	0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 21:08	- 1
Molybdenum	0.00293	0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 21:08	- 11
Selenium	<0.000960	0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 21:08	31
Thallium	0.00320	0.00100	0.000260	mg/L		04/15/21 09:19	04/21/21 21:08	1
Method: 7470A - Mercury	(CVAA)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total Dissolved Solids	1000		30.0	26.0	mg/L			04/19/21 09:05	1

0.000150 mg/L

0.000200

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< 0.000150

Page 8 of 29 4/27/2021 Page 9 of 29 4/27/2021

lient Sample ID: NC1MW4							Lab Cama	le ID: 310-20	1262 2
							Lab Samp		
ate Collected: 04/13/21 11:29								Matrix	c: Water
ate Received: 04/14/21 09:30									
Method: 9056A - Anions, Ion Chrom	atography								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.71		5.00	2.15	mg/L	33.50	e -	04/20/21 00:35	5
Fluoride	0.441	J	0.500	0.275	mg/L			04/20/21 00:35	5
Sulfate	165		5.00	2.45	mg/L			04/20/21 00:35	5
Method: 6020A - Metals (ICP/MS)									
Analyte	10000000	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Antimony	<0.00110		0.00200	0.00110			04/15/21 09:19	04/21/21 21:11	1
Arsenic	0.00109	J	0.00200	0.000750	200		04/15/21 09:19	04/21/21 21:11	1
Barium	0.0768		0.00200	0.000300			04/15/21 09:19	04/21/21 21:11	1
Beryllium	<0.000270		0.00100	0.000270	12		04/15/21 09:19	04/21/21 21:11	81
Boron	1.44		0.100	0.0580	370		04/15/21 09:19	04/21/21 21:11	3
Cadmium	0.000133		0.000100	0.0000510			04/15/21 09:19	04/21/21 21:11	31
Calcium	98.4		0.500	0.190			04/15/21 09:19	04/21/21 21:11	81
Chromium	< 0.00110		0.00500	0.00110	875		04/15/21 09:19	04/21/21 21:11	21
Cobalt	0.000976		0.000500	0.0000910	- 12		04/15/21 09:19	04/21/21 21:11	31
Lead	<0.000210		0.000500	0.000210	100		04/15/21 09:19	04/21/21 21:11	1
Lithium	0.0190		0.00200	0.00250	985		04/15/21 09:19	04/21/21 21:11	31 31
Molybdenum Selenium	< 0.00154	J	0.00200	0.000960			04/15/21 09:19	04/21/21 21:11	1
Thallium	0.000313	-1	0.00300	0.000960	35		04/15/21 09:19	04/21/21 21:11	31
mainum	0.000313	J	0.00100	0.000200	ingit		UN 15/21 US.19	WHZ 112 21.11	-31
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	< 0.000150		0.000200	0.000150	mg/L		04/20/21 14:33	04/21/21 16:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample Results

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

Lab Sample ID: 310-204263-4

Client Sample ID: NC1MW9 Date Collected: 04/13/21 13:01 Date Received: 04/14/21 09:30

Matrix: Water

Job ID: 310-204263-1

Method: 9056A - Anions, Ion Chromatography RL MDL Unit Analyzed Dil Fac Chloride 5.00 2.15 mg/L 04/20/21 00:51 6.50 Fluoride 0.504 0.500 0.275 mg/L 04/20/21 00:51 Sulfate 162 5.00 2.45 mg/L 04/20/21 00:51

Method: 6020A - Metals (ICP/MS)	D	0	RL	MDL	11-14	-		ware and a second	DUE
Analyte	10072002	Qualifier	- little c	W5-25	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		04/15/21 09:19	04/21/21 21:24	1
Arsenic	0.0110		0.00200	0.000750	mg/L		04/15/21 09:19	04/21/21 21:24	1
Barium	0.120		0.00200	0.000300	mg/L		04/15/21 09:19	04/21/21 21:24	- 1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 21:24	3
Boron	1.50		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 21:24	31
Cadmium	0.0000890	J	0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 21:24	31
Calcium	160		0.500	0.190	mg/L		04/15/21 09:19	04/21/21 21:24	
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 21:24	31
Cobalt	0.00143		0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 21:24	81
Lead	< 0.000210		0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 21:24	81
Lithium	0.0343		0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 21:24	
Molybdenum	0.0234		0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 21:24	
Selenium	0.00280	J	0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 21:24	31
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/15/21 09:19	04/21/21 21:24	1

_ manuari	-0.000200		0.00100	0.000200	ingic			OWNER THE PARTY.	
Method: 7470A - Mercury (CVAA) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150		0.000200	0.000150	mg/L		04/20/21 14:33	04/21/21 16:04	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	768		30.0	26.0	mg/L			04/19/21 09:05	1

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Page 10 of 29 4/27/2021 Page 11 of 29 4/27/2021

NAMES OF TAXABLE PROPERTY OF		Clien	t Sample	Results	5				
lient: Omaha Public Power District roject/Site: Nebraska City Unit 1 CCF	R/Landfill							Job ID: 310-2	04263-1
lient Sample ID: MW11							Lab Samp	le ID: 310-20	4263-5
Pate Collected: 04/13/21 10:10 Pate Received: 04/14/21 09:30							E-mosework		x: Water
Method: 9056A - Anions, Ion Chron		Qualifier	RL	MDL	Unit	D		V. N. 151	Dil Fac
Analyte	2000000000	Quaimer	5.00	2.15		D D	Prepared	Analyzed 04/20/21 01:06	7-0-12 0-0-0-0
Chloride	5.42 0.323	J	0.500		mg/L mg/L			04/20/21 01:06	5
Sulfate	35.1		5.00		mg/L			04/20/21 01:06	5
	35.1		5.00	2.40	nigit			U-120/21 U1.00	.5
Method: 6020A - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L	-	04/15/21 09:19	04/21/21 21:27	1
Arsenic	0.00452		0.00200	0.000750	mg/L		04/15/21 09:19	04/21/21 21:27	1
Barium	0.131		0.00200	0.000300	mg/L		04/15/21 09:19	04/21/21 21:27	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 21:27	1
Boron	0.474		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 21:27	31
Cadmium	0.0000900	J	0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 21:27	31
Calcium	52.4		0.500	0.190	mg/L		04/15/21 09:19	04/21/21 21:27	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 21:27	31
Cobalt	0.000873		0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 21:27	31
Lead	0.000572		0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 21:27	81
Lithium	0.00252	J	0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 21:27	- 21
Molybdenum	0.0299		0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 21:27	21
Selenium	0.00138	J	0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 21:27	31
Thallium	<0.000260		0.00100	0.000260	mg/L		04/15/21 09:19	04/21/21 21:27	1
Method: 7470A - Mercury (CVAA)	2475-0500	0.04-21-22-14-15-14-14	09601	SWICE	The Colores	aren	10277707084507	AND RESIDENCE OF THE PROPERTY	NATE CONTROL
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150		0.000200	0.000150	mg/L		04/20/21 14:33	04/21/21 16:06	1
General Chemistry	2 0	25 1025	900	200		100	2 A	S 12 757	200
Analyte	10000	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	212		30.0	26.0	mg/L			04/19/21 09:05	1

Client Sample Results

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

Lab Sample ID: 310-204263-6

Client Sample ID: MW14 Date Collected: 04/13/21 11:01 Date Received: 04/14/21 09:30

Sulfate

Matrix: Water

Job ID: 310-204263-1

Method: 9056A - Anions, Ion Chromatography RL MDL Unit Analyzed Dil Fac Chloride 5.00 2.15 mg/L 04/20/21 01:22 8.57 Fluoride 0.495 J 0.500 0.275 mg/L 04/20/21 01:22 12.3 5.00 2.45 mg/L 04/20/21 01:22

Method: 6020A - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L	-	04/15/21 09:19	04/21/21 21:30	1
Arsenic	0.0455		0.00200	0.000750	mg/L		04/15/21 09:19	04/21/21 21:30	1
Barium	0.318		0.00200	0.000300	mg/L		04/15/21 09:19	04/21/21 21:30	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 21:30	1
Boron	0.263		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 21:30	1
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 21:30	1
Calcium	152		0.500	0.190	mg/L		04/15/21 09:19	04/21/21 21:30	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 21:30	31
Cobalt	0.00116		0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 21:30	1
Lead	< 0.000210		0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 21:30	- 1
Lithium	0.0548		0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 21:30	1
Molybdenum	< 0.00130		0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 21:30	1
Selenium	< 0.000960		0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 21:30	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		04/15/21 09:19	04/21/21 21:30	1

Tribinon,	-0.000200		0.00100	0.000200	mgic		. OH TOTAL TOURIS	OHIE DELETION.	5.80
Method: 7470A - Mercury (CVAA) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150		0.000200	0.000150	mg/L		04/20/21 14:33	04/21/21 16:08	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	672		30.0	26.0	mg/L			04/19/21 09:05	1

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Page 12 of 29 4/27/2021 Page 13 of 29 4/27/2021

Chefft Sample Results	Client	Sample	Results
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Cilent.	Omai	ia Public F	owe	r Dist	rice	
Project	VSite:	Nebraska	City	Unit '	1 CCR/I	Landfill

Method: 9056A - Anions, Ion Chromatography

Client Sample ID: DUP1 Date Collected: 04/13/21 00:00 Date Received: 04/14/21 09:30

Mercury

General Chemistry Analyte

Total Dissolved Solids

Lab Sample ID: 310-204263-7

04/20/21 14:33 04/21/21 16:11

Analyzed

04/19/21 09:05

Prepared

Matrix: Water

Job ID: 310-204263-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	9.14	S .	5.00	2.15	mg/L	5.83	E .	04/20/21 01:37	5	
Fluoride	0.549		0.500	0.275	mg/L			04/20/21 01:37	5	K
Sulfate	372		5.00	2.45	mg/L			04/20/21 01:37	5	Ī
Method: 6020A - Metals (ICP/MS)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Antimony	< 0.00110		0.00200	0.00110	mg/L	-	04/15/21 09:19	04/21/21 21:32	1	
Arsenic	0.0347		0.00200	0.000750	mg/L		04/15/21 09:19	04/21/21 21:32	1	Ė
Barium	0.138		0.00200	0.000300	mg/L		04/15/21 09:19	04/21/21 21:32	1	
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 21:32	3	
Boron	3.05		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 21:32	31	
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 21:32	1	
Calcium	176		0.500	0.190	mg/L		04/15/21 09:19	04/21/21 21:32	3	
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 21:32	31	
Cobalt	0.00178		0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 21:32	1	
Lead	< 0.000210		0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 21:32	1	
Lithium	0.0417		0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 21:32	- 1	
Molybdenum	0.00136	J	0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 21:32		
Selenium	< 0.000960		0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 21:32	- 1	
Thallium	<0.000260		0.00100	0.000260	mg/L		04/15/21 09:19	04/21/21 21:32	1	
Method: 7470A - Mercury (CVAA)										
Analyte	Popult	Qualifier	DI	MOL	Heit	D.	Propared	Applymed	Dil Eso	

0.000200

RL

30.0

0.000150 mg/L

MDL Unit

26.0 mg/L

<0.000150

Result Qualifier

1000

Definitions/Glossary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

Qualifiers		
HPLC/IC Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
Metals		
Qualifier	Qualifier Description	
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value,	

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.
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

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Page 14 of 29 4/27/2021 Page 15 of 29 4/27/2021

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

TEF

TEQ

TNTC

QC Sam	le Results
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Client: Omaha Public Power District
Project/Site: Nebraska City Unit 1 CCR/Landfill

< 0.000260

Job ID: 310-204263-1

Client Sample ID: Method Blank

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-313953/3	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 313953	(42), 69
MR MR	

	мв	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.430		1.00	0.430	mg/L			04/19/21 18:36	1
Fluoride	< 0.0550		0.100	0.0550	mg/L			04/19/21 18:36	1
Sulfate	< 0.490		1.00	0.490	mg/L			04/19/21 18:36	1

Lab Sample ID: LCS 310-313953/4 Matrix: Water					Client	Sample	Prep Type: To
Analysis Batch: 313953							191401818.1840120010
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	10.0	9.751		mg/L		98	90 - 110
Fluoride	2.00	2.180		mg/L		109	90 - 110
Sulfate	10.0	10.47		mg/L		105	90 - 110

Method: 6020A - Metals (ICP/MS) Lab Sample ID: MB 310-312828/1-A

Thallium

Matrix: Water Analysis Batch: 313546								Prep Type: 1 Prep Batch:	
		МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		04/15/21 09:19	04/21/21 20:52	
Arsenic	< 0.000750		0.00200	0.000750	mg/L		04/15/21 09:19	04/21/21 20:52	1
Barium	< 0.000300		0.00200	0.000300	mg/L		04/15/21 09:19	04/21/21 20:52	- 1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		04/15/21 09:19	04/21/21 20:52	1
Boron	< 0.0580		0.100	0.0580	mg/L		04/15/21 09:19	04/21/21 20:52	1
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		04/15/21 09:19	04/21/21 20:52	1
Calcium	< 0.190		0.500	0.190	mg/L		04/15/21 09:19	04/21/21 20:52	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		04/15/21 09:19	04/21/21 20:52	1
Cobalt	< 0.0000910		0.000500	0.0000910	mg/L		04/15/21 09:19	04/21/21 20:52	1
Lead	< 0.000210		0.000500	0.000210	mg/L		04/15/21 09:19	04/21/21 20:52	- 31
Lithium	< 0.00250		0.0100	0.00250	mg/L		04/15/21 09:19	04/21/21 20:52	1
Molybdenum	< 0.00130		0.00200	0.00130	mg/L		04/15/21 09:19	04/21/21 20:52	1
Selenium	< 0.000960		0.00500	0.000960	mg/L		04/15/21 09:19	04/21/21 20:52	1

0.00100

0.000260 mg/L

Lab Sample ID: LCS 310-312828/2-A Matrix: Water Analysis Batch: 313546					Client	Sample	Prep Type: Total/NA Prep Batch: 312828
Analysis Daten. 515545	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.200	0.1869		mg/L		93	80 - 120
Arsenic	0.200	0.1968		mg/L		98	80 - 120
Barium	0.100	0.09920		mg/L		99	80 - 120
Beryllium	0.100	0.1012		mg/L		101	80 - 120
Boron	0.200	0.1811		mg/L		91	80 - 120
Cadmium	0.100	0.09523		mg/L		95	80 - 120
Calcium	2,00	1.721		mg/L		86	80 - 120
Chromium	0.100	0.09888		mg/L		99	80 - 120
Cobalt	0.100	0.09555		mg/L		96	80 - 120

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04/15/21 09:19 04/21/21 20:52

QC Sample Results

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

Job ID: 310-204263-1

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

Lab Sample ID: LCS 310-312828/2-A Matrix: Water Analysis Batch: 313546					Client	Sample	10 E 10 E 10 E 10 E	trol Sample e: Total/NA tch: 312828
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.200	0.1907		mg/L		95	80 - 120	
Lithium	0.200	0.1970		mg/L		98	80 - 120	
Molybdenum	0.200	0.1862		mg/L		93	80 - 120	
Selenium	0.400	0.3817		mg/L		95	80 - 120	
Thallium	0.200	0.1767		mg/L		88	80 - 120	

Lab Sample ID: 310-204263-1 MS	S		Client Sample ID: NC1MW2
Matrix: Water			Prep Type: Total/NA
Analysis Batch: 313546			Prep Batch: 312828

A THOUGHT THE VIEW THE PARTY OF THE VIEW									The same of the sa
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	<0.00110		0.200	0.1862		mg/L		93	75 - 125
Arsenic	0.000878	J	0.200	0.1945		mg/L		97	75 - 125
Barium	0.134		0.100	0.2336		mg/L		99	75 - 125
Beryllium	< 0.000270		0.100	0.09832		mg/L		98	75 - 125
Boron	0.233		0.200	0.4238		mg/L		96	75 - 125
Cadmium	0.000176		0.100	0.09384		mg/L		94	75 - 125
Calcium	91.6		2.00	95.72	4	mg/L		206	75 - 125
Chromium	< 0.00110		0.100	0.09443		mg/L		94	75 . 125
Cobalt	0.000238	J	0.100	0.09299		mg/L		93	75 - 125
Lead	0.000463	J	0.200	0.1905		mg/L		95	75 - 125
Lithium	0.00998	J	0.200	0.1996		mg/L		95	75 - 125
Molybdenum	0.0886		0.200	0.2762		mg/L		94	75 - 125
Selenium	< 0.000960		0.400	0.3733		mg/L		93	75 - 125
Thallium	0.00278		0.200	0.1688		ma/L		83	75 - 125

Analysis Batch: 313546										Batch: 3	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	< 0.00110		0.200	0.1860		mg/L		93	75 - 125	0	20
Arsenic	0.000878	J	0.200	0.1943		mg/L		97	75 - 125	0	20
Barium	0.134		0.100	0.2344		mg/L		100	75 - 125	0	20
Beryllium	< 0.000270		0.100	0.09828		mg/L		98	75 - 125	0	20
Boron	0.233		0.200	0.4318		mg/L		100	75 - 125	2	20
Cadmium	0.000176		0.100	0.09399		mg/L		94	75 - 125	0	20
Calcium	91.6		2.00	95.29	4	mg/L		184	75 - 125	0	20
Chromium	< 0.00110		0.100	0.09567		mg/L		96	75 - 125	1	20
Cobalt	0.000238	J	0.100	0.09272		mg/L		92	75 - 125	0	20
Lead	0.000463	J	0.200	0.1920		mg/L		96	75 - 125	1	20
Lithium	0.00998	J	0.200	0.1994		mg/L		95	75 - 125	0	20
Molybdenum	0.0886		0.200	0.2778		mg/L		95	75 - 125	1	20
Selenium	< 0.000960		0.400	0.3705		mg/L		93	75 - 125	1	20
Thallium	0.00278		0.200	0.1733		mg/L		85	75 - 125	3	20

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Client Sample ID: NC1MW2

Page 16 of 29 4/27/2021 Page 17 of 29 4/27/2021

Lab Sample ID: 310-204263-1 MSD

Matrix: Water Analysis Batch: 313511 MB MB Analyte Result Qualifier RL MDL Unit D Prepared Mercury <0.000150 0.000200 0.000150 mg/L 0.4/20/21 14:3 Lab Sample ID: LCS 310-313369/2-A Matrix: Water Analysis Batch: 313511 Analyte Added Result Qualifier Unit D **Rec Mercury 0.00167 0.001760 mg/L 106 Method: SM 2540C - Solids, Total Dissolved (TDS) Lab Sample ID: MB 310-313155/1 MB MB Analyte Result Qualifier RL MDL Unit D Prepared Analysis Batch: 313155 MB MB Analyte Result Qualifier RL MDL Unit D Prepared Total Dissolved Solids <26.0 30.0 26.0 mg/L	ample ID: Meth Prep Type: Prep Batch	od Blani
Matrix: Water Analysis Batch: 313511 MB MB Analyte Result Qualifier RL MDL Unit D Prepared Mercury <0.000150 0.000200 0.000150 mg/L 0.4/20/21 14:3 Lab Sample ID: LCS 310-313369/2-A Matrix: Water Analysis Batch: 313511 Spike LCS LCS Analyte Added Result Qualifier Unit D %Rec Mercury 0.00167 0.001760 mg/L 106 Method: SM 2540C - Solids, Total Dissolved (TDS) Lab Sample ID: MB 310-313155/1 MB MB Analyte Result Qualifier RL MDL Unit D Prepared Total Dissolved Solids <26.0 30.0 26.0 mg/L	Prep Type:	od Blani
Analysis Batch: 313511 MB		
Analyte Result Qualifier RL MDL Unit D Prepared Mercury < 0.000150 0.000200 0.000150 mg/L 0.4/20/21 14:3 Client Sample ID; LCS 310-313369/2-A Client Sample ID; LCS 310-313369/2-A Spike LCS LCS LCS Spike LCS LCS Spike LCS LCS LCS Spike LCS LCS LCS Spike LCS LCS LCS Spi	Prep Batch	Total/N/
Analyte Result Qualifier RL MDL Unit D Prepared Mercury <0.000150 0.000200 0.000150 mg/L 0.420/21 14:3 Lab Sample ID; LCS 310-313369/2-A Matrix: Water Analysis Batch: 313511 Analyte Added Result Qualifier Unit D Recurrency 0.00167 0.001760 mg/L Unit D Recurrency 0.00167 0.001760 mg/L 106 Lethod: SM 2540C - Solids, Total Dissolved (TDS) Lab Sample ID; MB 310-313155/1 MB MB Analyte Result Qualifier RL MDL Unit D Prepared Otal Dissolved Solids <26.0 30.0 36.0 mg/L		n: 31336
Mercury		
Client Sample D; LCS 310-313369/2-A Client Sample D; LCS 310-313369/2-A Client Sample D; LCS 310-313369/2-A Spike LCS LCS Analysis Batch: 313511 Spike LCS LCS Marker Marke	Analyzed	Dil Fa
Matrix: Water Analysis Batch: 313511 Spike LCS LCS Analysis Batch: 313511 Analysis Batch: 313511 Spike Added Result Qualifier Unit D %Rec Mercury 0.00167 0.001760 mg/L 106 106	04/21/21 15:30	
Spike Added Result Qualifier Unit D %Rec	ID: Lab Contro	
Spike Added Result Qualifier Unit D %Rec	Prep Batch	
Mercury	%Rec.	10.00000000
Lab Sample ID: MB 310-313155/1	Limits	
Lab Sample ID: MB 310-313155/1 Client Matrix: Water Analysis Batch: 313155 MB MB MB Analyte Result Qualifier RL MDL Unit D Prepared Total Dissolved Solids 426.0 30.0 26.0 mg/L MB MB MB MB MB MB MB M	80 - 120	
Analysis Batch: 313155 MB MB	ample ID: Meth	
Analyte Result Qualifier RL MDL Unit D Prepared Total Dissolved Solids <26.0	Frep Type.	Totalily
Analyte Result Qualifier RL MDL Unit D Prepared Total Dissolved Solids <26.0 30.0 26.0 mg/L		
Total Dissolved Solids <26.0 30.0 26.0 mg/L	Analyzed	Dil Fa
ah Sample ID: LCS 310-313155/2	04/19/21 09:05	
ah Sample ID: LCS 310-313155/2		
Law Campie in. Loc City 1010/E	ID: Lab Contro	I Sample
Matrix: Water	Prep Type:	Total/N/
Analysis Batch: 313155		
Spike LCS LCS		
Analyte Added Result Qualifier Unit D %Rec	%Rec.	

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

HPLC/IC

Analysis Batch: 313953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-1	NC1MW2	Total/NA	Water	9056A	
310-204263-2	NC1MW3	Total/NA	Water	9056A	
310-204263-3	NC1MW4	Total/NA	Water	9056A	
310-204263-4	NC1MW9	Total/NA	Water	9056A	
310-204263-5	MW11	Total/NA	Water	9056A	
310-204263-6	MW14	Total/NA	Water	9056A	
310-204263-7	DUP1	Total/NA	Water	9056A	
MB 310-313953/3	Method Blank	Total/NA	Water	9056A	
LCS 310-313953/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 312828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-1	NC1MW2	Total/NA	Water	3010A	3.5
310-204263-2	NC1MW3	Total/NA	Water	3010A	
310-204263-3	NC1MW4	Total/NA	Water	3010A	
310-204263-4	NC1MW9	Total/NA	Water	3010A	
310-204263-5	MW11	Total/NA	Water	3010A	
310-204263-6	MW14	Total/NA	Water	3010A	
310-204263-7	DUP1	Total/NA	Water	3010A	
MB 310-312828/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-312828/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-204263-1 MS	NC1MW2	Total/NA	Water	3010A	
310-204263-1 MSD	NC1MW2	Total/NA	Water	3010A	

Prep Batch: 313369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-1	NC1MW2	Total/NA	Water	7470A	
310-204263-2	NC1MW3	Total/NA	Water	7470A	
310-204263-3	NC1MW4	Total/NA	Water	7470A	
310-204263-4	NC1MW9	Total/NA	Water	7470A	
310-204263-5	MW11	Total/NA	Water	7470A	
310-204263-6	MW14	Total/NA	Water	7470A	
310-204263-7	DUP1	Total/NA	Water	7470A	
MB 310-313369/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-313369/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 313511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-1	NC1MW2	Total/NA	Water	7470A	313369
310-204263-2	NC1MW3	Total/NA	Water	7470A	313369
310-204263-3	NC1MW4	Total/NA	Water	7470A	313369
310-204263-4	NC1MW9	Total/NA	Water	7470A	313369
310-204263-5	MW11	Total/NA	Water	7470A	313369
310-204263-6	MW14	Total/NA	Water	7470A	313369
310-204263-7	DUP1	Total/NA	Water	7470A	313369
MB 310-313369/1-A	Method Blank	Total/NA	Water	7470A	313369
LCS 310-313369/2-A	Lab Control Sample	Total/NA	Water	7470A	313369

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Page 18 of 29 4/27/2021 Page 19 of 29 4/27/2021

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

Metals

Analysis Batch: 313546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-1	NC1MW2	Total/NA	Water	6020A	312828
310-204263-2	NC1MW3	Total/NA	Water	6020A	312828
310-204263-3	NC1MW4	Total/NA	Water	6020A	312828
310-204263-4	NC1MW9	Total/NA	Water	6020A	312828
310-204263-5	MW11	Total/NA	Water	6020A	312828
310-204263-6	MW14	Total/NA	Water	6020A	312828
310-204263-7	DUP1	Total/NA	Water	6020A	312828
MB 310-312828/1-A	Method Blank	Total/NA	Water	6020A	312828
LCS 310-312828/2-A	Lab Control Sample	Total/NA	Water	6020A	312828
310-204263-1 MS	NC1MW2	Total/NA	Water	6020A	312828
310-204263-1 MSD	NC1MW2	Total/NA	Water	6020A	312828

General Chemistry

Analysis Batch: 313155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
310-204263-1	NC1MW2	Total/NA	Water	SM 2540C	
310-204263-2	NC1MW3	Total/NA	Water	SM 2540C	
310-204263-3	NC1MW4	Total/NA	Water	SM 2540C	
310-204263-4	NC1MW9	Total/NA	Water	SM 2540C	
310-204263-5	MW11	Total/NA	Water	SM 2540C	
310-204263-6	MW14	Total/NA	Water	SM 2540C	
310-204263-7	DUP1	Total/NA	Water	SM 2540C	
MB 310-313155/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-313155/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Lab Chronicle

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

> Lab Sample ID: 310-204263-1 Matrix: Water

Client Sample ID: NC1MW2 Date Collected: 04/13/21 10:47 Date Received: 04/14/21 09:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	8%	5	313953	04/20/21 00:04	SAD	TAL CF
Total/NA	Prep	3010A			312828	04/15/21 09:19	CJT	TAL CF
Total/NA	Analysis	6020A		1	313546	04/21/21 20:58	SAD	TAL CF
Total/NA	Prep	7470A			313369	04/20/21 14:33	HED	TAL CF
Total/NA	Analysis	7470A		1	313511	04/21/21 15:58	HED	TAL CF
Total/NA	Analysis	SM 2540C		1	313155	04/19/21 09:05	ARG	TAL CF

Client Sample ID: NC1MW3 Date Collected: 04/13/21 12:22 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204263-2

Matrix: Water

Job ID: 310-204263-1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	313953	04/20/21 00:19	SAD	TAL CF
Total/NA	Prep	3010A			312828	04/15/21 09:19	CJT	TAL CF
Total/NA	Analysis	6020A		1	313546	04/21/21 21:08	SAD	TAL CF
Total/NA	Prep	7470A			313369	04/20/21 14:33	HED	TAL CF
Total/NA	Analysis	7470A		10	313511	04/21/21 16:00	HED	TAL CF
Total/NA	Analysis	SM 2540C		1	313155	04/19/21 09:05	ARG	TAL CF

Client Sample ID: NC1MW4 Date Collected: 04/13/21 11:29 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204263-3

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	313953	04/20/21 00:35	SAD	TAL CF
Total/NA	Prep	3010A			312828	04/15/21 09:19	CJT	TAL CF
Total/NA	Analysis	6020A		1	313546	04/21/21 21:11	SAD	TAL CF
Total/NA	Prep	7470A			313369	04/20/21 14:33	HED	TAL CF
Total/NA	Analysis	7470A		1	313511	04/21/21 16:02	HED	TAL CF
Total/NA	Analysis	SM 2540C		1	313155	04/19/21 09:05	ARG	TAL CF

Client Sample ID: NC1MW9 Date Collected: 04/13/21 13:01 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204263-4

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	313953	04/20/21 00:51	SAD	TAL CF
Total/NA	Prep	3010A			312828	04/15/21 09:19	CJT	TAL CF
Total/NA	Analysis	6020A		10	313546	04/21/21 21:24	SAD	TAL CF
Total/NA	Prep	7470A			313369	04/20/21 14:33	HED	TAL CF
Total/NA	Analysis	7470A		1	313511	04/21/21 16:04	HED	TAL CF
Total/NA	Analysis	SM 2540C		12	313155	04/19/21 09:05	ARG	TAL CF

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Page 20 of 29 4/27/2021 Page 21 of 29 4/27/2021

Lab Chronicle

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

Client Sample ID: MW11 Date Collected: 04/13/21 10:10 Date Received: 04/14/21 09:30

Lab Sample ID: 310-204263-5

Matrix: Water

Job ID: 310-204263-1

Batch Prep Type Type Method or Analyzed Total/NA TAL CF Analysis 9056A 313953 04/20/21 01:06 SAD Total/NA 04/15/21 09:19 CJT TAL CF Prep 3010A 312828 Total/NA Analysis 6020A 313546 04/21/21 21:27 SAD TAL CF Total/NA Prep 74704 TAL CF 313369 04/20/21 14:33 HED Total/NA Analysis 7470A 313511 04/21/21 16:06 HED TAL CF Total/NA SM 2540C 313155 04/19/21 09:05 ARG

Client Sample ID: MW14 Date Collected: 04/13/21 11:01 Lab Sample ID: 310-204263-6

Matrix: Water

Date Received: 04/14/21 09:30

-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	9056A		5	313953	04/20/21 01:22	SAD	TAL CF	
Total/NA	Prep	3010A			312828	04/15/21 09:19	CJT	TAL CF	
Total/NA	Analysis	6020A		1	313546	04/21/21 21:30	SAD	TAL CF	-12
Total/NA	Prep	7470A			313369	04/20/21 14:33	HED	TAL CF	LE
Total/NA	Analysis	7470A		1:	313511	04/21/21 16:08	HED	TAL CF	
Total/NA	Analysis	SM 2540C		1	313155	04/19/21 09:05	ARG	TAL CF	10.00

Client Sample ID: DUP1 Date Collected: 04/13/21 00:00 Date Received: 04/14/21 09:30 Lab Sample ID: 310-204263-7

Matrix: Water

Batch Prep Type Method Type or Analyzed Total/NA Analysis 9056A 313953 04/20/21 01:37 SAD TAL CF Total/NA 3010A 312828 04/15/21 09:19 CJT TAL CF Analysis Total/NA 6020A 313546 04/21/21 21:32 SAD TAL CF Total/NA Prep 7470A TAL CF Total/NA Analysis 7470A 313511 04/21/21 16:11 HED TAL CF Total/NA Analysis SM 2540C 313155 04/19/21 09:05 ARG TAL CF

TAL CF = Eurofins TestAmerica, 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 CCR/Landfill Job ID: 310-204263-1

Laboratory: Eurofins TestAmerica, 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)	09-29-21
Georgia	State	IA100001 (OR)	09-29-21
Illinois	NELAP	200024	11-29-21
lowa	State	007	12-01-21
Kansas	NELAP	E-10341	01-31-22
Minnesota	NELAP	019-999-319	12-31-21
Minnesota (Petrofund)	State	3349	08-22-21
North Dakota	State	R-186	09-29-21
Oregon	NELAP	IA100001	09-29-21
USDA	US Federal Programs	P330-19-00003	01-02-22

Eurofins TestAmerica, Cedar Falls Eurofins TestAmerica, Cedar Falls

Page 22 of 29 4/27/2021 Page 23 of 29 4/27/2021

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-1

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
3010A	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 TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

eurofins

Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

Client Dwy Iva Pub	Francisco Company	4.77.的联系。《	公司的第三人	(1) () () () ()	医产业供收的产品
CONTRACT	ic tower	8			
City/State: Dwalla	STA	DE Project:	Nel	washa	City
Receipt information	THE PROPERTY OF		-		Hull March
1/1	3/21 0	1930 Received	d By:	m	,
Lab Courier Lab Field Services Client Drop-off Other. Condition of Cooler(Containers	☐ Spee-De				
		ervices Client Di	rop-off	Other:	—
Condition of Cooler/Containers	医罗斯斯斯斯	1.200 1.300 1.000 1.000 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.300 1.3	EDWSWALL.	Carte Supplied to	SELECT GARAGE
Sample(s) received in Cooler?					ALCOHOL STATE
Multiple Coolers?	Yes 🗆	No If yes: Co	ooler# _	of 5	
Cooler Custody Seals Present?	Yes 🗆	No #yes: Co	oler custod	y seals intact?	Yes No
Sample Custody Seals Present?	Yes X			, V	
Trip Blank Present?	☐ Yes XI				
				, , , , , , , , , , , , , , , , , , ,	
	lue ice 🔲 🗅	Ory ice Other	ī	DNO	NE
Thermometer ID:	0	Correction	Factor (°C)	+01	2102
. Temp Blank Temperature - if no te	mp blank, or temp b	lank temperature above	criteria: proor	ed to Sample Contai	ner Temperature
Uncorrected Temp (°C):				-08	ior remperature :
· Sample Container Temperature				010	- Frequency
Container(s) used:	NER 1		CONTAINE	R2	
Uncorrected Temp (°C):				3	
Corrected Temp (°C):					
xceptions Noted	Agent of Sales to a	the at the sale	C ==0445345	A SAME STATE	Part
a) If yes: Is there evidence to	hat the chilling pr	rocess began?	eceived By:		
	SOURCE AND AND ASSESSED.		-		
(e.g., bulging septa, broken/cr	re obvious signs acked bottles, fro	s that the integrity on ozen solid?)	f sample co	entainers is comp	romised?
Note: If yes, contact PM before p	proceeding. If no,	proceed with login			
Additional Comments	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Transport Prints	1.00	11-21-21-6	16 2 20 14
NCIMWZ	P	CIMWI			
NCZMWZ	N	1611			
NCZMWZ	v.				

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Eurofins TestAmerica, Cedar Falls

4/27/2021

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neurofins 🔆

Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client information		ME THE SENDENCE OF THE SENDENC
Client: UMana P	ublic fow	ex .
City/State: CITDMANA	STATE	Project: Nelstaska City
Date/Time Received: DATE	13 21 093	Received By:
Delivery Type: Dups Lab Courier		FedEx Ground US Mail Spee-De
Condition of Cooler/Containers	~	The state of the s
Sample(s) received in Cooler?	Yes No	If yes: Cooler ID:
Multiple Coolers?	Yes No	If yes: Cooler # 2 of 5
Cooler Custody Seals Present?	Yes No	If yes: Cooler custody seals intact? Yes \(\subseteq No
Sample Custody Seals Present	7 Yes No	If yes: Sample custody seals intact? Yes No
Trip Blank Present?	Yes No	If yes: Which VOA samples are in cooler? ↓
Thermometer ID: *Temp,Blank-Temperature — If no.	emp blank, ör temp blank te	Correction Factor (°C): +O.
Uncorrected Temp (°C):	06	Corrected Temp (°C): h 7
 Sample Container Temperature 		the printer the transfer of the first of the contract of the c
Container(s) used:	INER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		
Exceptions Noted	45-10-45-2	STREET, STREET
 If temperature exceeds criteria a) If yes: Is there evidence 		
 If temperature is <0°C, are the (e.g., bulging septa, broken/c 	ere obvious signs that racked bottles, frozen	the integrity of sample containers is compromised? solid?) Yes No
Note: If yes, contact PM before	proceeding. If no, proce	ed with login
MW13	34 K 34 S S	MWIH
Dup 1		·
NCIMWY		

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Eurofins TestAmerica, Cedar Falls

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

Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client: DAAAAA	V. 1012	Live		Bel. E	数据是一个方式的
City/State: CITY PARA	- Public	STATE	A		
Receibuliformation	M	NO	Project: //	DIASTA CI	ily
	MT4/13/21	109	Received By:	() M)	att. L. de
Delivery Type: Dups	FedEx	- 1	☐ FedEx Ground	□ US Mail	□ Snee-De
☐ Lab (Courier Lab Fi	eld Services			□ shee-pe
Sample(s) received in Co	ooler? Yes	□No	If yes: Cooler ID:	a single of Appropriate services	THE RESERVE OF THE PERSON
Multiple Coolers?	Yes	□ No	If yes: Cooler # _	E of 5	
Cooler Custody Seals Pre	esent? Yes	□ No			Yes No
Sample Custody Seals Pr	resent? Yes	No	If yes: Sample cus	tody seals intact?[☐ Yes ☐ No
Trip Blank Present?	☐ Yes	No			
Coolant:	Blue ice	Dry ice	Correction Factor (*	'c): +1).]
Uncorrected Temp (°C):	- 0.9	7	Corrected Temp (°C	;):	0.4
:Sample Container Lember Container(s) used:	CONTAINER 1	11/2/3/4/5/1			以外基数 44.00000000000000000000000000000000000
Uncorrected Temp (°C):				ř.	
Corrected Temp (°C):					
	6.5.10mm 中的主张	有一种工作。	Server and the server	VERY AND CHEST OF THE	P TURBORES CHIP PORC
1) If temperature exceeds	criteria, was samp	ole(s) receiv	ed same day of samp		□No
a) If yes: Is there evid	ence that the chill	ing process	FedEx Ground US Mail Spee-Dee Prices Client Drop-off Other:		
2) If temperature is <0°C, (e.g., bulging septa, bro	oken/cracked bottl	es, frozen s	olid?)	☐ Yes	□ No
NOTE: If yes, contact PM	before proceeding.	If no, procee	d with login	TOTAL BUT VEST SERVICE	E ANGELONIA ANTONIO
NC	MIJO	1 March 1 7 July 1	70, 24 W	23 10 21 27 10 2 3	Carried Co. All
NCA	Mula				
NOIT	1103				
1.0					

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Mormation Able Power District 16th Street Mail 9E/EP1 16th Street Mail 9E/EP1 2247 25515 City Station Unit 1 CORV.anditii City Station Unit 1	Sample Type (Cecomp, (Cecomp, Gegrab) Preserva	The Part of the Pa	X Description Michigan Pres or No.) See See	2515 Seriel 9320 Radium 226+228 Combined	R R R R R R R R R R R R R R R R R R R	Clarer Tracking Metal.	DOC No. 1 Page: An A-HCI A-HCI A-HCI B-NACH B-NACH C-ZA-Acatala
Promise Total See East 5 Total Requested (day) Total Total See East 6 Total Total Total See East 6 Total Total Total Total See East 6 Total Total Total Total East 6 Total East 6	Sample Type Type (Cacomp, Cacomp, Caco	Company Comp	Perform MSMARIP (Year or No.) Perform MSMARIP (Year or No.) American MSMARIP (Year or No.) American Colfuring 132 Lier; American Colfuring 132 Lier; American Colfuring 132 Lier;	8315 and 8320 Radium 228-228 Combined	nalysis Requeste	2	Property A + Hot. Preservation Code A + Hot. - A - A - A - A + Hot. - A - A - A - A + Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A - A - Hot. - A - A - A -
men District Don Oth Requested (day of Part Red (day of	Sample Type (Cocomp, Gegrab) Preserve	S O O O O O O O O O	Attached CCRUTile 132 Liet, 7470A Meroury, See Attached CCRUTile 132 Liet, 7470A Meroury, See	S315 and 9320 Redshum 238+228 Combined	nalysis Requeste	De la companya de la	Job 8: Preservation Code Preservation Code 1: A - HCL - A - HCL
TAT Requested (day for the first fir	Sample Type (Cocomp. Gagrab) Preserve	(o) Yo so Y) element Sample (Yes or No)	➤ D Attached CCRVTRib 132 List, 7470A Moroury, See	benidmod 825+855 Redium 226+228 Combined			Preservation Code A - HCL B - Nector C - My Assistance C - My Assi
TAT Requestrial (day for the form of the f	Sample Type Type Cacomp, Gagrab) Preserva	(oN no set) eligened benefilit bleft X 3	X D 6030A Total Metals CCR/Title 132 List, 7470A Mercury, See	POLIS AND	*		A - HCL. 2 - Model C - Sh - Model C - Sh - Model F - Medyl H - Model H - Model H - Model L - EDA Other:
MO.s. With a CC-Rit, and fill 1 Secure	Sample Type (Creome, Gagrab) Preserve	(oli no self) eliginad Berralia biel S 3	Attached CCRTINe 132 Llet Attached CCRTINe 132 Llet	Secretary and an experience of the control of the c			D. Nither, And D. Nither, And D. Nither, And D. Nither, And P. Marson H. Ascentie And J. Di Water K. EDTA Other:
CCPL andfill 31007559 SSOWe Sample Date	Sample Type Geromp	(off no set) eligned benefit? biel?	X D Attached CCRVTine 132 Liet	AND THE PERSON NAMED IN PARTY OF PERSONS ASSESSED.			F - MeOH G - Amother And H - Ascente And J - Di Water K - EDTA K - EDTA Gliber:
CCPL andfill Teuhonica Project 9 Search Date Sample Date \$ \$\text{Sample Date}\$	Sample Type (Cacomp, Gegrab) Preserve	(oil no sey) eliqued benefilit bleiq X 3	X D Attached CCRVTitle 132 Liet				H - Ascorbie Acid - Asid - Di Wester K - EDTA L - EDA Other:
CCR0, andfill Treshversa Project 9 550 vm 650 vm 65	Sample Type (Cecomp, Gegrab) Preserva	seV) elqmed benefilit bleft X 3	X D 6920A Total Metals CCRTRile 132 Liet				K - EDA L - EDA Other:
Sample Date	Sample Type (Cacomp, Gagrab) Preserva	olyme8 benefit! bleft X 3	X D Stracted CCRUTRe 132				Other:
Sample Date	Sample Type (C=comp, G=grab) Preserva	benefiti bieff X X 3	X D Attached CCRVTI	A SECURITION OF THE PARTY			o sequini
W/3/01	Preserva G	X 2 2	Ω×				
11/2/3/1				15		+	Special Instructions/Note:
		T	-				See armit me Har toy uppermen
18:50 KIBS		N.	×	-			4 See-olesses all Exceptable
	O	×	×	×			6 Generalization TOC SCHOOLSHAME SPACE
4(3) (30)	ø	×	×	×			4 See alterbandelet for spooffermetres
a) / (1/2) / (1/2)	0	×	×	×			4 Greenwastad 181 for specific
MW14 14011 1401	9	Z	×	×			4 San allochestintine apacitics
- KİZIY -	o	×	×	×			4 Americanish for specific blocks
ant Doison B Unknown	Radiological	- 00	Sample Di	Sposel (A I	fee may be assussed	d if samples are re	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
, III, IV, Other (specify)		U)	pecial Ins	tructions/QC	Special Instructions/QC Requirements:	D) 190	Auditive For
d by:		Time:		-	Met	Method of Shipment:	
4 H 1 3 cou	1700 CE	Caro	Parceling	1	+ 1/4	0910/Time 0910/10/10/10	20ry 1440 Company
V sals Intect: Custody Seal No.:				1000	Coler Ton Section (s) "C and Gener Remain."	Child.	(24093) Company

Page 28 of 29

4/27/2021

Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-204263-1 SDG Number:

List Source: Eurofins TestAmerica, Cedar Falls

Login Number: 204263 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	

Eurofins TestAmerica, Cedar Falls
Page 29 of 29
4/27/2021

N/A

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-204263-2

Client Project/Site: Nebraska City Unit 1 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: 5/17/2021 2:44:15 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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
Λ	Project/Site: Nebraska City Unit 1 CCR/Land

Laboratory Job ID: 310-204263-2

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
	5
Definitions	12
QC Sample Results	13
QC Association	16
Chronicle	17
Certification Summary	19
Method Summary	20
Chain of Custody	21
Receipt Checklists	25
Tracer Carrier Summary	27

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

Job ID: 310-204263-2

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-204263-2

Comments

No additional comments.

Receipt

The samples were received on 4/14/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.8° C, -0.4° C and 0.7° C.

RAD

Method 9320: Radium 228 prep batch 160-506619

The LCS recovered at (128%) for (Ra228). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (61-138) per method requirements. The LCS passes, no further action is required (LCSD 160-50661912-A)

Method PrecSep_0: Radium 228 Prep batch 160-506115:

The following samples were prepared at a reduced aliquot due to Matrix: NC1MW4 (310-204263-3), MW11 (310-204263-5) and MW14 (310-204263-6).

Method PrecSep_0: Radium 228 Prep Batch 160-506115:

During the in-growth process, the following samples needed to be filtered due to sediment present in the sample: NC1MW2 (310-204263-1) and MW11 (310-204263-5). This is an indicator of matrix interference.

Method PrecSep-21: Radium 226 Prep Batch 160-506114:

The following samples were prepared at a reduced aliquot due to Matrix: NC1MW4 (310-204263-3), MW11 (310-204263-5) and MW14 (310-204263-6).

Page 3 of 27

Method PrecSep-21: Radium 226 Prep Batch 160-506114:

During the in-growth process, the following samples needed to be filtered due to sediment present in the sample: NC1MW2 (310-204263-1) and MW11 (310-204263-5). This is an indicator of matrix interference.

Sample Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

Lab Sample ID Client Sample ID Collected Received 310-204263-1 NC1MW2 Water 04/13/21 10:47 04/14/21 09:30 310-204263-2 NC1MW3 Water 04/13/21 12:22 04/14/21 09:30 310-204263-3 NC1MW4 04/14/21 09:30 Water 04/13/21 11:29 310-204263-4 NC1MW9 Water 04/13/21 13:01 04/14/21 09:30 310-204263-5 MW11 04/13/21 10:10 04/14/21 09:30 Water 310-204263-6 MW14 Water 04/13/21 11:01 04/14/21 09:30 310-204263-7 DUP1 04/13/21 00:00 04/14/21 09:30 Water

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Eurofins TestAmerica, Cedar Falls 5/17/2021 Page 4 of 27 5/17/2021

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			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public F roject/Site: Nebraska		Very and the second							Job ID: 310-2	04263-2
Client Sample ID:	NC1MW2							Lab Samp	le ID: 310-20	4263-1
ate Collected: 04/13/	/21 10:47								Matri	x: Water
late Received: 04/14/	21 09:30									
Method: 9315 - Radi	um-226 (GFF	C)								
		12.	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0410	Ü	0.0816	0.0816	1.00	0.146	pCi/L	04/19/21 11:16	05/11/21 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		40 - 110					04/19/21 11:16	05/11/21 09:59	1
Method: 9320 - Radi	um-228 (GFF	(C)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.511	30	0.259	0.263	1.00	0.374	pCi/L	04/19/21 11:53	05/06/21 14:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5	-	40 - 110					04/19/21 11:53	05/06/21 14:25	1
Y Carrier	90.1		40 - 110					04/19/21 11:53	05/06/21 14:25	1
Carrier Control of the Control of th										
Method: Ra226_Ra2	28 - Combine	ed Radium-								
			Count	Total						
			Uncert.	Uncert.						
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL		7	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.552		0.272	0.275	5.00	0.374	pCi/L		05/11/21 23:07	1

			Clie	nt Samp	e Resu	ilts				
lient: Omaha Public F roject/Site: Nebraska				:5					Job ID: 310-2	04263-2
Client Sample ID: Pate Collected: 04/13/ Pate Received: 04/14/	21 12:22							Lab Samp	le ID: 310-20 Matrix	4263-2 c: Water
Method: 9315 - Radio	um-226 (GFF	C)								
Analyte		Qualifier	Count Uncert.	Total Uncert.	RL	MDC		Prepared	Analyzed	Dil Fac
Radium-226	0.262	Qualifier	(2 0+/-) 0.135	(2 0+/-) 0.137	1.00	0.175		04/22/21 18:34	05/14/21 20:40	Dil Fac
Carrier	%Yield	Qualifier	Limits		1.33	30,000	port	Prepared	Analyzed	Dil Fac
Ba Carrier	80.6	-	40 - 110					04/22/21 18:34	05/14/21 20:40	1
Method: 9320 - Radio	um-228 (GFF	PC)	Maril 1980's							
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier			RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result 0.481	Qualifier	Uncert.	Uncert.	RL 1.00	The state of the s	The state of the s	Prepared 04/22/21 19:47	Analyzed 05/10/21 13:10	Dil Fac
Radium-228 Carrier	0.481 %Yield		Uncert. (2σ+/-) 0.279	Uncert. (2σ+/-)	652,00	The state of the s	The state of the s	04/22/21 19:47 Prepared	05/10/21 13:10 Analyzed	Dil Fac
Radium-228 Carrier Ba Carrier	%Yield 80.6		Uncert. (2σ+/-) 0.279 Limits 40 - 110	Uncert. (2σ+/-)	652,00	The state of the s	The state of the s	04/22/21 19:47 Prepared 04/22/21 19:47	05/10/21 13:10 Analyzed 05/10/21 13:10	1
Radium-228 Carrier Ba Carrier	0.481 %Yield		Uncert. (2σ+/-) 0.279	Uncert. (2σ+/-)	652,00	The state of the s	The state of the s	04/22/21 19:47 Prepared	05/10/21 13:10 Analyzed	1 Dil Fac
Radium-228 Carrier Ba Carrier Y Carrier	0.481 %Yield 80.6 88.2	Qualifier	Uncert. (2σ+/-) 0.279 Limits 40 - 110 40 - 110	Uncert. (2σ+i-) 0.283	652,00	The state of the s	The state of the s	04/22/21 19:47 Prepared 04/22/21 19:47	05/10/21 13:10 Analyzed 05/10/21 13:10	Dil Fac
Radium-228 Carrier Ba Carrier Y Carrier	0.481 %Yield 80.6 88.2	Qualifier	Uncert. (2σ+/-) 0.279 Limits 40 - 110 40 - 110 226 and Rad Count	Uncert. (2σ+/-) 0.283 ium-228 Total	652,00	The state of the s	The state of the s	04/22/21 19:47 Prepared 04/22/21 19:47	05/10/21 13:10 Analyzed 05/10/21 13:10	Dil Fac
Carrier Ba Carrier	9.481 %Yield 80.6 88.2 28 - Combine	Qualifier	Uncert. (2σ+/-) 0.279 Limits 40 - 110 40 - 110	Uncert. (2σ+i-) 0.283	652,00	The state of the s	pCi/L	04/22/21 19:47 Prepared 04/22/21 19:47	05/10/21 13:10 Analyzed 05/10/21 13:10	Dil Fac

Eurofins TestAmerica, Cedar Falls Eurofins TestAmerica, Cedar Falls

Page 5 of 27 Page 6 of 27 5/17/2021 5/17/2021

ient: Omaha Public Po				nt Samp	le Resi	ilts			Job ID: 310-2	04263-2
Project/Site: Nebraska (City Unit 1 C	CR/Landfill								
Client Sample ID: Note that Collected: 04/13/20 ate Received: 04/14/2	11 11:29							Lab Samp	le ID: 310-20 Matri	4263-3 x: Water
Method: 9315 - Radiu	m-226 (GFF	PC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.151	U	0.150	0.150	1.00	0.236	pCi/L	04/19/21 11:16	05/11/21 10:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier Method: 9320 - Radiu	83.3 m-228 (GFF	(C)	40 - 110					04/19/21 11:16	05/11/21 10:00	1
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0263	U	0.280	0.280	1.00	0.514	pCi/L	04/19/21 11:53	05/06/21 14:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.3		40 - 110					04/19/21 11:53	05/06/21 14:34	1
Y Carrier	90.5		40 - 110					04/19/21 11:53	05/06/21 14:34	1
Method: Ra226_Ra22	8 - Combine	ed Radium-	226 and Rad	ium-228						
			Count	Total						
			Uncert.	Uncert.						
Analyte		Qualifier	(2σ+/-)	(2σ+/-)	RL		7	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.151	u	0.318	0.318	5.00	0.514	pCi/L		05/11/21 23:09	1

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public I						Job ID: 310-204263-2				
roject/Site: Nebraska	City Unit 1 C	CR/Landfill								
lient Sample ID:	NC1MW9							Lab Samp	le ID: 310-20	4263-4
ate Collected: 04/13									Matri	x: Water
ate Received: 04/14	/21 09:30									
Method: 9315 - Radi	um-226 (GFF	PC)								
		4	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.119	0.119	1.00	0.195	pCi/L	04/19/21 11:16	05/11/21 10:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier	73.9	-	40 - 110					04/19/21 11:16	05/11/21 10:00	1
Method: 9320 - Radi	um-228 (GFF	PC)								
monitori vozo i ina			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.104	U	0.260	0.260	1.00	0.451	pCi/L	04/19/21 11:53	05/06/21 14:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.9		40 - 110					04/19/21 11:53	05/06/21 14:34	1
Y Carrier	89.0		40 - 110					04/19/21 11:53	05/06/21 14:34	1
		10.0	000 15							
Method: Ra226_Ra2	28 - Combin	ed Radium-								
			Count	Total						
4004-400	72200000		Uncert.	Uncert.	-		12.00	1200000000	12/19/2005/2007	
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

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Eurofins TestAmerica, Cedar Falls

Page 7 of 27 5/17/2021 Page 8 of 27 5/17/2021

Combined Radium 226 + 228 0.205 U

0.286

0.286

5.00

0.451 pCi/L

05/11/21 23:07

			Clie	nt Samp	le Resi	ults				
lient: Omaha Public F roject/Site: Nebraska									Job ID: 310-2	04263-2
Client Sample ID: Pate Collected: 04/13/ Pate Received: 04/14/	/21 10:10							Lab Samp	le ID: 310-20 Matri	4263-5 x: Water
Method: 9315 - Radi	um-226 (GFF	C)								
	2000 00	Rof 905000	Count Uncert.	Total Uncert.						
Analyte		Qualifier	(2σ+/-)	(20+/-)	RL	MDC	0.5000000	Prepared	Analyzed	Dil Fac
Radium-226	0.216	U	0.164	0.165	1.00	0.241	pCi/L	04/19/21 11:16	05/11/21 10:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier	82.4		40 - 110					04/19/21 11:16	05/11/21 10:00	1
Method: 9320 - Radii	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	-	Prepared	Analyzed	Dil Fac
Radium-228	0.353	U	0.341	0.342	1.00	0.550	pCl/L	04/19/21 11:53	05/06/21 14:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.4		40 - 110					04/19/21 11:53	05/06/21 14:34	1
Y Carrier	89.3		40 - 110					04/19/21 11:53	05/06/21 14:34	1
Method: Ra226_Ra2	28 - Combine	ed Radium-	226 and Rad Count Uncert.	ium-228 Total Uncert.						
Analyte	Result	Qualifier	(20+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.570		0.378	0.380	5.00	0.550	pCl/L		05/11/21 23:07	1

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public P		Market 19 To 1							Job ID: 310-2	04263-2
roject/Site: Nebraska	City Unit 1 C	CR/Landfill								
lient Sample ID: I	MW14							Lab Samp	le ID: 310-20	4263-6
ate Collected: 04/13/	21 11:01								Matri	x: Water
ate Received: 04/14/2	21 09:30									
Method: 9315 - Radio	ım-226 (GFF	C)								
		12.	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.423	9 88	0.175	0.180	1.00	0.191	pCi/L	04/19/21 11:16	05/11/21 17:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier	78.2	Qualifier	40 - 110					04/19/21 11:16	05/11/21 17:27	1
Method: 9320 - Radio	ım-228 (GFF	C)	20010000	C10400						
			Count	Total						
	925599	Qualifier	Uncert.	Uncert.	-	MDC	Unit	200000	20000000	DV F
Analyte Radium-228	1.09	Qualifier	(2 0+/-) 0.431	(2σ+/-) 0.443	1.00	0.598	-	Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35	Dil Fac
Radium-228	1.09		0.431	0.445	1.00	0.390	POIL	04/19/21 11:53	03/06/21 14.35	3.5
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.2		40 - 110					04/19/21 11:53	05/06/21 14:35	1
Y Carrier	89.7		40 - 110					04/19/21 11:53	05/06/21 14:35	1
Method: Ra226 Ra22	O Combin	ed Badium	226 and Bad	ium 220						
Metriou. Razzo_Razz	20 - Combine	eu Kaulum-	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Milalyte										

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Eurofins TestAmerica, Cedar Falls

Page 9 of 27 5/17/2021 Page 10 of 27 5/17/2021

			Clie	nt Samp	e Resu	ılts				
lient: Omaha Public P roject/Site: Nebraska		THE STATE OF THE S							Job ID: 310-2	04263-2
		GroLandill							- ID. 240 00	1000 7
lient Sample ID: I ate Collected: 04/13/2								Lab Samp	le ID: 310-20	4263-7 x: Water
ate Received: 04/14/2									WELL ST	A. Water
Method: 9315 - Radiu	um-226 (GFF	PC)								
			Count	Total						
	1237 - 03	BH 8000	Uncert.	Uncert.	200	0000000		92 25	02 - 25 - (641)	1277.27
Analyte	111100000000000000000000000000000000000	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	2.5 (00000)	Prepared	Analyzed	Dil Fac
Radium-226	0.217		0.132	0.133	1.00	0.173	pCi/L	04/19/21 11:16	05/11/21 17:27	1
2000000	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Carrier	75 FIEIG									
Carrier Ba Carrier	63.9		40 - 110					04/19/21 11:16	05/11/21 17:27	1
Ba Carrier	63.9		40 - 110					04/19/21 11:16	05/11/21 17:27	1
	63.9	PC)		7				04/19/21 11:16	05/11/21 17:27	1
Ba Carrier	63.9	PC)	Count	Total				04/19/21 11:16	05/11/21 17:27	1
Ba Carrier Method: 9320 - Radiu	63.9 um-228 (GFF	Toward carried late	Count Uncert.	Uncert.	RL	MDC	Unit			
Ba Carrier	63.9 um-228 (GFF	Qualifier	Count		RL 1.00	MDC 0.582	Unit pCi/L	04/19/21 11:16 Prepared 04/19/21 11:53	05/11/21 17:27 Analyzed 05/06/21 14:35	Dil Fac
<i>Ba Carrier</i> Method: 9320 - Radiu Analyte Radium-228	63.9 um-228 (GFF Result 0.261	Qualifier U	Count Uncert. (2σ+/-) 0.349	Uncert. (2σ+/-)	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35	Dil Fac
<i>Ba Carrier</i> Method: 9320 - Radiu Analyte Radium-228 Carrier	63.9 um-228 (GFF Result 0.261 %Yield	Qualifier U	Count Uncert. (2σ+/-) 0.349	Uncert. (2σ+/-)	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier	63.9 Result 0.261 %Yield 63.9	Qualifier U	Count Uncert. (2σ+/-) 0.349 Limits 40 - 110	Uncert. (2σ+/-)	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53 Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed 05/06/21 14:35	Dil Fac
<i>Ba Carrier</i> Method: 9320 - Radiu Analyte Radium-228 Carrier	63.9 um-228 (GFF Result 0.261 %Yield	Qualifier U	Count Uncert. (2σ+/-) 0.349	Uncert. (2σ+/-)	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier	63.9 Result 0.261 %Yield 63.9 90.1	Qualifier U Qualifier	Count Uncert. (2σ+/-) 0.349 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.350	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53 Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed 05/06/21 14:35	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier	63.9 Result 0.261 %Yield 63.9 90.1	Qualifier U Qualifier	Count Uncert. (2σ+/-) 0.349 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.350	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53 Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed 05/06/21 14:35	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier	63.9 Result 0.261 %Yield 63.9 90.1	Qualifier U Qualifier	Count Uncert. (20+1-) 0.349 Limits 40 .110 40 .110 .226 and Rad Count	Uncert. (2σ+/-) 0.350	0.00	11/2/17/20	The state of the s	Prepared 04/19/21 11:53 Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed 05/06/21 14:35	Dil Fac
Ba Carrier Method: 9320 - Radiu Analyte Radium-228 Carrier Ba Carrier Y Carrier	63.9 Result 0.261 %Yield 63.9 90.1 28 - Combine	Qualifier U Qualifier	Count Uncert. (2σ+/-) 0.349 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.350	0.00	11/2/17/20	pCi/L	Prepared 04/19/21 11:53 Prepared 04/19/21 11:53	Analyzed 05/06/21 14:35 Analyzed 05/06/21 14:35	Dil Fac

Definitions/Glossary

Job ID: 310-204263-2

Qualifiers	lebraska City Unit 1 CCR/Landfill
Qualmers	
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.
н	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

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 11 of 27 5/17/2021 Page 12 of 27 5/17/2021

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Not Detected at the reporting limit (or MDL or EDL if shown)

Reporting Limit or Requested Limit (Radiochemistry)

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

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Client: Omaha Public Power District

MQL

NC

ND

NEG

POS

PQL

QC

RER

RPD

TEF

TEQ

TNTC

RL

PRES

					Q	C Samp	le Resul	ts						
ient: Omaha Pu oject/Site: Nebr	Section 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Special Control	ndfill								Job ID: 3	10-20	4263-2
ethod: 9315														
Lab Sample ID:	MR 160.	506114/2	Α.Ε								Client Sa	mple ID: N	lethor	Blank
Matrix: Water	MD 100	30011412	S. Carrie								Oligin On	Prep Ty		
Analysis Batch:	509146											Prep B		
					Count	Total								
			MB		Uncert.	Uncert.								
Analyte Radium-226		0.5137	Qualific	er	(2 0+/-) 0.153	(2 0+/-) 0.159	1.00	100000000000000000000000000000000000000	Unit pCi/L		repared 9/21 11:16	Analyze 05/11/21 1		Dil Fac
Kadium-226		0.5137			0.153	0.159	1.00	0.137	pCirL	04/1	9/21 11:16	05/11/21 1	1:21	
		MB	MB											
Carrier		%Yield	Qualifi	er	Limits					THE REAL PROPERTY.	repared	Analyze	rinciamoralati 1 s	Dil Fa
Ba Carrier		87.0			40 - 110					04/1	9/21 11:16	05/11/21 1	7:27	
Lab Sample ID:	LCS 160	-506114/	1-A							Client	Sample I	D: Lab Co	ntrol S	Sample
Matrix: Water												Prep Ty	/pe: To	otal/NA
Analysis Batch:	509145											Prep B	atch:	506114
							Total							
				Spike		LCS	Uncert.					%Rec.		
Analyte Radium-226			7.0	Added 11.3	Result 11.48	Qual	(2σ+/-) 1.23	1.00	MDC		%Rec 101	75 - 125		
Radium-226				11.3	11,46		1.23	1.00	0.141	pu/L	101	/5 - 125		
	LCS	LCS												
Carrier	%Yield	Qualifier		Limits	2									
Ba Carrier	80.0		- 3	40 - 110										
Lab Sample ID:	LCSD 16	50-50611	4/2-A						Cli	ent Sam	ple ID: La	b Control	Samp	le Dup
Matrix: Water												Prep Ty	/pe: To	otal/NA
Analysis Batch:	509146											Prep B	atch:	506114
							Total							
2002020				Spike		LCSD	Uncert.	24	0.000	22.22	222200	%Rec.	-	REF
Analyte Radium-226				Added 11.3	Result 11.13	Qual	(2σ+/-) 1.20	RL 1.00	MDC 0.137	pCi/L	%Rec 98	75 - 125	0.14	Limi
tadidii-220				11.0	117.19		1.20	1.00	0,131	point	20	10-120	V. 14	3.0
	LCSD													
Carrier	%Yield	Qualifier		Limits										
la Carrier	84.8		(i	40 - 110										
ab Sample ID:	MB 160-	506615/2	23-A								Client Sa	mple ID: N	lethod	Blank
Matrix: Water												Prep Ty		
Analysis Batch:	509878											Prep B	atch:	506615
					Count	Total								
Analyte		MB	MB Qualifie		Uncert.	Uncert.	RL	MDC	Unit		repared	Analyze	ed.	Dil Fa
Analyte Radium-226		0.006772		er —	(2 0+/-) 0.0835	(2 0+/-) 0.0835	1.00		pCi/L	_	2/21 18:34	05/14/21 2	-	Dil Fa
VOULUIII-ZZO					0.0000	0.0030	1.00	0.104	POIL	04/2	LIE 1 10,34	00/14/21 Z	2.21	
		MB												
		%Yield	Qualifi	er	Limits					-	repared	Analyze	01211	Dil Fa
13mm 100mm 000					40 - 110					04/2	2/21 18:34	05/14/21 2	2:27	
Carrier Ba Carrier	- 22	88.5												
3a Carrier	LCS 160		/1-A							Client	Sample I	D: Lab Co	ntrol S	Sample
Ba Carrier	LCS 160		/1-A							Client	Sample I	D: Lab Co Prep Ty		W. Land S. S.
13mm 100mm 000			/1-A							Client	Sample I		/pe: To	otal/NA

(20+/-)

11.3

11.43

Analyte

Radium-226

t-th-d-024	D-4"	- 220	CERCI IC-	41									
Method: 9315	- Radiu	m-226	(GFPC) (Co	ntinued)									
Lab Sample ID:	LCS 160	-506615/	1-A						Clien	it Sample l			
Matrix: Water	. 500540										Prep Ty		
Analysis Batch	: 509542										Prep B	atch:	00001
	LCS	LCS											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	83.0		40 - 110										
Lab Sample ID:	LCSD 16	50-50661	5/2-A					Cli	ent Sar	mple ID: La	b Control	Samp	le Du
Matrix: Water											Prep Ty		
Analysis Batch	: 509542										Prep B		
						Total							
			Spike		LCSD	Uncert.					%Rec.		RE
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	CG25000	%Rec	Limits	RER	Lin
Radium-226			11.3	11.85		1.27	1.00	0.157	pCi/L	105	75 - 125	0.17	
	LCSD	LCSD											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	81.5		40 - 110										
lethod: 9320	Dedic	220	CERCI										
		506115/2 MB	мв	Count Uncert.	Total Uncert.					Client Sa	Prep Ty Prep B	pe: To	otal/N
Analysis Batch		МВ		Count Uncert. (2σ+/-)	Total Uncert. (20+/-)	RL	MDC	Unit	1	Client Sa	Prep Ty	pe: To	otal/N 50611
Analysis Batch Analyte		МВ	мв	Uncert.	Uncert.	RL 1.00	MDC 0.439	20,000,00	- receipt		Prep Ty Prep B	pe: To atch: !	otal/N 50611
Analysis Batch Analyte		MB Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)			20,000,00	- receipt	Prepared	Prep Ty Prep B	pe: To atch: !	otal/N 50611
Analysis Batch Analyte Radium-228 Carrier		MB Result 0.1570 MB %Yield	MB Qualifier U	Uncert. (2σ+/-) 0.260 Limits	Uncert. (2σ+/-)			20,000,00	04/	Prepared 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 14	rpe: To atch: ! d 4:35	otal/N 50611 Dil F
Analysis Batch Analyte Radium-228 Carrier Ba Carrier		MB Result 0.1570 MB %Yield 87.0	MB Qualifier U MB	Uncert. (2σ+/-) 0.260 Limits 40 - 110	Uncert. (2σ+/-)			20,000,00	04/	Prepared 19/21 11:53 Prepared 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 1: Analyze 05/06/21 1:	d 4:35	otal/N 50611 Dii Fa
Analysis Batch Analyte Radium-228 Carrier Ba Carrier		MB Result 0.1570 MB %Yield	MB Qualifier U MB	Uncert. (2σ+/-) 0.260 Limits	Uncert. (2σ+/-)			20,000,00	04/	Prepared 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 14	d 4:35	otal/N 50611 Dil F
Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier	: 508608	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.260 Limits 40 - 110	Uncert. (2σ+/-)			20,000,00	04/ 04/ 04/	Prepared 19/21 11:53 Prepared 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 1- Analyze 05/06/21 1- 05/06/21 1-	rpe: To atch: ! d 4:35	Dil F
Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water	: 508608	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.260 Limits 40 - 110	Uncert. (2σ+/-)			20,000,00	04/ 04/ 04/	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53	Analyze 05/06/21 1- Analyze 05/06/21 1: 05/06/21 1: D: Lab Col	d 4:35 4:35 htrol S	Dil F
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water	: 508608	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.260 Limits 40 - 110	Uncert. (2σ+/-)	1.00		20,000,00	04/ 04/ 04/	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 1- Analyze 05/06/21 1- 05/06/21 1-	d 4:35 4:35 htrol S	Dil F
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water	: 508608	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.260 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.281	1.00		20,000,00	04/ 04/ 04/	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Cool Prep Ty Prep B	d 4:35 4:35 htrol S	Dil Fa
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water Analysis Batch	: 508608	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier	Uncert. (20+f-) 0.260 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.261	Total Uncert.	0.439	PCI/L	04/ 04/ 04/ Clien	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 11:53 11:53	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Coi Prep Ty Prep B	d 4:35 4:35 htrol S	Dil Fa
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID:	: 508608	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.260 Limits 40 - 110 40 - 110	Uncert. (2σ+/-) 0.261	1.00		20,000,00	04/ 04/ 04/ Clien	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Cool Prep Ty Prep B	d 4:35 4:35 htrol S	Dil Fa
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water Analysis Batch	: 508608 : LCS 160	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	pCi/L	04/ 04/ 04/ Clien	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 11:53 11:53 11:53 11:54 11:54	Analyze 05/06/21 1- Analyze 05/06/21 1- D: Lab Col Prep Ty Prep B %Rec. Limits	d 4:35 4:35 htrol S	Dil F
Analysis Batch Analyse Radium-228 Carrier Ba Carrier V Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyte Radium-228	: 508608 : LCS 160 :: 508606	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	pCi/L	04/ 04/ 04/ Clien	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 11:53 11:53 11:53 11:53 11:54 11:54	Analyze 05/06/21 1- Analyze 05/06/21 1- D: Lab Col Prep Ty Prep B %Rec. Limits	d 4:35 4:35 htrol S	Dil Fa
Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyte Radium-228 Carrier	: 508608 : LCS 160 :: 508606	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	pCi/L	04/ 04/ 04/ Clien	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 11:53 11:53 11:53 11:53 11:54 11:54	Analyze 05/06/21 1- Analyze 05/06/21 1- D: Lab Col Prep Ty Prep B %Rec. Limits	d 4:35 4:35 htrol S	Dil Fa
Analyte Radium-228 Carrier Ba Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Ba Carrier Ba Carrier	: 508608 : LCS 160 :: 508606	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	pCi/L	04/ 04/ 04/ Clien	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 11:53 11:53 11:53 11:53 11:54 11:54	Analyze 05/06/21 1- Analyze 05/06/21 1- D: Lab Col Prep Ty Prep B %Rec. Limits	d 4:35 4:35 htrol S	Dil F
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyse Radium-228 Carrier Ba Carrier Ba Carrier Y Carrier	LCS 1606 LCS 508606 LCS %Yield 80.0 90.5	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23 Limits 40.110 40.110	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	MDC 0.480	04/ 04/ Clien Unit pGi/L	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 19/21 11:53 11 Sample II **Rec** 104	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/2	rpe: Total d d d d d d d d d d d d d d d d d d d	Dil F.
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID:	LCS 1606 LCS 508606 LCS %Yield 80.0 90.5	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23 Limits 40.110 40.110	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	MDC 0.480	04/ 04/ Clien Unit pGi/L	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 11:53 11:53 11:53 11:53 11:54 11:54	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Coi Prep Ty Prep B %Rec. Limits 75 - 125	d 4:35 d 4:35 samp	Dil F. Dil F. Samp
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water	LCS 1600 LCS 508606 LCS 508606 LCS 508606	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23 Limits 40.110 40.110	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	MDC 0.480	04/ 04/ Clien Unit pGi/L	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 19/21 11:53 11 Sample II **Rec** 104	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Col Prep Ty Prep B %Rec. Limits 75 - 125	d d d d d d d d d d d d d d d d d d d	Dil F. Dil F. Dil F. Samp ptal/N 50611
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyse Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID: Matrix: Water	LCS 1600 LCS 508606 LCS 508606 LCS 508606	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23 Limits 40.110 40.110	Uncert. (20+/-) 0.260 Limits 40 - 110 40 - 110 LCS Result	Uncert. (2σ+/-) 0.261	Total Uncert. (20+/-) 0.959	0.439	MDC 0.480	04/ 04/ Clien Unit pGi/L	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 19/21 11:53 11 Sample II **Rec** 104	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Coi Prep Ty Prep B %Rec. Limits 75 - 125	d d d d d d d d d d d d d d d d d d d	Dil Fa Dil Fa Dil Fa Samppotal/N 50611
Analysis Batch Analyse Radium-228 Carrier Ba Carrier Lab Sample ID: Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID:	LCS 1600 LCS 508606 LCS 508606 LCS 508606	MB Result 0.1570 MB %Yield 87.0 90.8	MB Qualifier U MB Qualifier 1-A Spike Added 7.23 Limits 40.110 40.110	Uncert. (2a+i-) 0.260 Limits 40 - 110 40 - 110 LCS Result 7.498	Uncert. (2σ+/-) 0.261	1.00 Total Uncert. (2σ+/-)	0.439	MDC 0.480	04/ 04/ Clien Unit pGi/L	Prepared 19/21 11:53 Prepared 19/21 11:53 19/21 11:53 19/21 11:53 11 Sample II **Rec** 104	Prep Ty Prep B Analyze 05/06/21 1- 05/06/21 1- 05/06/21 1- D: Lab Col Prep Ty Prep B %Rec. Limits 75 - 125	d d d d d d d d d d d d d d d d d d d	Dil Fa Dil Fa Dil Fa Samplotal/N 50611

QC Sample Results

Eurofins TestAmerica, Cedar Falls

75 - 125

Radium-228

Eurofins TestAmerica, Cedar Falls

104 75 - 125 0.02

0.441 pCi/L

Page 13 of 27 5/17/2021

0.152 pCi/L

Page 14 of 27

5/17/2021

				Q	C Samp	le Resul	ts					
ent: Omaha Pu											Job ID: 310-	204263-2
oject/Site: Nebi		U.										
ethod: 9320	- Radiu	m-228	(GFPC) (Co	ontinued								
Lab Sample ID:	LCSD 1	60-50611	5/2-A					Cli	ent Samp	ole ID: La	b Control Sar	mple Dup
Matrix: Water											Prep Type:	
Analysis Batch	: 508606										Prep Batcl	h: 506115
	LCSD	LCSD										
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	84.8	-	40 - 110									
Y Carrier	88.6		40 - 110									
	MD 450	F000401										101
Lab Sample ID: Matrix: Water	WB 160-	506619/2	63-A							ment Sa	mple ID: Meth Prep Type:	
Matrix: Water Analysis Batch	508981										Prep Batch	
Allarysis Datcii	. 500501			Count	Total						riep batti	1. 300013
		MB	мв	Uncert.	Uncert.							
Analyte		Result	Qualifier	(20+/-)	(2σ+/-)	RL	MDC	Unit	Pre	pared	Analyzed	Dil Fac
Radium-228		-0.07700	U	0.263	0.263	1.00	0.479	pCi/L	04/22	21 19:47	05/10/21 13:18	1
		MB	мв									
Carrier		%Yield	FATE CONTACT	Limits					Pre	pared	Analyzed	Dil Fac
Ba Carrier		88.5	8 188	40 - 110					-	/21 19:47	05/10/21 13:18	191000100
Y Carrier		91.2		40 - 110					04/22	/21 19:47	05/10/21 13:18	1
Lab Sample ID:	LCS 160	-506619	1-A						Client	Sample I	D: Lab Contro	The Street Street
Matrix: Water	. =00000										Prep Type:	
Analysis Batch	: 506962					Total					Prep Batch	1: 300019
			Spike	LCS	LCS	Uncert.					%Rec.	
Analyte			Added	Result		(2 0+/-)	RL	MDC	Unit	%Rec	Limits	
Radium-228			7.22	8.130		1.03	1.00	0.477	pCi/L	113	75 - 125	
	LCS	LCS										
Carrier		Qualifier	Limits									
Ba Carrier	83.0		40 - 110									
Y Carrier	85.2		40 - 110									
Lab Sample ID:	I CED 4	0 50664	0/2.4					C	ant Carr	de ID: 1 -	h Central Ca	mala Dur
Matrix: Water	LCOD II	00-30061	OIL-M					CI	ent samp	ne ID. La	b Control Sar Prep Type:	A CONTRACTOR OF THE PARTY OF TH
Analysis Batch	508982										Prep Batch	
yolo odtoli	. Journal					Total					1 rep sate	300013
			Spike	LCSD	LCSD	Uncert.					%Rec.	RER

Radium-228

Carrier

Ba Carrier Y Carrier 7.22

Limits

40 - 110

40 - 110

LCSD LCSD %Yield Qualifier

81.5

86.0

9.259

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

Rad

Prep Batch: 506114

Tep baten, south					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Ba
310-204263-1	NC1MW2	Total/NA	Water	PrecSep-21	
310-204263-3	NC1MW4	Total/NA	Water	PrecSep-21	
310-204263-4	NC1MW9	Total/NA	Water	PrecSep-21	
310-204263-5	MW11	Total/NA	Water	PrecSep-21	
310-204263-6	MW14	Total/NA	Water	PrecSep-21	
310-204263-7	DUP1	Total/NA	Water	PrecSep-21	
MB 160-506114/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-506114/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-506114/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 506115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-1	NC1MW2	Total/NA	Water	PrecSep_0	
310-204263-3	NC1MW4	Total/NA	Water	PrecSep_0	
310-204263-4	NC1MW9	Total/NA	Water	PrecSep_0	
310-204263-5	MW11	Total/NA	Water	PrecSep_0	
310-204263-6	MW14	Total/NA	Water	PrecSep_0	
310-204263-7	DUP1	Total/NA	Water	PrecSep_0	
MB 160-506115/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-506115/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-506115/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 506615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-2	NC1MW3	Total/NA	Water	PrecSep-21	1811
MB 160-506615/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-506615/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-506615/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 506619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-204263-2	NC1MW3	Total/NA	Water	PrecSep_0	
MB 160-506619/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-506619/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-506619/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

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Page 15 of 27 5/17/2021

0.536 pCi/L

Page 16 of 27

5/17/2021

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

Matrix: Water

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Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

Client Sample ID: NC1MW2 Date Collected: 04/13/21 10:47 Date Received: 04/14/21 09:30

Client Sample ID: NC1MW3

Date Collected: 04/13/21 12:22

Lab Sample ID: 310-204263-1 Matrix: Water

Lab Sample ID: 310-204263-2

Client Sample ID: MW11 Date Collected: 04/13/21 10:10 Date Received: 04/14/21 09:30 Lab Sample ID: 310-204263-5 Matrix: Water

Batch Dilution Batch Prepared Prep Type Method or Analyzed Type Total/NA 04/19/21 11:16 RBR TAL SI Prep PrecSep-21 506114 Total/NA 05/11/21 09:59 FLC TAL SL Analysis Total/NA Prep PrecSep_0 04/19/21 11:53 RBR TAL SL Total/NA Analysis 9320 508606 05/06/21 14:25 ANW TAL SI Total/NA Ra226 Ra228 509278 05/11/21 23:07 SCB TAL SL Analysis

Batch Dilution Batch Prepared Prep Type Method or Analyzed Type 04/19/21 11:16 RBR TAL SI Total/NA Prep PrecSep-21 506114 Total/NA 9315 509146 05/11/21 10:00 FLC TAL SL Analysis Total/NA Prep PrecSep_0 506115 04/19/21 11:53 RBR TAL SL 508608 05/06/21 14:34 AK Total/NA Analysis 9320 TAL SI Total/NA Ra226 Ra228 509278 05/11/21 23:07 SCB TAL SL Analysis

Lab Sample ID: 310-204263-6 Client Sample ID: MW14 Date Collected: 04/13/21 11:01 Matrix: Water Date Received: 04/14/21 09:30

Lab Chronicle

Date Received: 04/14/21 09:30 Dilution Prep Type Method Factor or Analyzed Total/NA PrecSep-21 506615 04/22/21 18:34 RMW TAL SL Pren Total/NA 05/14/21 20:40 Analysis Total/NA 04/22/21 19:47 RMW Prep PrecSep 0 506619 TAL SI

Dilution Prep Type Type Method Factor or Analyzed Total/NA PrecSep-21 506114 04/19/21 11:16 RBR TAL SL Pren Total/NA 05/11/21 17:27 FLC TAL SL Analysis Total/NA Prep 506115 04/19/21 11:53 RRR TAL SI PrecSep_0 Total/NA Analysis 9320 508608 05/06/21 14:35 AK TAL SL Total/NA Analysis Ra226_Ra228 509278 05/11/21 23:07 SCB TAL SL

Total/NA Analysis 9320 508982 05/10/21 13:10 FLC TAL SL Total/NA Analysis Ra226_Ra228 510105 05/17/21 12:24 GRW Client Sample ID: NC1MW4 Lab Sample ID: 310-204263-3 Date Collected: 04/13/21 11:29 Matrix: Water

Date Collected: 04/13/21 00:00 Date Received: 04/14/21 09:30

Client Sample ID: DUP1 Lab Sample ID: 310-204263-7 Matrix: Water

Batch Batch Dilution Prep Type Method or Analyzed Type Factor Total/NA Prep PrecSep-21 506114 04/19/21 11:16 TAL SL Total/NA Analysis 9315 509146 05/11/21 10:00 FLC TAL SL Total/NA Prep PrecSep 0 506115 04/19/21 11:53 RBR TAL SL Total/NA 9320 508608 05/06/21 14:34 AK TAL SL Analysis Total/NA Ra226 Ra228 509279 05/11/21 23:09 SCB TAL SI Analysis

Batch	Batch		Dilution	Batch	Prepared		
Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Prep	PrecSep-21	-		506114	04/19/21 11:16	RBR	TAL SL
Analysis	9315		1	509146	05/11/21 17:27	FLC	TAL SL
Prep	PrecSep_0			506115	04/19/21 11:53	RBR	TAL SL
Analysis	9320		1	508608	05/06/21 14:35	AK	TAL SL
Analysis	Ra226 Ra228		1	509278	05/11/21 23:07	SCB	TAL SL
	Type Prep Analysis Prep Analysis	Type Method Prep PrecSep-21 Analysis 9315 Prep PrecSep_0 Analysis 9320	Type Method Run Prep PrecSep-21 Analysis 9315 Prep PrecSep_0 Analysis 9320	Type Method Run Factor Prep PrecSep-21 Ferb 1 Analysis 9315 1 1 Prep PrecSep_0 320 1	Type Method Run Factor Number Prep PrecSep-21 506114 Analysis 9315 1 509146 Prep PrecSep_0 506115 506115 Analysis 9320 1 508608	Type Method Run Factor Number or Analyzed Prep PrecSep-21 506114 04/19/21 11:16 Analysis 9315 1 509146 05/11/21 17:27 Prep PrecSep_0 506115 04/19/21 11:53 Analysis 9320 1 508608 05/06/21 14:35	Type Method Run Factor Number or Analyzed Analyst Prep PrecSep-21 506114 04/19/21 11:16 RBR Analysis 9315 1 509146 05/11/21 17:27 FLC Prep PrecSep_0 506115 04/19/21 11:53 RBR Analysis 9320 1 508608 05/06/21 14:35 AK

Client Sample ID: NC1MW9 Date Collected: 04/13/21 13:01

Lab Sample ID: 310-204263-4

Matrix: Water

Date Received: 04/14/21 09:30

Date Received: 04/14/21 09:30

Dilution Prep Type Method or Analyzed Analyst Type Total/NA PrecSep-21 04/19/21 11:16 RBR TAL SL 506114 Prep Total/NA Analysis 05/11/21 10:00 FLC TAL SL Total/NA 04/19/21 11:53 RBR TAL SL Prep PrecSep_0 506115 Total/NA Analysis 9320 508608 05/06/21 14:34 AK TAL SI Total/NA Ra226 Ra228 Analysis 509278 05/11/21 23:07 SCB

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

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Page 17 of 27 5/17/2021 Page 18 of 27 5/17/2021

Accreditation/Certification Summary

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

Job ID: 310-204263-2

Laboratory: Eurofins TestAmerica, 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	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
lowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

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Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

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 TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

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Page 19 of 27 5/17/2021 Page 20 of 27 5/17/2021

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

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Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

Client information	94.00.967.60	COUNTY OF	586.79.15,0	Margaritz no co	1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	34.00	
Client: Dwa ha Pub	ic Pou	DV	244.74.75.75.75	A STATE OF THE PARTY OF THE PAR	7777	4-21, 24	ration .
City/State: City/State:	10	STATE	Project:	1101	- 1	1	
Receipt information	14	llahum		MENON	aska	UY	y
Date/Time Received: DATE	3/21	11593	Received B		h. 🗸	- FLEE SEL	12
Delivery Type: DUPS	☐ FedEx	010	☐ FedEx Gro	1	7/10/14 //		
			s Client Drop		US Mail	П	Spee-Do
Condition of Cooler/Containers	SILSHVIS TO		S Client Drop	0000	Other:		COLOR PROCESS
Sample(s) received in Cooler?	Yes	□ No	If yes: Cool		(大) (1.2.65 g) (1.2.65 g) (2.2.65	City of the	41 4
Multiple Coolers?	Yes	□No	If yes: Cool	er# _	of 5_		
Cooler Custody Seals Present?	Yes	□No	If yes: Coole	er custody s	seals intact?	Yes	□No
Sample Custody Seals Present	? Yes	DANO	If yes: Samp	ole custody	seals intact?	☐ Yes	П No
Trip Blank Present?	Yes	No			ples are in co		
Thermometer ID: Temp Blank Temperature – If no t	Blue ice	☐ Dry ice	Other:_	actor (°C):	+0.	ONE	perature .
Uncorrected Temp (°C):	-0.9	18537	Corrected Te		-0.5	3	
Sample Container Temperature	NINER 1	A PARTIE A	Salayabaya ar a		1 - 1/1851		
Container(s) used:				CONTAINER	₹		
Incorrected Temp (°C):					3		
Corrected Temp (°C):							
xceptions Noted	W. C. J. 1817	17.07 15.	Saff of Saff Sandraid	-17/10/10	10, 10 p. 10 p. 1	1 Francis	
If temperature exceeds criteria a) If yes: Is there evidence to	a, was samp	le(s) recei	ved same day o			□ No	
f temperature is <0°C, are the (e.g., bulging septa, broken/c	ere obvious racked bottle	signs that es, frozen :	the integrity of s solid?)	ample cont	ainers is com	promised No	1?
Note: If yes, contact PM before dditional Comments	proceeding.	If no, procee	ed with login				
NC IMMINO	77 T 584	1) (-	/ MI.T		A HILL IN SUBSEC	7-10 , 400	9
MAZNALD		1000	IMWT				
1 V LAVIUD)	NIW	L/		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		
NUZIMW							

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client information	Pu	blic	Powe	N .	成次就是"在"。	14.似门。门设	5 - (1)	N. Car
City/State: CITY DW	Lha	ob messes	STATE	Project:	Neba	aska Ci	ily	
Date/Time Received:	DATELL	3/2/	993	Received	By:	(M)	4500	
	Courier [eld Services	FedEx Gr	p-off	US Mail		Spee-De
Condition of Cooler/Cont		Mark at	学的种类	Market TE	もまるい。	AND RESIDENCE	5 190	東京の
Sample(s) received in C	ooler?	Yes	☐ No	If yes: Coo	ler ID:			
Multiple Coolers?		Yes	☐ No	If yes: Coo	ler# 2	of 5		
Cooler Custody Seals Pr	resent?	Yes	□ No	If yes: Coo	ler custody	seals intact?	Yes	☐ No
Sample Custody Seals P	resent?	☐ Yes	No	If yes: Sam	ple custod	ly seals intact?[Yes	□ No
Trip Blank Present?		☐ Yes	No	If yes: Which	ch VOA sa	mples are in co	oler? ↓	
Coolant: Wet ice Thermometer ID: Temp Blank Temperature		P P	☐ Dry ice	Other:		: +c	ONE),	
		1	8).]	
Uncorrected Temp (°C):	7 11 110.101	0	I a	Corrected T		h 7	ourier roug	pordiure
Sample Container Tempe	rature	323 1.7	V		martiers, 17 %	· · ·	1 E.T	i.e.
Container(s) used:	CONTAIN	ER 1			CONTAINE	R2		
Uncorrected Temp (°C):								
Corrected Temp (°C):								
Exceptions Noted	77" T. 74"	101, 2 14	5 T	82 m 1 - 1 1 1 - 1	197 38 W	To be design.	15-00-	1 1 1
 If temperature exceeds a) If yes: Is there ev 					of samplin	g? Yes	□ No	
 If temperature is <0°C (e.g., bulging septa, b 	roken/cra	cked bott	les, frozen s	olid?)	sample co	ontainers is com	promise No	
NOTE: If yes, contact PN Additional Comments	before pr	oceeding.	If no, procee	d with login				4
MW13		-		nu)14	,			
Dial	-			,,-0,-1				
Pup	. Ir I							
NOIM	4							

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

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Environment Testing TestAmerica Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Probleman			T. T. Basis Little Basis Little	BONGLOW HAT A GOVERNMENT OF THE
Client: OMahar	Public-	How	ex.	
City/State: CITY DIAN I	14	STATE	Project: 12000846	A1 .
Bicella dillometon	Miles I have been been been been been been been be	NO	Project New lasta	City
Date/Time Received: DATE	4113/21"	THO 9:	Received By:	1
Delivery Type: DUPS	☐ FedEx	- 1	☐ FedEx Ground ☐ US Ma	/
☐ Lab Cou	rier DI ab Field	d Service	s Client Drop-off Other:	™ □ obee-pe
Conclidence Cooler/Contain		PACKET IN		down to the state of the state
Sample(s) received in Cook		□No	If yes: Cooler ID:	
Multiple Coolers?	Yes	□ No	If yes: Cooler # 4 of 5	
Cooler Custody Seals Prese	ent? Yes	□ No	If yes: Cooler custody seals inta-	ct? No
Sample Custody Seals Pres	ent? Yes	No	If yes: Sample custody seals into	act? Yes No
Trip Blank Present?	☐ Yes	No	If yes: Which VOA samples are i	n cooler? 1
Coolant: Wet ice		Dry ice	Other:	
Thermometer ID:	D Dide ice [_ Diy ice	Correction Factor (°C):	NONE
	ADMARKS INCOME A	to Laborate	nperature above criteria proceed to Sample	10.1
Incorrected Temp (°C):	- 05	uth Interes that	Corrected Temp (°C):	-0.4
Sample Container (emperate	reason of the	100 MAY 11		White is a factor of
Container(s) used:	NTAINER 1		CONTAINER 2	
Incorrected Temp (°C):				
Corrected Temp (°C):				
xceptions Noted	10年1日本作业的海岸市	海北州	企业的企业 企业,1975年	SALLY TO SENSO SERVICE
) If temperature exceeds cri a) If yes: Is there eviden	teria, was sample	e(s) receiv	ved same day of sampling?	s 🔲 No
If temperature is <0°C, are (e.g., bulging septa, broke	there obvious si en/cracked bottles	igns that to	the integrity of sample containers is solid?)	
Note: If yes, contact PM bef	ore proceeding. If	no, proces	d with login	
Comments Comments	AL 104	C 2, -65	网络沙漠	多中国建筑的 的。1
100	W			
NOON	1W9			
NCIM	W3			

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

704 Enterprise Drive Cadar Falls. IA 50613 Phone (319) 277-2401 Fax (319) 277-2425		Chain of Custody Record	of Cus	tody R	900	5	9	stAme	288 288	lestAmerica Omaha SC 288	0	lestAmerico	erico
Client Information	Sample: Kyle K. Uhing			Lab PM Hayes	Lab PM: Hayes, Shawn M	Mnw			Camer	Camer Tracking No(s)		ODC No	
Chert Contact Kyle Uhing	Phone (531) 226-2515			E-Mail: shawr	n.haye	s@tests	E-Mait: shawn, hayes@testamericainc.com	C.com	Г			Page	
Company Omaha Public Power District								Analysis Requested	Reguest	pa		Job #:	
Address: 444 South 16th Street Mall 9E/EP1	Dus Date Requested	ad:				-	E	E	F	E	E	Preservation Codes:	l
City: Omaha	TAT Requested (days):	nta):				nul' ge			- 110		_		aname and
State, Zip.: NE, 68102-2247						DJOJOH V						C - Zn Acetale O - Au D - Nitric Acid P - Ni	O - Asharoz P - Nazioes
Phone: (531) 226-2515	₩ОМ					Julius	peujo						R - National
Email: Skuhingi@oppd.com	WOW					nouge	amoð i						T - TSP Dodepahycess U - Acetime
Project Name Nebraska City Station Unit 1 CCR/Landfill	TestAmerica Project #. 31007559	18			Yes or h		126+221					K-EDTA L-EDA	W-ph 4-8 Z-other (spently)
Site Nebraska City Station Unit 1	SSOWE				भग्ने वर	261 40	unge					Other:	
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (remain: prests; Oversite)	benetii? bie! MMBM miojne	029A Total Meti mached CCR/TI 549C TDS, 9056	A osee bins 215					o sedmuki lasc	
	\ \	X	Preserval	Preservation Code:		V	-	-	+		+	Special Instructions/Note:	ons/Note:
NCIMW2	W-Slat	14:01	9	×	Z	-			-		1	See aconcline has has upper	introduce.
NC1MW3	76 5 JA	13-33	o	W	z	×	×	F	F			4 Com-chaeping SALTER Spatters	- Complete
NC1MW4	4634	PG://	O	A	Z	×	×		F			4 Generalization TOT Specific Managers 4	Electricity of the
NCIMWB	16/31	13:01	0	W	z	×	×		-		-	4 See altechnolistic specific smelyes	Campbel.
MWII	1861/	00 00	0	×	2	×	×		F	F		4 Georgian St. for sprent, magain	- Canadana
MW14	1461.W	10:11	9	W	z	×	×		F		-	San allocherforties apacific action	Name of Street
DUP1	141331	1	o	W	z	×	×				-	4 Several September 1	- 840089
Boosthie House of the sife of					\vdash	H			-		+		
Non-Hazard Flammable Skin fritari	Polson B Unknown		Radiological		Sam	ple Dis Retur	posal (A	fee may b	Disposa	d if sample: By Lab	are retain	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	EQ.
Empty Kit Relinquished by:		Date:			Time:	ngui ingr	ncsousk	special instructions/QC Requirements:		Method of Shament	1		
Refinguished by	HOCK!H		部計	7/		Sacolvol by	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	Date	Date/firms	Itatio	1
Relimparathed by	4.13.20U	17	1700	Company 10		Radford B				Date/		1440	Campary
Custody Seals Intact: Custody Seal No.:	Name in the			Sombany			100	Tard Inghon	1111	27	C/h/l/2	1093 Commen	A
A Yes A No									2				

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-204263-2

SDG Number:

List Source: Eurofins TestAmerica, Cedar Falls

Login Number: 204263 List Number: 1 Creator: Homolar, Dana J

Sample bottles are completely filled.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

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

Containers requiring zero headspace have no headspace or bubble is

Sample Preservation Verified.

Residual Chlorine Checked.

MS/MSDs

<6mm (1/4").

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	

True

True

True

True

True

True

N/A

Login Sample Receipt Checklist

Client: Ornaha Public Power District Job Number: 310-204263-2
SDG Number:

Login Number: 204263
List Source: Eurofins TestAmerica, St. Louis
List Number: 2
List Creation: 04/15/21 01:00 PM

Creator:	Worthington, Sierra	M
Question	1	

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

 Eurofins TestAmerica, Cedar Falls
 Eurofins TestAmerica, Cedar Falls
 Eurofins TestAmerica, Cedar Falls
 Page 25 of 27
 5/17/2021

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12



Tracer/Carrier Summary

Client: Omaha Public Power District Project/Site: Nebraska City Unit 1 CCR/Landfill Job ID: 310-204263-2

Method: 9315 - Radium-226 (GFPC)

	 -	1	
Matrix: Water			

Prep	Type:	Total/NA	

			Percent Yield (Acceptance Limits)
		Ba	
Lab Sample ID	Client Sample ID	(40-110)	
310-204263-1	NC1MW2	84.5	
310-204263-2	NC1MW3	80.6	
310-204263-3	NC1MW4	83.3	
310-204263-4	NC1MW9	73.9	
310-204263-5	MW11	82.4	
310-204263-6	MW14	78.2	
310-204263-7	DUP1	63.9	
LCS 160-506114/1-A	Lab Control Sample	80.0	
LCS 160-506615/1-A	Lab Control Sample	83.0	
LCSD 160-506114/2-A	Lab Control Sample Dup	84.8	
LCSD 160-506615/2-A	Lab Control Sample Dup	81.5	
MB 160-506114/23-A	Method Blank	87.0	
MB 160-506615/23-A	Method Blank	88.5	

Method: 9320 - Radium-228 (GFPC)

Tracer/Carrier Legend Ba = Ba Carrier

Matrix: Water

Prep Type: Total/NA

				Percent Yield (Acceptance Limits)
		Ва	Y	
Lab Sample ID	Client Sample ID	(40-110)	(40-110)	
310-204263-1	NC1MW2	84.5	90.1	
310-204263-2	NC1MW3	80.6	88.2	
310-204263-3	NC1MW4	83.3	90.5	
310-204263-4	NC1MW9	73.9	89.0	
310-204263-5	MW11	82.4	89.3	
310-204263-6	MW14	78.2	89.7	
310-204263-7	DUP1	63.9	90.1	
LCS 160-506115/1-A	Lab Control Sample	80.0	90.5	
LCS 160-506619/1-A	Lab Control Sample	83.0	85.2	
CSD 160-506115/2-A	Lab Control Sample Dup	84.8	88.6	
LCSD 160-506619/2-A	Lab Control Sample Dup	81.5	86.0	
MB 160-506115/23-A	Method Blank	87.0	90.8	
MB 160-506619/23-A	Method Blank	88.5	91.2	

Tracer/Carrier Legend Ba = Ba Carrier

Y = Y Carrier

Eurofins TestAmerica, Cedar Falls

5/17/2021

Page 27 of 27



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-216812-1

Client Project/Site: Nebraska City Station 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

Authorized for release by: 10/25/2021 6:19:26 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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
n	Project/Site: Nebraska City Station Unit 1/2 CC

Laboratory Job ID: 310-216812-1

Table of Contents

Sover 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	13
Certification Summary	14
Method Summary	15
Chain of Custody	16
Receipt Checklists	18

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-1

Job ID: 310-216812-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-216812-1

Comments

No additional comments.

Receipt

The samples were received on 10/7/2021 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° 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 Job ID: 310-216812-1

Lab Sample ID Client Sample ID Collected Received 310-216812-1 NC2MW4 Water 10/04/21 10:53 10/07/21 09:40 310-216812-2 MW13 Water 10/04/21 09:59 10/07/21 09:40

Detection Summary

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

ID:	310-216812-1	

Ne-space								
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	4.86	J	5.00	2.15	mg/L	5	9056A	Total/NA
Sulfate	62.6		5.00	2.45	mg/L	5	9056A	Total/NA
Arsenic	0.00275		0.00200	0.000750	mg/L	1	6020A	Total/NA
Barium	0.420		0.00200	0.000370	mg/L	1	6020A	Total/NA
Beryllium	0.000571	J	0.00100	0.000270	mg/L	1	6020A	Total/NA
Boron	0.119		0.100	0.0580	mg/L	1	6020A	Total/NA
Cadmium	0.000469		0.000100	0,0000510	mg/L	1	6020A	Total/NA
Calcium	128		0.500	0.190	mg/L	1	6020A	Total/NA
Chromium	0.00110	J	0.00500	0.00110	mg/L	1	6020A	Total/NA
Cobalt	0.00203		0.000500	0.000190	mg/L	1	6020A	Total/NA
Lead	0.00610		0.000500	0.000210	mg/L	1	6020A	Total/NA
Lithium	0.0324		0.0100	0.00250	mg/L	1	6020A	Total/NA
Molybdenum	0.00154	J	0.00200	0.00130	mg/L	1	6020A	Total/NA
Selenium	0.00391	J	0.00500	0.000960	mg/L	1	6020A	Total/NA
Thallium	0.000527	J	0.00100	0.000260	mg/L	1	6020A	Total/NA
Total Dissolved Solids	486		50.0	26.0	mg/L	1	SM 2540C	Total/NA

Client Sample ID: MW13	Lab Sample ID: 310-216812-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11.5		5.00	2.15	mg/L	5	-	9056A	Total/NA
Sulfate	47.4		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.0402		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.257	F1	0.00200	0.000370	mg/L	1		6020A	Total/NA
Boron	0.105		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	126		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00102		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0330		0.0100	0.00250	mg/L	1		6020A	Total/NA
Total Dissolved Solids	510		50.0	26.0	mg/L	1		SM 2540C	Total/NA

Client Sample Results

4.86 J

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

Lab Sample ID: 310-216812-1

Job ID: 310-216812-1

Client Sample ID: NC2MW4 Date Collected: 10/04/21 10:53

Chloride

Matrix: Water

10/12/21 03:23

Date Received: 10/07/21 09:40 Method: 9056A - Anions, Ion Chromatography Analyzed

Onionac	4.00								
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 03:23	5
Sulfate	62.6		5.00	2.45	mg/L			10/12/21 03:23	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00110	-	0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 18:46	1
Arsenic	0.00275		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 18:46	1
Barium	0.420		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 18:46	1
Beryllium	0.000571	J	0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 18:46	1
Boron	0.119		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 18:46	31
Cadmium	0.000469		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 18:46	1
Calcium	128		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 18:46	1
Chromium	0.00110	J	0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 18:46	31
Cobalt	0.00203		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 18:46	1
Lead	0.00610		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 18:46	31
Lithium	0.0324		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 18:46	- 1
Molybdenum	0.00154	J	0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 18:46	31
Selenium	0.00391	J	0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 18:46	1
Thallium	0.000527	J	0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 18:46	1

5.00

MDL Unit

2.15 mg/L

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Mercury	<0.000150		0.000200	0.000150	mg/L		10/11/21 11:22	10/12/21 11:06	

П	General Chemistry									
ı	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Total Dissolved Solids	486		50.0	26.0	mg/L			10/08/21 15:24	1

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 5 of 18

10/25/2021

Page 6 of 18

10/25/2021

Client	Sample	Results
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		Clien	t Sample	Results	5				
Client: Omaha Public Power District Project/Site: Nebraska City Station Ur	nit 1/2 CCR							Job ID: 310-2	16812-1
Client Sample ID: MW13							Lab Samp	le ID: 310-21	6812-2
Date Collected: 10/04/21 09:59								Matri	x: Water
Date Received: 10/07/21 09:40								1000	
Method: 9056A - Anions, Ion Chror									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.5		5.00	2.15	mg/L			10/12/21 03:39	5
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 03:39	5
Sulfate	47.4		5.00	2.45	mg/L			10/12/21 03:39	5
Method: 6020A - Metals (ICP/MS)	-				- CARDONIC			140004000411	-
Analyte	10000000	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Antimony	<0.00110		0.00200	0.00110			10/08/21 09:00	10/22/21 18:49	1
Arsenic	0.0402		0.00200	0.000750	9.7		10/08/21 09:00	10/22/21 18:49	1
Barium	0.257	F1	0.00200	0.000370	-		10/08/21 09:00	10/22/21 18:49	1
Beryllium	<0.000270		0.00100	0.000270			10/08/21 09:00	10/22/21 18:49	1
Boron	0.105		0.100	0.0580	200		10/08/21 09:00	10/22/21 18:49	3
Cadmium	<0.0000510		0.000100	0.0000510			10/08/21 09:00	10/22/21 18:49	1
Calcium	126		0.500	0.190			10/08/21 09:00	10/22/21 18:49	1
Chromium	< 0.00110		0.00500	0.00110	8.7		10/08/21 09:00	10/22/21 18:49	31
Cobalt	0.00102		0.000500	0.000190			10/08/21 09:00	10/22/21 18:49	31
Lead	< 0.000210		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 18:49	1
Lithium	0.0330		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 18:49	1
Molybdenum	< 0.00130		0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 18:49	1
Selenium	< 0.000960		0.00500	0.000960			10/08/21 09:00	10/22/21 18:49	1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 18:49	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	< 0.000150		0.000200	0.000150	mg/L		10/11/21 11:22	10/12/21 11:08	1

RL

50.0

MDL Unit

26.0 mg/L

Analyzed

10/08/21 15:24

Result Qualifier

510

General Chemistry Analyte

Total Dissolved Solids

Definitions/Glossary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-1

Qualifiers	
HPLC/IC Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals	
Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not
	applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
п	Listed under the *D* column to designate that the result is reported on a dry weight basis
%R	Percent Recovery

	Elated 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)

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Eurofins TestAmerica, Cedar Falls

Page 7 of 18 10/25/2021 Page 8 of 18 10/25/2021

Too Numerous To Count

TNTC

QC :	Sampl	e Res	sults
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Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR

< 0.0550

< 0.490

< 0.000190

< 0.000210

< 0.00250

< 0.00130

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

Matrix: Water								Prep Type:	Total/NA
Analysis Batch: 331496									
	мв	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorida	-0.420		1.00	0.420	mod			10/12/21 00:21	4

0.100

1.00

0.0550 mg/L

0.490 mg/L

Lab Sample ID:	LCS 310-331496/33
Advantage Address of	

Fluoride

Sulfate

Cobalt

Lithium

Molybdenum

Lead

Lab Sample ID: MB 310-331496/3

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

Analysis Datch. 331430	Spike	LCS	LCS				%Rec.	9
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10.0	10.06		mg/L		101	90 - 110	113
Fluoride	2.00	2.168		mg/L		108	90 - 110	
Sulfate	10.0	10.54		mg/L		105	90 - 110	

Method: 6020A - Metals (ICP/MS) Lab Sample ID: MB 310-330872/1-A

Matrix: Water Analysis Batch: 332689								Prep Type: 7 Prep Batch:	
A CONTROL OF THE CONT	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Antimony	<0.00110		0.00200	0.00110	mg/L		10/08/21 09:00	10/22/21 18:31	- 3
Arsenic	< 0.000750		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 18:31	- 1
Barium	< 0.000370		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 18:31	31
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 18:31	1
Boron	< 0.0580		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 18:31	1
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 18:31	1
Calcium	<0.190		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 18:31	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 18:31	1

0.000500

0.000500

0.0100

0.00200

0.000190 mg/L

0.000210 mg/L

0.00250 mg/L

0.00130 mg/L

Selenium	< 0.000960	0.00500	0.000960	mg/L	10/08/21 09:00	10/22/21 18:31	1
Thallium	<0.000260	0.00100	0.000260	mg/L	10/08/21 09:00	10/22/21 18:31	1
Lab Sample ID: LCS 310	-330872/2-A				Client Sample I	D: Lab Control Sa	ample
Matrix: Water						Prep Type: Tot	tal/NA
Analysis Batch: 332680						Prop Batch: 3	30872

Matrix: Water Analysis Batch: 332689							Prep Batch	
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.200	0.2000		mg/L		100	80 - 120	
Arsenic	0.200	0.1937		mg/L		97	80 - 120	
Barium	0.100	0.1078		mg/L		108	80 - 120	
Beryllium	0.100	0.09649		mg/L		96	80 - 120	
Boron	0.200	0.2066		mg/L		103	80 - 120	
Cadmium	0.100	0.1002		mg/L		100	80 - 120	
Calcium	2.00	2.164		mg/L		108	80 - 120	
Chromium	0.100	0.09767		mg/L		98	80 - 120	
Cobalt	0.100	0.1033		mg/L		103	80 - 120	

Eurofins TestAmerica, Cedar Falls

Job ID: 310-216812-1

Client Sample ID: Method Blank

10/12/21 00:31

10/12/21 00:31

Client Sample ID: Method Blank

10/22/21 18:31

10/22/21 18:31

10/22/21 18:31

10/08/21 09:00

10/08/21 09:00

10/08/21 09:00

10/08/21 09:00 10/22/21 18:31

QC Sample Results

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

Lab Sample ID: 310-216812-2 MSD

Thallium

Job ID: 310-216812-1

99 80 - 120

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

Lab Sample ID: LCS 310-330872/2-A Matrix: Water Analysis Batch: 332689					Client	Sample	Prep T	ntrol Sample ype: Total/NA latch: 330872
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.200	0.2076		mg/L		104	80 - 120	
Lithium	0.200	0.2018		mg/L		101	80 - 120	
Molybdenum	0.200	0.1978		mg/L		99	80 - 120	
Selenium	0.400	0.3830		mg/L		96	80 - 120	

Lab Sample ID: 310-216812-2 MS	Client Sample ID: MW13
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 332689	Prep Batch: 330872

0.1975

mg/L

0.200

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	< 0.00110		0.200	0.2042		mg/L		102	75 - 125
Arsenic	0.0402		0.200	0.2425		mg/L		101	75 - 125
Barium	0.257	F1	0.100	0.3947	F1	mg/L		137	75 - 125
Beryllium	< 0.000270		0.100	0.09586		mg/L		96	75 - 125
Boron	0,105		0.200	0.2795		mg/L		87	75 - 125
Cadmium	< 0.0000510		0.100	0.1028		mg/L		103	75 - 125
Calcium	126		2.00	134.3	4	mg/L		392	75 - 125
Chromium	< 0.00110		0.100	0.09720		mg/L		97	75 . 125
Cobalt	0.00102		0.100	0.09995		mg/L		99	75 - 125
Lead	< 0.000210		0.200	0.2029		mg/L		101	75 - 125
Lithium	0.0330		0.200	0.2257		mg/L		96	75 - 125
Molybdenum	< 0.00130		0.200	0.2117		mg/L		106	75 - 125
Selenium	< 0.000960		0.400	0.4038		mg/L		101	75 - 125
Thallium	<0.000360		0.200	0.1073		ma/l		00	75 125

Matrix: Water									Prep T	ype: To	tal/NA
Analysis Batch: 332689									Prep I	Batch: 3	30872
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	< 0.00110		0.200	0.2031		mg/L		102	75 - 125	1	20
Arsenic	0.0402		0.200	0.2434		mg/L		102	75 - 125	0	20
Barium	0.257	F1	0.100	0.3913	F1	mg/L		134	75 - 125	1	20
Beryllium	< 0.000270		0.100	0.09465		mg/L		95	75 - 125	1	20
Boron	0.105		0.200	0.2855		mg/L		90	75 - 125	2	20
Cadmium	< 0.0000510		0.100	0.1026		mg/L		103	75 - 125	0	20
Calcium	126		2.00	136.9	4	mg/L		520	75 - 125	2	20
Chromium	< 0.00110		0.100	0.09733		mg/L		97	75 - 125	0	20
Cobalt	0.00102		0.100	0.09785		mg/L		97	75 - 125	2	20
Lead	< 0.000210		0.200	0.2012		mg/L		101	75 - 125	1	20
Lithium	0.0330		0.200	0.2220		mg/L		95	75 - 125	2	20
Molybdenum	< 0.00130		0.200	0.2098		mg/L		105	75 - 125	1	20
Selenium	< 0.000960		0.400	0.4034		mg/L		101	75 - 125	0	20
Thallium	< 0.000260		0.200	0.1966		mg/L		98	75 - 125	0	20

Eurofins TestAmerica, Cedar Falls

10/25/2021

Client Sample ID: MW13

Page 9 of 18 10/25/2021 Page 10 of 18

8

Method: 7470A - Mercury (CVAA)											
Lab Sample ID; MB 310-331208/1-A										Client S	ample ID: Meth	od Blank
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 331367											Prep Batch	: 331208
	0.9	MB										
Analyte	Result	Qualifier	_	RL		MDL Uni		D	P	repared	Analyzed	Dil Fac
Mercury	<0.000150		0.0	00200	0.00	0150 mg	L		10/1	1/21 11:22	10/12/21 10:13	1
Lab Sample ID: LCS 310-331208/2-A								C	lient	Sample	ID: Lab Contro	I Sample
Matrix: Water										200000000000000000000000000000000000000	Prep Type:	Total/NA
Analysis Batch: 331367											Prep Batch	: 331208
ACCUSED SERVICES OF CONTRACT OF A CONTRACT			Spike		LCS	LCS					%Rec.	
Analyte			Added		Result	Qualifier	Unit		D	%Rec	Limits	
Mercury			0.00400	2700		, paperature continues	1000 W			make the second	80 - 120	
			0.00167	0.	001622		mg/L			97	80 - 120	
\$1000 (1.50 ± 1.00 ± 1.	al Dissol	ved (TD	(2185031)	0.	001622		mg/L			97	80 - 120	
Method: SM 2540C - Solids, Tota	al Dissol	ved (TD	(2185031)	0.	001622		mg/L			97	80 - 120	
\$1000 (1.50 ± 1.00 ± 1.	al Dissol	ved (TD	(2185031)	0.	001622		mg/L			70)	ample ID: Meth	od Blank
Method: SM 2540C - Solids, Tota	al Dissol	ved (TD	(2185031)	0.	001622		mg/L			70)	55 (053	
Method: SM 2540C - Solids, Tota Lab Sample ID: MB 310-331052/1	al Dissol	ved (TD	(2185031)	0.	001622		mg/L			70)	ample ID: Meth	
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water		ved (TD	(2185031)	0.	001622		mg/L			70)	ample ID: Meth	
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water	мв		(2185031)	RL	001622	MDL Uni		D	P	70)	ample ID: Meth	
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water Analysis Batch: 331052	мв	мв	(2185031)		001622	MDL Uni 26.0 mg/		D	Р	Client Sa	ample ID: Metho	Total/NA
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water Analysis Batch: 331052 Analyte Total Dissolved Solids	MB Result	мв	(2185031)	RL	001622				00 100	Client Sa	ample ID: Meth-Prep Type: Analyzed 10/08/21 15:24	Total/NA Dil Fac 1
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water Analysis Batch: 331052 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331052/2	MB Result	мв	(2185031)	RL	001622				00 100	Client Sa	ample ID: Methin Prep Type: Analyzed 10/08/21 15:24 ID: Lab Contro	Dil Fac
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water Analysis Batch: 331052 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331052/2 Matrix: Water	MB Result	мв	(2185031)	RL	001622				00 100	Client Sa	ample ID: Meth-Prep Type: Analyzed 10/08/21 15:24	Dil Fac
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water Analysis Batch: 331052 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331052/2	MB Result	мв	S)	RL		26.0 mg			00 100	Client Sa	Analyzed 10: Lab Contro Prep Type:	Dil Fac
Method: SM 2540C - Solids, Total Lab Sample ID: MB 310-331052/1 Matrix: Water Analysis Batch: 331052 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331052/2 Matrix: Water	MB Result	мв	(2185031)	RL	LCS				00 100	Client Sa	ample ID: Methin Prep Type: Analyzed 10/08/21 15:24 ID: Lab Contro	Dil Fac

QC Sample Results

QC Association Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-1

HPLC/IC

Analysis Batch: 331496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216812-1	NC2MW4	Total/NA	Water	9056A	
310-216812-2	MW13	Total/NA	Water	9056A	
MB 310-331496/3	Method Blank	Total/NA	Water	9056A	
LCS 310-331496/33	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 330872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
310-216812-1	NC2MW4	Total/NA	Water	3010A	************
310-216812-2	MW13	Total/NA	Water	3010A	
MB 310-330872/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-330872/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-216812-2 MS	MW13	Total/NA	Water	3010A	
310-216812-2 MSD	MW13	Total/NA	Water	3010A	

Prep Batch: 331208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
310-216812-1	NC2MW4	Total/NA	Water	7470A	200
310-216812-2	MW13	Total/NA	Water	7470A	
MB 310-331208/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-331208/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 331367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216812-1	NC2MW4	Total/NA	Water	7470A	331208
310-216812-2	MW13	Total/NA	Water	7470A	33120
MB 310-331208/1-A	Method Blank	Total/NA	Water	7470A	331208
LCS 310-331208/2-A	Lab Control Sample	Total/NA	Water	7470A	331208

Analysis Batch: 332689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216812-1	NC2MW4	Total/NA	Water	6020A	330872
310-216812-2	MW13	Total/NA	Water	6020A	330872
MB 310-330872/1-A	Method Blank	Total/NA	Water	6020A	330872
LCS 310-330872/2-A	Lab Control Sample	Total/NA	Water	6020A	330872
310-216812-2 MS	MW13	Total/NA	Water	6020A	330872
310-216812-2 MSD	MW13	Total/NA	Water	6020A	330872

General Chemistry

Analysis Batch: 331052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216812-1	NC2MW4	Total/NA	Water	SM 2540C	
310-216812-2	MW13	Total/NA	Water	SM 2540C	
MB 310-331052/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-331052/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Page 12 of 18

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Eurofins TestAmerica, Cedar Falls

Page 11 of 18 10/25/2021 10/25/2021





Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-1

Client Sample ID: NC2MW4

Lab Sample ID: 310-216812-1

Date Collected: 10/04/21 10:53 Date Received: 10/07/21 09:40

Matrix: Water

-									
	Batch	Batch		Dilution	Batch	Prepared			16
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	0
Total/NA	Analysis	9056A		5	331496	10/12/21 03:23	JNR	TAL CF	Total Control
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF	
Total/NA	Analysis	6020A		1	332689	10/22/21 18:46	SAP	TAL CF	
Total/NA	Prep	7470A			331208	10/11/21 11:22	EAM	TAL CF	
Total/NA	Analysis	7470A		1	331367	10/12/21 11:06	EAM	TAL CF	0
Total/NA	Analysis	SM 2540C		1	331052	10/08/21 15:24	ARG	TAL CF	

Client Sample ID: MW13 Date Collected: 10/04/21 09:59 Lab Sample ID: 310-216812-2

Matrix: Water

Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	9056A		5	331496	10/12/21 03:39	JNR	TAL CF	
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF	
Total/NA	Analysis	6020A		1	332689	10/22/21 18:49	SAP	TAL CF	E
Total/NA	Prep	7470A			331208	10/11/21 11:22	EAM	TAL CF	
Total/NA	Analysis	7470A		t:	331367	10/12/21 11:08	EAM	TAL CF	
Total/NA	Analysis	SM 2540C		10	331052	10/08/21 15:24	ARG	TAL CF	

TAL CF = Eurofins TestAmerica; 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 Job ID: 310-216812-1

Laboratory: Eurofins TestAmerica, Cedar Falls

All accreditations/certifications held by this laboratory are tisted. 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	11-29-21
lowa	State	007	12-01-21
Kansas	NELAP	E-10341	01-31-22
Minnesota	NELAP	019-999-319	12-31-21
Minnesota (Petrofund)	State	3349	04-06-23
North Dakota	State	R-186	09-29-21 *
Oregon	NELAP	IA100001	09-29-22
USDA	US Federal Programs	P330-19-00003	01-02-22

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Eurofins TestAmerica, Cedar Falls

Page 13 of 18

10/25/2021

Page 14 of 18

10/25/2021

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

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-1

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
3010A	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 TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

13

84



Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

Client: Omaha Public Po	U-01 D13	STATE	T	and their property viscon
City/State: Omaha	Sales establish	NE	Project: Nebraska City	
DATE	-7-21	TIME 0940	Received By: HED	国政主任 11 位文明是 计图像可能 \$ 新安全
		eld Services	☐ FedEx Ground ☐ US M.☐ Client Drop-off ☐ Other	
		Name of the last	美国在特殊的 特别的国际	NAME TO SHEET AND A SHEET AND ASSESSED.
Sample(s) received in Cooler?	⊠ Yes	□ No	If yes: Cooler ID:	
Multiple Coolers?	Yes	No CC	If yes: Cooler # 2 of 5	-
Cooler Custody Seals Present?	Yes Yes	□ No	If yes: Cooler custody seals into	act? ☑ Yes ☐ No
Sample Custody Seals Present?	Yes	Ø No	If yes: Sample custody seals in	tact? Yes No
Trip Blank Present?	Yes	⊠ No	If yes: Which VOA samples are	in cooler? 4
Uncorrected Temp (°C): 2 .\ Sample Container Temperature CONTA	eren ga		Correction Factor (°C): 0 perature above criteria, proceed to Sample Corrected Temp (°C): 2 \(\) CONTAINER 2	
Container(s) used:				
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted	1 6 9 4 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	g mer antiqu	Experimental includes a refull	经 发生的一种经验中一种"
 If temperature exceeds criteria a) If yes: Is there evidence 				
	ere obvious		he integrity of sample containers in olid?)	
2) If temperature is <0°C, are th (e.g., bulging septa, broken/c	racked bott	ies, irozen s		
(e.g., bulging septa, broken/c Note: If yes, contact PM before	proceeding.	If no, procee	d with login	April 19 mar Sales Anna Sales
(e.g., bulging septa, broken/c Note: If yes, contact PM before	proceeding.	If no, procee	d with login JU, NCIMW3, NCIMW9, DI	

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Eurofins TestAmerica, Cedar Falls

Client Information Client Information Client United Concern Co	Section 2			ALL THE				Contract Security and Market	WW OCO	
Compact Company Compan	Kyle K. Uhing			Hayer	Hayes, Shawn M	2		Camer Iracking No(s):	2	
Omerowy Omatha Public Power Cistrict Omatha Public Power Cistrict 444 South 16th Street Mall BE/EP1 Ony	Phone (531) 226-2515			E-Mail Shawn	T.hayes@	testame	E-Mail shawn.hayes@testamericainc.com		Page	
Address: 4444 South 16th Street Mall 9E/EP1 City Omarka							Analysis Requested	adnested	Job #	
Crity	Due Data Requested:	66			1				Preserva	ion Code
	TAT Requested (days)	18			8228	4952.N			A - HCL B - NaOH C - Zn Ace	M Herone N N None cetate O Asklacz
NE, 68102-2247				12.0	9 bris	DJOM A	9**		D - Name Acid	
Phone (531) 226-2515	a Od					07.47	mue ,		G - Amchlor	Nor S-H2504
Email Sketning@copst.com	*0%				(0)	VI bne	eguar-			
Project Name Nebraska City Station Unit 2 CCR / Landfill	TestAmenta Project # 31007559				as or h	III xipu	J 'gour		tainers L - EDTA	
See Nebraska City Station Unit • 1/3	SSOWe				as (v	edd 5	uun vo		noo to	
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (www.es. Sweete. Ownerment.	Field Filtered : Perform MS/M Perform Sazze, 932	IOD A0568 IMO	506 'SQL 2005'		nedmuM lsto	Paris Institution
		X	Preserval	3	X	0	z			
Difference	1	1	×	0	-	2)	•		1	MANUAL III COMPANIES IN A POSSO
	1	1	8	9	*	٠			•	powerful and 1/ concent
NC2MW4	ださつ	0:53	O	×	×	×	×		4 CCR App	CCR Appendix III and W.Constitutinis
MODEL.)	•	8	*				- 000	
Milhiter	1	1	•	ø	9	9			8	penducini and IV Colombine
positivities	1	1					-		COOLUMB	period in an excellent to a
Sphinn]	1	•	,	3	9	-		A Colores	PROGRAMMENT CONTINUES
MW13	200	4:50	O	*	×	×	×		4 CCR App	CCR Appendix III and W Constituents
MAR.	1	*				3	*		•	MOST III SHOULD BE SHOULD BE
Possible Hazard Identification Non-Hazard Plammable Skin irrient Deliverable Requested: II. III. N. Other (specify)	Poison B Unknown	0.50	Radiological		Samp	e Dispo	Sample Disposal (A fee may be ass Return To Client Disposal term from Do	essed if samples a	re retained longer	r than 1 month) Months
Empty Kit Relinguished by:		Date	-		Limb.			Mathod of Shirman		
Selfinguished by ()	Date/Time 4, 3	13	1	orpagny	- 100	Received by		DateTime		Contolete
Sempeshed by Ask of the Sample	DateTime	1 (60)	2	Chicany	Rec	Received by:		DateTime		ACCURACY OF
Relinquished by:	Date/Time			Сотрану	Rec	Received by	11.10	DataTime		
Custody Seals Infact: Custody Seal No.:			-		S	lar Tempe	Cooler Temperature(s) *C and Other Remarks		0 17-1-0	0240

Page 17 of 18

10/25/2021

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-216812-1

Login Number: 216812 List Number: 1 Creator: Muehling, Angela C List Source: Eurofins TestAmerica, Cedar Falls

areater. mooning, rangela a		
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

Eurofins TestAmerica, Cedar Falls

Residual Chlorine Checked.

Page 18 of 18 10/25/2021



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-216812-2

Client Project/Site: Nebraska City Station 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

Authorized for release by: 11/8/2021 2:30:41 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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
n.	Project/Site: Nebraska City Station Unit 1/2 CC

Laboratory Job ID: 310-216812-2

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	7
QC Sample Results	8
QC Association	10
Chronicle	11
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	16
Tracer Carrier Summary	18

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-2

Job ID: 310-216812-2

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-216812-2

Comments

No additional comments.

Receipt

The samples were received on 10/7/2021 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

Method PrecSep 0: Radium-228 Prep Batch 160-530648

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW4 (310-216812-1) and MW13 (310-216812-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-530645

The following samples were prepared at a reduced aliquot due to Matrix: NC2MW4 (310-216812-1) and MW13 (310-216812-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

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 Job ID: 310-216812-2

Lab Sample ID Client Sample ID Received Matrix Collected 310-216812-1 NC2MW4 Water 10/04/21 10:53 10/07/21 09:40 310-216812-2 MW13 Water 10/04/21 09:59 10/07/21 09:40

lient: Omaha Public F	ower District	i i	Clie	nt Samp	le Resu	Its			Job ID: 310-2	16812-2
Project/Site: Nebraska	City Station	Unit 1/2 CC	R							
Client Sample ID: Date Collected: 10/04/ Date Received: 10/07/	21 10:53							Lab Samp	le ID: 310-21 Matri	6812-1 x: Water
Method: 9315 - Radio	um-226 (GFF	C)								
		1	Count	Total						
			Uncert.	Uncert.						
Analyte	1100000000	Qualifier	(2σ+/-)	(20+/-)	RL	MDC	1.500000	Prepared	Analyzed	Dil Fac
Radium-226	2.23	G	1.40	1.41	1.00	1.96	pCi/L	10/11/21 10:03	11/03/21 22:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.7	-	40 - 110					10/11/21 10:03	11/03/21 22:48	1
Method: 9320 - Radii		Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.16	G	1.87	1.96	1.00	2.45	pCi/L	10/11/21 10:40	11/03/21 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.7		40 - 110					10/11/21 10:40	11/03/21 13:13	- 1
Y Carrier	80.7		40 - 110					10/11/21 10:40	11/03/21 13:13	1
Y Carrier	80.7		40 - 110					10/11/21 10:40	11/03/21 13:13	:1
Method: Ra226_Ra2	28 - Combine	ed Radium-								
			Count	Total						
Analyte	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	8.39	Quantite	2.34	2.41	5.00		pCi/L	Frepared	11/05/21 19:08	1

			Clie	ent Samp	le Resu	ılts				
lient: Omaha Public F roject/Site: Nebraska		Markot e rezula este de la	R	ñ					Job ID: 310-2	16812-2
lient Sample ID:	MW13							Lab Samp	le ID: 310-21	6812-2
ate Collected: 10/04/	21 09:59									x: Water
Method: 9315 - Radio	um-226 (GFF	PC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.419	Ü	0.375	0.377	1.00	0.586	pCi/L	10/11/21 10:03	11/03/21 22:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2	-	40 - 110					10/11/21 10:03	11/03/21 22:48	1
Mathada 0220 Badi	220 (CEE	101								
Method: 9320 - Radio	um-228 (GFF	·C)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.42		0.511	0.527	1.00	0.716	pCi/L	10/11/21 10:40	11/03/21 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					10/11/21 10:40	11/03/21 13:13	- 7
Y Carrier	81.1		40 - 110					10/11/21 10:40	11/03/21 13:13	1
Method: Ra226 Ra2	28 - Combin	ed Radium-	-226 and Rad	ium-228						
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	1.84		0.634	0.648	5.00	0.716	pCl/L		11/05/21 19:08	1

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Page 5 of 18 11/8/2021 Page 6 of 18 11/8/2021

226 + 228

Dofi	nitio	ne/GI	ossary
Den	milloi	15/61	ossary

	a Public Power District Job ID: 3 Nebraska City Station Unit 1/2 CCR	10-216812-2
Qualifiers	5	
Rad		
Qualifier	Qualifier Description	
G	The Sample MDC is greater than the requested RL.	
U	Result is less than the sample detection limit,	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	-
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"	E
MDA	Minimum Detectable Activity (Radiochemistry)	100
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

RPD

TEF

TEQ

TNTC

RL

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)
Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

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

QC Sample Results

Total

Limits

LCS LCS

Result Qual

14.07

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-2

A	ethod:	9315 -	Radium-226	(GFPC)	

Lab Sample ID: MB 160-530645/23-A Matrix: Water Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 530645

Analysis Batch: 535165

Analyte

Analyte

Radium-226

| MB | MB | Uncert. Uncert. | Uncert. | Uncert. | Uncert. | (2σ+/-) | (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac | Unit | Prepared | Unit |

Total

Uncert.

 $(2\sigma + l - 1)$

RL.

MDC Unit

0.489 pCi/L

Prepared Analyzed Dil Fac 10/11/21 10:03 11/04/21 08:21 1

MB MB
Carrier %Yield Qualifier

Ba Carrier 84.2 40 - 110

Client Sample ID: Lab Control Sample

%Rec.

Limits

Lab Sample ID: LCS 160-530645/1-A Matrix: Water

Analysis Batch: 534853

Added

Prep Type: Total/NA Prep Batch: 530645

Limit

Dil Fac

Radium-226 15.1

LCS LCS

Carrier %Yeld Qualifier Limits

 Carrier
 %Yield
 Qualifier
 Limits

 Ba Carrier
 97.4
 40 - 110

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 530645

%Rec

Lab Sample ID: LCSD 160-530645/2-A Matrix: Water Analysis Batch: 534853

Total Spike LCSD LCSD Uncert. Analyte Added Result Qual (20+/-) MDC Unit %Rec Limits RER Radium-226 15.1 13.33 0.422 pCi/L

 Carrier
 %Yield
 Qualifier
 Limits

 Ba Carrier
 97.4
 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-530648/23-A Matrix: Water Analysis Batch: 534860 Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 530648

Analyzed

11/03/21 13:11

11/03/21 13:11

Total Count мв мв Uncert. Uncert. Analyte Result Qualifier (20+/-) (20+/-) RL MDC Unit Analyzed Dil Fac 0.6923 0.635 pCi/L 11/03/21 13:11 Radium-228 0.415 0.420 1.00 10/11/21 10:40

Page 8 of 18

Carrier	%Yield Qua	alifier Limits	Prepared
Ba Carrier	84.2	40 - 110	10/11/21 10:40
Y Carrier	89.3	40 - 110	10/11/21 10:40

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Page 7 of 18 11/8/2021

11/8/2021

				Q	C Sam	ple Resu	lts						
lient: Omaha roject/Site: Ne			nit 1/2 CCR			5.					Job ID: (310-216	812-2
lethod: 932				tinued)	00								
Lab Sample I	D: L CS 16	1-530648/1-	Δ						Clien	t Sample I	D: Lab Co	ntrol S	ample
Matrix: Water											Prep T		and the contract of
Analysis Bat	ch: 534851											atch: 5	
- C						Total							
			Spike	LCS	LCS	Uncert.					%Rec.		
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits		
Radium-228	2/	0.00	12.2	12.37		1.47	1.00	0.488	pCi/L	101	75 - 125	2000	
	100	LCS											
Carrier	%Yield	100 Telephone	Limits										
Ba Carrier	97.4	***************************************	40 - 110										
Y Carrier	80.4		40 - 110										
Lab Sample I		60-530648/2	2-A					CII	ent San	nple ID: La		4	
Matrix: Water												ype: To	
Analysis Bat	ch: 535010										Prep B	latch: 5	30648
						Total							
*****			Spike		LCSD	Uncert.	PH 1		- Carreston		%Rec.	nen	RER
Analyte Radium-228	1	0 0	Added 12.2	Result 12.80	Qual	1.51	RL 1,00	MDC 0.557	Unit pCi/L	%Rec 105	75 - 125	0.15	Limit 1
Radium-228			12.2	12.80		1.51	1.00	0.557	pu/L	105	75 - 125	0.15	:1
	LCSD	LCSD											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	97.4		40 - 110										
Y Carrier	81.5		40 - 110										

QC Association Summary

Job ID: 310-216812-2

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

				-							
,	'n	×	m	2	-	- 1	53	n	64	6	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bat
310-216812-1	NC2MW4	Total/NA	Water	PrecSep-21	
310-216812-2	MW13	Total/NA	Water	PrecSep-21	
MB 160-530645/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-530645/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-530645/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 530648

Client Sample ID	Prep Type	Matrix	Method	Prep Bat
NC2MW4	Total/NA	Water	PrecSep_0	
MW13	Total/NA	Water	PrecSep_0	
Method Blank	Total/NA	Water	PrecSep_0	
Lab Control Sample	Total/NA	Water	PrecSep_0	
Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
	MW13 Method Blank Lab Control Sample	NC2MW4 Total/NA MW13 Total/NA Method Blank Total/NA Lab Control Sample Total/NA	NC2MW4 Total/NA Water MW13 Total/NA Water Method Blank Total/NA Water Lab Control Sample Total/NA Water	NC2MW4 TotalNA Water PrecSep_0 MW13 TotalNA Water PrecSep_0 Method Blank TotalNA Water PrecSep_0 Lab Control Sample Total/NA Water PrecSep_0

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Page 9 of 18 11/8/2021 Page 10 of 18 11/8/2021

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-2

Client Sample ID: NC2MW4

Lab Sample ID: 310-216812-1

Matrix: Water

Date Collected: 10/04/21 10:53 Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	8%		530645	10/11/21 10:03	BMP	TAL SL
Total/NA	Analysis	9315		1	534853	11/03/21 22:48	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530648	10/11/21 10:40	BMP	TAL SL
Total/NA	Analysis	9320		1	534853	11/03/21 13:13	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	535296	11/05/21 19:08	MLK	TAL SL

Lab Sample ID: 310-216812-2

Matrix: Water

Client Sample ID: MW13 Date Collected: 10/04/21 09:59

Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	33		530645	10/11/21 10:03	BMP	TAL SL
Total/NA	Analysis	9315		11	534853	11/03/21 22:48	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530648	10/11/21 10:40	BMP	TAL SL
Total/NA	Analysis	9320		10	534853	11/03/21 13:13	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		ť	535296	11/05/21 19:08	MLK	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, 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 Station Unit 1/2 CCR Job ID: 310-216812-2

Laboratory: Eurofins TestAmerica, 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	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
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	10-31-21 *
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
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	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
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

Eurofins TestAmerica, Cedar Falls

11/8/2021

Eurofins TestAmerica, Cedar Falls

11/8/2021

Page 11 of 18

Page 12 of 18

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

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1/2 CCR Job ID: 310-216812-2

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 TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

1

871



Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

City/State: CITY	STATE	Destructive to the contract of the late
Omana	NE	Project: Nebraska City Station Unit 1/2
DATE	0-7-21 0940	
	FedEx Lab Field Servic	
		的复数形式的现在分词 医多种性性性炎 医多种性性炎 医多种性炎 医生性炎 医皮肤炎 医皮肤炎性炎 医皮肤炎性炎 医皮肤炎 医皮肤炎 医皮肤炎 医皮肤炎 医皮肤炎 医皮肤炎 医皮肤炎 医皮肤
Sample(s) received in Cooler?	25	If yes: Cooler ID:
Multiple Coolers?	Yes No	If yes: Cooler # 2 of 5
Cooler Custody Seals Present	? Yes No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Presen	t? Yes No	If yes: Sample custody seals intact? Yes No
Trip Blank Present?	☐ Yes ☑ No	If yes: Which VOA samples are in cooler? 1
Jncorrected Temp (°C): 2 .\ Sample Container Temperature	in the surplus processing	Correction Factor (°C): 0 temperature above criteria, proceed to Sample Container Temperature Corrected Temp (°C): 2 \(\)
Container(s) used:	FAINER 1	CONTAINER 2
Incorrected Temp (°C):		
Corrected Temp (°C):		
conected remp (C).	AND RESIDENCE TO A SECURIOR OF THE PARTY OF	
	不是是一个。 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	The same and the same of the s
	ria, was sample(s) rec	eived same day of sampling?
) If temperature exceeds crite a) If yes: Is there evidence	ria, was sample(s) rec e that the chilling proce there obvious signs tha	eived same day of sampling?
) If temperature exceeds crite a) If yes: Is there evidence (e.g., bulging septa, broken, Note: If yes, contact PM befordditional Comments	ria, was sample(s) reco a that the chilling proce there obvious signs that cracked bottles, frozer e proceeding. If no, proc	eived same day of sampling?

Document: CF-LG-WI-002 Revision: 25 Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Eurofins TestAmerica, Cedar Falls

TestAmerica Cedar Falls 704 Enterprise Drive Coder Falls, 1, 8, 9661, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	Ü	Chain	of Cus	Chain of Custody Record	eco	5					اه	TestAmerica
Client Information	Sampler Kyle K. Uhing			Lab	Lab PM Haves, Shawn M	M cv			Carrier	Camer Tracking No(s):	COCNO	
Crient Contact Kyle Uhing	Phone (531) 226-2515			E-Msit shawr	n.haye	s@test	america	E-Mait shawn.hayes@testamericainc.com	Π		Page	
Company Omaha Public Power District					L			Analysi	Analysis Requested	9	Job #	
Address: 4444 South 16th Street Mall 9E/EP1	Due Date Requested:	-pa				H		F			Preserv	Preservation Codes:
City	TAT Requested (days)	sys):				990	-				B-NaOH	M Nexans
State, Zp. NE, 68102-2247						A104000	-				D - Nitric Acid E - NaHSO4	
Phune (531) 226-2515	# Od					100000	-			_	F - MeO	S-Amchier S-HSSD4
Email (3)	#0M					over the con-						
Project Name Nebraska City Station Unit 2 CCR / Landfill	TestAmentos Project I 31007559	*				V V (V (V (V)						
See Nebraska City Station Unit • 1	SSOWs										of cont	
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (Www.msc., Sweekl, Ownermick, Officers, Anales	Field Filtered S Perform MS/M:	315 Ra226, 9321	TOTAL 6020A CCR				o sedmuM listo	Concint Institute (Modes
	X	X	Preserva	Preservation Code:	X	-	-	F		-		
Politican		1	×	0		-	-	F			4000	CHARLES CONTROLL IN COLUMN TO SERVICE STATE OF THE PERSON
	1)	*			-	9	F			•	present ill and if consis
NC2MW4	でかり	10:53	O	×	z	×	×	F				CCR Appendix III and IV Constituents
abolitic.)	•	4	-		10				-	OF THE PROPERTY OF THE PARTY OF
Philipse .	1	1	•	6				F			9	penductii and IV Colomonie
patrification]	1	•		-		9				Contract	perform and excellent
Spiles	1)	•	9	8		9	F			- Constitution	PRESENTATION OF THE PROPERTY.
MW13	16.40	65:3	O	*	z	×	×	Ė			4 CCR Ap	CCR Appendix III and W Constituents
about 1	1	*			4		*				1	A STOLE OF SECULA
lant	Poison B Unknown	10.355	Radiological		San	Retu	sposal vn To C	Sample Disposal (A fee may be assi	y be assessed if sam	d if samples ar	re retained longe	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Clean Disposal By Lab Archive For Worths
Deliverable Requested: I, II, III, IV, Other (specify)					Spe	cial Ins	truction	s/QC Requ	rements:			
Empty Kit Relinquished by:		Date:			Time:				2	dethod of Shipment.		
Reinquished by	.0	1 /63/6	2.70	980		Received by	3 by			DateTime		Contobry
Reinquistred by 1	Date/Time			Company		Received by	, dp			DataTime		Company
	Date/Tane			Сотралу		Received by	My My	2	5	DataTime	16-C-01	COURSES COURSES
Custody Seals Infact: Custody Seal No.:						Coolar T	mbecatri	e(s) *C and (Cooler Temperature(s) *C and Other Remarks.			
							1	1	1			

Page 15 of 18

Login Sample Receipt Checklist

Client: Omaha Public Power District

Job Number: 310-216812-2

List Source: Eurofins TestAmerica, Cedar Falls

Login Number: 216812 List Number: 1

Creator: Muehling, Angela C

or occor, mounting, ringers o		
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	

Eurofins TestAmerica, Cedar Falls

11/8/2021

Residual Chlorine Checked.

Page 16 of 18

N/A

11/8/2021

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-216812-2

Login Number: 216812 List Source: Eurofins TestAmerica, St. Louis List Number: 2 List Creation: 10/08/21 06:18 PM Creator: Mazariegos, Leonel A

Creator: Mazariegos, Leoner A			
Question	Answer	Comment	
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></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

Residual Chlorine Checked.

		Tracer/Carrier Summary	
Client: Omaha Public P Project/Site: Nebraska	ower District City Station Unit 1/2 CCR		Job ID: 310-216812-2
Method: 9315 - Rad Matrix: Water	dium-226 (GFPC)		Prep Type: Total/NA
		Perce	nt Yield (Acceptance Limits)
		Ва	
Lab Sample ID	Client Sample ID	(40-110)	
310-216812-1	NC2MW4	70.7	
310-216812-2	MW13	91.2	
LCS 160-530645/1-A	Lab Control Sample	97.4	

TranscriCorrier Cummon.

97.4

84.2

Ba = Ba Carrier					
Method: 9320 - Rad	lium-228 (GFPC)				
Matrix: Water	(3,414.2)				Prep Type: Total/NA
				Percent Yield (Acceptance Limits)	
		Ba	Y		
Lab Sample ID	Client Sample ID	(40-110)	(40-110)		
310-216812-1	NC2MW4	70.7	80.7		
310-216812-2	MW13	91.2	81.1		
LCS 160-530648/1-A	Lab Control Sample	97.4	80.4		
LCSD 160-530648/2-A	Lab Control Sample Dup	97.4	81.5		
MB 160-530648/23-A	Method Blank	84.2	89.3		

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls Page 17 of 18 11/8/2021 Page 18 of 18 11/8/2021

LCSD 160-530645/2-A

MB 160-530645/23-A

Tracer/Carrier Legend

Tracer/Carrier Legend Ba = Ba Carrier Y = Y Carrier

Lab Control Sample Dup

Method Blank



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 310-216813-1

Client Project/Site: Nebraska City Station Unit 1 CCR

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: 10/25/2021 6:23:07 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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
N.	Project/Site: Nebraska City Station Unit 1 CC

Laboratory Job ID: 310-216813-1

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

Case Narrative Client: Omaha Public Power District Job ID: 310-216813-1 Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-1 Laboratory: Eurofins TestAmerica, Cedar Falls Narrative Job Narrative 310-216813-1 Comments No additional comments. Receipt The samples were received on 10/7/2021 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.9° C and 2.1° 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 CCR Job ID: 310-216813-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-216813-1	NC1MW2	Water	10/05/21 13:44	10/07/21 09:40
310-216813-2	NC1MW3	Water	10/06/21 11:04	10/07/21 09:40
310-216813-3	NC1MW4	Water	10/05/21 14:21	10/07/21 09:40
310-216813-4	NC1MW9	Water	10/06/21 11:53	10/07/21 09:40
310-216813-5	MW11	Water	10/05/21 13:06	10/07/21 09:40
310-216813-6	MW14	Water	10/04/21 11:53	10/07/21 09:40
310-216813-7	DUP1	Water	10/06/21 00:00	10/07/21 09:40

7

10

12

IL.

Detection	Summary
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Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-1

Client Sample ID: NC1MW2						Lab 9	Sample ID:	310-216813-1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	5.31		5.00	2.15	mg/L	5	9056A	Total/NA
Sulfate	72.1		5.00	2.45	mg/L	5	9056A	Total/NA
Antimony	0.00111	J	0.00200	0.00110	mg/L	1	6020A	Total/NA
Arsenic	0.00179	J	0.00200	0.000750	mg/L	1	6020A	Total/NA
Barium	0.154		0.00200	0.000370	mg/L	1	6020A	Total/NA
Beryllium	0.000387	J	0.00100	0.000270	mg/L	1	6020A	Total/NA
Boron	0.430		0.100	0.0580	mg/L	1	6020A	Total/NA
Cadmium	0.000592		0.000100	0.0000510	mg/L	1	6020A	Total/NA
Calcium	103		0.500	0.190	mg/L	1	6020A	Total/NA
Cobalt	0.000568		0.000500	0.000190	mg/L	1	6020A	Total/NA
Lead	0.000968		0.000500	0.000210	mg/L	1	6020A	Total/NA
Lithium	0.0124		0.0100	0.00250	mg/L	1	6020A	Total/NA
Molybdenum	0.102		0.00200	0.00130	mg/L	1	6020A	Total/NA
Selenium	0.00346	J	0.00500	0.000960	mg/L	1	6020A	Total/NA
Thallium	0.00106		0.00100	0.000260	mg/L	1	6020A	Total/NA
Total Dissolved Solids	340		50.0	26.0	mg/L	1	SM 2540C	Total/NA
Client Sample ID: NC1MW3						Lab S	Sample ID:	310-216813-2
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	9.86		5.00	2.15	mg/L	5		9056A	Total/NA
Sulfate	395		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.0368		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.144		0.00200	0.000370	mg/L	1		6020A	Total/NA
Boron	2.77		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	181		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00137		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0361		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00179	1	0.00200	0.00130	mg/L	1		6020A	Total/NA
Total Dissolved Solids	998		50.0	26.0	mg/L	- 1		SM 2540C	Total/NA

Client Sample ID: NC1MW4						Lat	5	Sample ID:	310-216813-
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.82		5.00	2.15	mg/L	5		9056A	Total/NA
Sulfate	210		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.00125	J	0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.111		0.00200	0.000370	mg/L	1		6020A	Total/NA
Boron	1.25		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.000134		0.000100	0.0000510	mg/L	1		6020A	Total/NA
Calcium	114		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00200		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0187		0.0100	0.00250	mg/L	1		6020A	Total/NA
Molybdenum	0.00664		0.00200	0.00130	mg/L	1		6020A	Total/NA
Total Dissolved Solids	518		50.0	26.0	ma/L	1		SM 2540C	Total/NA

Client Sample ID: NC1MW9					Client Sample ID: NC1MW9						Lal	o S	ample ID:	310-216813-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type					
Chloride	6.84		5.00	2.15	mg/L	5		9056A	Total/NA					
Sulfate	219		5.00	2.45	mg/L	5		9056A	Total/NA					
Arsenic	0.0121		0.00200	0.000750	mg/L	1		6020A	Total/NA					

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

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

Total Dissolved Solids

Client Sample ID: MW11

Client Sample ID: MW14

Job ID: 310-216813-1

1 SM 2540C

Lab Sample ID: 310-216813-5

Lab Sample ID: 310-216813-6

Client Sample ID: NC1MW9 (Continued)							5	Sample ID:	310-216813-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.139		0.00200	0.000370	mg/L	1		6020A	Total/NA
Boron	1.45		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0.0000780	J	0.000100	0.0000510	mg/L	1		6020A	Total/NA
Calcium	174		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00202		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lithium	0.0318		0.0100	0,00250	mg/L	1		6020A	Total/NA
Molybdenum	0.0243		0.00200	0.00130	mg/L	1		6020A	Total/NA
Selenium	0.00115	J	0.00500	0.000960	mg/L	1		6020A	Total/NA

26.0 mg/L

monte oumpto io. mirri							-	dilibio in:	010 210010
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.82		5.00	2.15	mg/L	- 5	-	9056A	Total/NA
Arsenic	0.0237		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.253		0.00200	0.000370	mg/L	1		6020A	Total/NA
Boron	0.335		0.100	0.0580	mg/L	1		6020A	Total/NA
Cadmium	0,000179		0.000100	0.0000510	mg/L	1		6020A	Total/NA
Calcium	79.5		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00131		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.000537		0.000500	0.000210	mg/L	1		6020A	Total/NA
Molybdenum	0.0201		0.00200	0.00130	mg/L	1		6020A	Total/NA
Selenium	0.00125	J	0.00500	0.000960	mg/L	1		6020A	Total/NA
Total Dissolved Solids	240		50.0	26.0	mg/L	1		SM 2540C	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.65		5.00	2.15	mg/L	5		9056A	Total/NA
Sulfate	36.0		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.0494		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.367		0.00200	0.000370	mg/L	1		6020A	Total/NA
Boron	0.246		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	168		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00167		0.000500	0.000190	mg/L	1		6020A	Total/NA
Lead	0.000211	J	0.000500	0.000210	mg/L	1		6020A	Total/NA
Lithium	0.0525		0.0100	0.00250	mg/L	1		6020A	Total/NA
Total Dissolved Solids	706		50.0	26.0	mg/L	1		SM 2540C	Total/NA

Analyte	Result (Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	10.3		5.00	2.15	mg/L	5		9056A	Total/NA
Sulfate	397		5.00	2.45	mg/L	5		9056A	Total/NA
Arsenic	0.0376		0.00200	0.000750	mg/L	1		6020A	Total/NA
Barium	0.146		0.00200	0.000370	mg/L	- 1		6020A	Total/NA
Boron	2.80		0.100	0.0580	mg/L	1		6020A	Total/NA
Calcium	186		0.500	0.190	mg/L	1		6020A	Total/NA
Cobalt	0.00143		0.000500	0.000190	mg/L	31.		6020A	Total/NA
Lithium	0.0373		0.0100	0.00250	mg/L	31		6020A	Total/NA
Molybdenum	0.00139	1	0.00200	0.00130	mg/L	.1		6020A	Total/NA
Total Dissolved Solids	1010		50.0	26.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Page 5 of 27 10/25/2021 Page 6 of 27 10/25/2021

roject/Site: Nebraska City Station Uni	t 1 CCR								
Client Sample ID: NC1MW2							Lab Samp	le ID: 310-21	6813-1
late Collected: 10/05/21 13:44								Matrix	k: Water
ate Received: 10/07/21 09:40									
Method: 9056A - Anions, Ion Chrom	atography								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.31	= =	5.00	2.15	mg/L	- 1	2	10/12/21 21:24	5
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 21:24	5
Sulfate	72.1		5.00	2.45	mg/L			10/12/21 21:24	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	2000000	D	Prepared	Analyzed	Dil Fac
Antimony	0.00111	J	0.00200	0.00110			10/08/21 09:00	10/22/21 18:59	1
Arsenic	0.00179	J	0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 18:59	1
Barium	0.154		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 18:59	1
Beryllium	0.000387	J	0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 18:59	1
Boron	0.430		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 18:59	1
Cadmium	0.000592		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 18:59	1
Calcium	103		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 18:59	1
Chromium	< 0.00110		0.00500	0.00110	5.7		10/08/21 09:00	10/22/21 18:59	31
Cobalt	0.000568		0.000500	0.000190	- 12		10/08/21 09:00	10/22/21 18:59	1
Lead	0.000968		0.000500	0.000210	3.5		10/08/21 09:00	10/22/21 18:59	- 1
Lithium	0.0124		0.0100	0.00250	95		10/08/21 09:00	10/22/21 18:59	31
Molybdenum	0.102		0.00200	0.00130			10/08/21 09:00	10/22/21 18:59	
Selenium	0.00346	J	0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 18:59	1
Thallium	0.00106		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 18:59	1
Method: 7470A - Mercury (CVAA)									
Analyte	Porult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150	- Commen	0.000200	0.000150	1000000		10/11/21 11:22	10/12/21 11:11	Dil Pac
word and y	-0.000100		0.000200	0.000100	mgre		101111211122	to tale i ii. ii	3.0
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	340		50.0	26.0	mg/L	_		10/11/21 15:55	1

Client Sample Results

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

Lab Sample ID: 310-216813-2

Client Sample ID: NC1MW3 Date Collected: 10/06/21 11:04 Date Received: 10/07/21 09:40

Fluoride

Total Dissolved Solids

Matrix: Water

Method: 9056A - Anions, Ion Chromatography Chloride 9.86

< 0.275

MDL Unit Analyzed Dil Fac 2.15 mg/L 10/12/21 21:40 0.275 mg/L 10/12/21 21:40 2.45 mg/L 10/12/21 21:40

Sulfate	395		5.00	2.45	mg/L			10/12/21 21:40	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110	-	0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 19:01	1
Arsenic	0.0368		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 19:01	1
Barium	0.144		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 19:01	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 19:01	1
Boron	2.77		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 19:01	31
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 19:01	1
Calcium	181		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 19:01	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 19:01	31
Cobalt	0.00137		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 19:01	4
Lead	< 0.000210		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 19:01	- 1
Lithium	0.0361		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 19:01	1
Molybdenum	0.00179	J	0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 19:01	1
Selenium	< 0.000960		0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 19:01	1
Thallium	< 0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:01	1

RL

5.00

0.500

Method: 7470A - Mercury (CVAA) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150		0.000200	0.000150	mg/L		10/11/21 11:22	10/12/21 11:13	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

50.0

26.0 mg/L

Eurofins TestAmerica, Cedar Falls Eurofins TestAmerica, Cedar Falls

998

Page 7 of 27 10/25/2021 Page 8 of 27 10/25/2021

Job ID: 310-216813-1

Analyzed

10/12/21 10:06

Client Sample ID: NC1MW4							Lab Samp	le ID: 310-21	6813-3
Pate Collected: 10/05/21 14:21								Matrix	k: Water
Date Received: 10/07/21 09:40									
Method: 9056A - Anions, Ion Chrom	atography								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.82		5.00		mg/L		Tropulou	10/12/21 21:55	5
Fluoride	< 0.275		0.500	0.275				10/12/21 21:55	5
Sulfate	210		5.00		mg/L			10/12/21 21:55	5
					-				
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		10/08/21 09:00	10/22/21 19:04	1
Arsenic	0.00125	J	0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 19:04	1
Barium	0.111		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 19:04	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 19:04	1
Boron	1.25		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 19:04	1
Cadmium	0.000134		0.000100	0.0000510			10/08/21 09:00	10/22/21 19:04	31
Calcium	114		0.500	0.190	100		10/08/21 09:00	10/22/21 19:04	1
Chromium	<0.00110		0.00500	0.00110	55 m		10/08/21 09:00	10/22/21 19:04	31
Cobalt	0.00200		0.000500	0.000190			10/08/21 09:00	10/22/21 19:04	1
Lead	<0.000210		0.000500	0.000210	100		10/08/21 09:00	10/22/21 19:04	1
Lithium	0.0187		0.0100	0.00250	25		10/08/21 09:00	10/22/21 19:04	
Molybdenum	0.00664		0.00200	0.00130			10/08/21 09:00	10/22/21 19:04	
Selenium	<0.000960		0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 19:04	31
Thallium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:04	1
Method: 7470A - Mercury (CVAA)									
Analyte	Posult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150	- admitor	0.000200	0.000150	3270 ST		10/11/21 11:25	10/12/21 11:19	1
-	0.300 (00		5.500200	0.000100					10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	518		50.0	26.0	mg/L	_		10/11/21 15:55	1

Client Sample Results

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

Client Sample ID: NC1MW9 Date Collected: 10/06/21 11:53

Lab Sample ID: 310-216813-4

Date Received: 10/07/21 09:40

Matrix: Water

Job ID: 310-216813-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.84	= =:	5.00	2.15	mg/L	1000	: : : : : : : : : : : : : : : : : : :	10/12/21 22:11	
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 22:11	5
Sulfate	219		5.00	2.45	mg/L			10/12/21 22:11	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 19:07	1
A STATE OF THE STA	and a company		0.00000	******			40/00/04 00 00	40000044007	

Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110	41444	0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 19:07	1
Arsenic	0.0121		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 19:07	1
Barium	0.139		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 19:07	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 19:07	3
Boron	1.45		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 19:07	31
Cadmium	0.0000780	J	0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 19:07	1
Calcium	174		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 19:07	- 1
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 19:07	31
Cobalt	0.00202		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 19:07	31
Lead	< 0.000210		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 19:07	- 1
Lithium	0.0318		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 19:07	- 31
Molybdenum	0.0243		0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 19:07	
Selenium	0.00115	J	0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 19:07	31
Thallium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:07	1

Thalli	ium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:07	1
Meti	hod: 7470A - Mercury (CVAA)	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Merci	ury	<0.000150		0.000200	0.000150	mg/L		10/11/21 11:25	10/12/21 11:30	1
Gen	eral Chemistry									
Analy	yte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total	Dissolved Solids	822		50.0	26.0	mg/L			10/12/21 10:06	1

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Page 9 of 27 10/25/2021 Page 10 of 27 10/25/2021

lient: Omaha Public Power District		Clien	t Sample	Results	•			Job ID: 310-2	16813-1
roject/Site: Nebraska City Station Un	t 1 CCR								
lient Sample ID: MW11							Lab Samp	le ID: 310-21	6813-5
ate Collected: 10/05/21 13:06								Matrix	x: Water
ate Received; 10/07/21 09:40									
Method: 9056A - Anions, Ion Chrom	atography								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.82		5.00	2.15	mg/L			10/12/21 22:26	5
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 22:26	5
Sulfate	<2.45		5.00	2.45	mg/L			10/12/21 22:26	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	< 0.00110	-	0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 19:19	1
Arsenic	0.0237		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 19:19	1
Barium	0.253		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 19:19	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 19:19	3
Boron	0.335		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 19:19	31
Cadmium	0.000179		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 19:19	:1
Calcium	79.5		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 19:19	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 19:19	- 3
Cobalt	0.00131		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 19:19	1
Lead	0.000537		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 19:19	8
Lithium	< 0.00250		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 19:19	:1
Molybdenum	0.0201		0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 19:19	
Selenium	0.00125	J	0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 19:19	:1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:19	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150		0.000200	0.000150	mg/L		10/11/21 11:25	10/12/21 11:32	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		50.0		mg/L			10/11/21 15:55	1

Client Sample Results

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

Client Sample ID: MW14 Date Collected: 10/04/21 11:53 Lab Sample ID: 310-216813-6

Date Received: 10/07/21 09:40

Total Dissolved Solids

Matrix: Water

10/08/21 15:24

Job ID: 310-216813-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.65	3 5	5.00	2.15	mg/L			10/12/21 22:42	5
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 22:42	5
Sulfate	36.0		5.00	2.45	mg/L			10/12/21 22:42	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ntimony	< 0.00110	400000000000000000000000000000000000000	0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 19:22	1
rsenic	0.0494		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 19:22	1
Barium	0.367		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 19:22	1
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 19:22	1
Boron	0.246		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 19:22	1
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 19:22	1
alcium	168		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 19:22	
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 19:22	21
Cobalt	0.00167		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 19:22	1
.ead	0.000211	J	0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 19:22	1
ithium	0.0525		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 19:22	- 1
Molybdenum	< 0.00130		0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 19:22	- 11
Selenium	< 0.000960		0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 19:22	- 1
Thallium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:22	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000150		0.000200	0.000150	mg/L		10/11/21 11:25	10/12/21 11:34	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

50.0

26.0 mg/L

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706

Page 11 of 27 10/25/2021 Page 12 of 27 10/25/2021

	Client	Sample	Results
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Client: Omaha Public Power District	
Project/Site: Nebraska City Station Unit 1 CCR	

General Chemistry Analyte

Total Dissolved Solids

Client Sample ID: DUP1

Lab Sample ID: 310-216813-7 Date Collected: 10/06/21 00:00 Date Received: 10/07/21 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.3		5.00	2.15	mg/L		=======================================	10/12/21 22:57	5
Fluoride	< 0.275		0.500	0.275	mg/L			10/12/21 22:57	5
Sulfate	397		5.00	2.45	mg/L			10/12/21 22:57	5
Method: 6020A - Metals (ICP/MS)									
inalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ntimony	< 0.00110	410000000000000000000000000000000000000	0.00200	0.00110	mg/L	-	10/08/21 09:00	10/22/21 19:25	1
rsenic	0.0376		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 19:25	31
Barium	0.146		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 19:25	38
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 19:25	8
Boron	2.80		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 19:25	8
Cadmium	<0.0000510		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 19:25	2
Calcium	186		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 19:25	8
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 19:25	
Cobalt	0.00143		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 19:25	81
ead	< 0.000210		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 19:25	81
Lithium	0.0373		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 19:25	8
Molybdenum	0.00139	J	0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 19:25	25
Selenium	< 0.000960		0.00500	0.000960	mg/L		10/08/21 09:00	10/22/21 19:25	đ
Thallium	<0.000260		0.00100	0.000260	mg/L		10/08/21 09:00	10/22/21 19:25	33
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	< 0.000150		0.000200	0.000150	mg/L		10/11/21 11:25	10/12/21 11:36	1

50.0

MDL Unit

26.0 mg/L

Result Qualifier

1010

Definitions/Glossary

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

Qualifiers

Metals

Qualifier

TNTC

Job ID: 310-216813-1

Analyzed

10/12/21 10:06

Matrix: Water

Job ID: 310-216813-1

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.
н	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
oc .	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)

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Page 13 of 27 10/25/2021 Page 14 of 27 10/25/2021

Too Numerous To Count

	QC	Sam	ple	Results
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Client: Omaha Public Power District Job ID: 310-216813-1 Project/Site: Nebraska City Station Unit 1 CCR

Lab Sample ID: MB 310-331686/3

Matrix: Water

Selenium

Analysis Batch: 331686									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	< 0.430		1.00	0.430	mg/L			10/12/21 20:22	1
Fluoride	< 0.0550		0.100	0.0550	mg/L			10/12/21 20:22	1
Sulfate	< 0.490		1.00	0.490	mg/L			10/12/21 20:22	1

	Lab Sample ID: LCS 310-331686/4		
ı	Matrix: Water		

< 0.000960

Matrix: Water					to recorde	ABTO CONTRACTO		pe: Total/NA
Analysis Batch: 331686								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10.0	9.875		mg/L		99	90 - 110	
Fluoride	2.00	2.110		mg/L		106	90 - 110	
Sulfate	10.0	10.25		ma/L		103	90 - 110	

Method: 6020A - Metals (ICP/MS) Lab Sample ID: MB 310-330872/1-A

Lub dampie ib. inb die doddir							Olient ou	inpie ib. metilo	a Diam.
Matrix: Water	rix: Water							Prep Type: 7	otal/NA
Analysis Batch: 332689								Prep Batch:	330872
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Antimony	< 0.00110		0.00200	0.00110	mg/L		10/08/21 09:00	10/22/21 18:31	
Arsenic	< 0.000750		0.00200	0.000750	mg/L		10/08/21 09:00	10/22/21 18:31	- 21
Barium	< 0.000370		0.00200	0.000370	mg/L		10/08/21 09:00	10/22/21 18:31	31
Beryllium	< 0.000270		0.00100	0.000270	mg/L		10/08/21 09:00	10/22/21 18:31	1
Boron	< 0.0580		0.100	0.0580	mg/L		10/08/21 09:00	10/22/21 18:31	1
Cadmium	< 0.0000510		0.000100	0.0000510	mg/L		10/08/21 09:00	10/22/21 18:31	1
Calcium	<0.190		0.500	0.190	mg/L		10/08/21 09:00	10/22/21 18:31	1
Chromium	< 0.00110		0.00500	0.00110	mg/L		10/08/21 09:00	10/22/21 18:31	1
Cobalt	< 0.000190		0.000500	0.000190	mg/L		10/08/21 09:00	10/22/21 18:31	1
Lead	< 0.000210		0.000500	0.000210	mg/L		10/08/21 09:00	10/22/21 18:31	- 1
Lithium	< 0.00250		0.0100	0.00250	mg/L		10/08/21 09:00	10/22/21 18:31	1
Molybdenum	< 0.00130		0.00200	0.00130	mg/L		10/08/21 09:00	10/22/21 18:31	1

200000000		4.000.0	1,40,90						
Thallium	<0.000260	0.00100	0.00	0260 mg/L		10/0	08/21 09:00	10/22/21 18	:31 1
Lab Sample ID: LCS 310-33087	2/2-A					Clien	t Sample	ID: Lab Cor	trol Sample
Matrix: Water								Prep Ty	pe: Total/NA
Analysis Batch: 332689								Prep Ba	tch: 330872
The state of the s		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony		0.200	0.2000		mg/L		100	80 - 120	
Arsenic		0.200	0.1937		mg/L		97	80 - 120	
Davison		0.400	0.4070		- A - A - A - A - A - A - A - A - A - A		400	00 400	

0.00500

0.000960 mg/L

	эріке	LUS	LUS				WREC.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.200	0.2000		mg/L		100	80 - 120	
Arsenic	0.200	0.1937		mg/L		97	80 - 120	
Barium	0.100	0.1078		mg/L		108	80 - 120	
Beryllium	0.100	0.09649		mg/L		96	80 - 120	
Boron	0.200	0.2066		mg/L		103	80 - 120	
Cadmium	0.100	0.1002		mg/L		100	80 - 120	
Calcium	2,00	2.164		mg/L		108	80 - 120	
Chromium	0.100	0.09767		mg/L		98	80 - 120	
Cobalt	0.100	0.1033		mg/L		103	80 - 120	

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10/08/21 09:00 10/22/21 18:31

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Prep Type: Total/NA

QC Sample Results

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

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

Lab Sample ID: LCS 310-330872/2-A Matrix: Water					Client	Sample	ID: Lab Control Sample Prep Type: Total/NA
Analysis Batch: 332689							Prep Batch: 330872
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Lead	0.200	0.2076		mg/L		104	80 - 120
Lithium	0.200	0.2018		mg/L		101	80 - 120
Molybdenum	0.200	0.1978		mg/L		99	80 - 120
Selenium	0.400	0.3830		mg/L		96	80 - 120
Thallium	0.200	0.1975		mg/L		99	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-331208/1-A							Client Sa	mple ID: Metho	d Blank
Matrix: Water								Prep Type: 7	otal/NA
Analysis Batch: 331367								Prep Batch:	331208
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	< 0.000150		0.000200	0.000150	mg/L		10/11/21 11:22	10/12/21 10:13	- 1

Lab Sample ID: LCS 310-331208/2-A					Client	Sample	ID: Lab Control	Sample
Matrix: Water							Prep Type:	Total/NA
Analysis Batch: 331367							Prep Batch	: 331208
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	0.00167	0.001622		mg/L		97	80 - 120	

Lab Sample ID: MB 310-331210/1-A							Client Sa	mple ID: Metho	d Blank
Matrix: Water								Prep Type: 1	Total/NA
Analysis Batch: 331367								Prep Batch:	331210
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	< 0.000150		0.000200	0.000150	mg/L		10/11/21 11:25	10/12/21 11:15	- 1

Lab Sample ID: LCS 310-331210/2-A					Clien	t Sample	D: Lab C	ontrol Sample
Matrix: Water							Prep	Type: Total/NA
Analysis Batch: 331367							Prep	Batch: 331210
The state of the s	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	0.00167	0.001632		mn/l		98	80 . 120	

Lab Sample ID: 310-216813-3 MS Matrix: Water	3							Cli	ent Sample ID: NC Prep Type: To	
Analysis Batch: 331367									Prep Batch: 3	31210
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	<0.000150		0.00167	0.001716		ma/l		103	80 120	

Mercury	< 0.000150		0.00167	0.001672		mg/L		100	80 - 120	3	20
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPE
Analysis Batch: 331367									Prep 8	Batch: 3	31210
Matrix: Water									Prep T	ype: To	tal/NA
Lab Sample ID: 310-216813-	3 MSD							Cli	ent Sample	ID: NC	1MW4
Wercury	~0.000100		0.00101	0.001710		mgr		100	00 - 120		

Eurofins TestAmerica, Cedar Falls

Job ID: 310-216813-1

Page 15 of 27 10/25/2021 Page 16 of 27 10/25/2021

Client: Omaha Public Power District			QC	Sam	ple F	Resu	Its					leb ID- 240 244	2042 4
roject/Site: Nebraska City Station Un	iit 1 CCR	Ē										Job ID: 310-216	0613-1
lethod: SM 2540C - Solids, To	tal Dis	sol	ved (TDS	3)									
Lab Sample ID: MB 310-331052/1											Client S	Sample ID: Method	Blank
Matrix: Water												Prep Type: To	
Analysis Batch: 331052													
			MB										
Analyte	- 11000		Qualifier	_	RL		MDL Unit		D	Pi	repared	Analyzed	Dil Fac
Total Dissolved Solids	-	26.0			50.0		26.0 mg/L					10/08/21 15:24	
Lab Sample ID: LCS 310-331052/2									CI	ient	Sample	ID: Lab Control S	ample
Matrix: Water											000000000000000000000000000000000000000	Prep Type: To	
Analysis Batch: 331052												ACCOUNTS A BARCON AND	
				Spike		LCS	LCS					%Rec.	
Analyte		_		Added			Qualifier	Unit		D	%Rec	Limits	
Total Dissolved Solids				1000		910.0		mg/L			91	90 - 110	
Lab Sample ID: 310-216813-6 DU												Client Sample ID:	MANA/4 A
Matrix: Water												Prep Type: To	
Analysis Batch: 331052												Frep Type. 10	LairitA
Analysis Batch. 001002	Sample	Sam	ple			DU	DU						RPD
Analyte	Result	Qual	lifier			Result	Qualifier	Unit		D		RPD	Limit
Total Dissolved Solids	706					694.0		mg/L		-	_	2	20
Lab Sample ID: MB 310-331240/1											Client S	Sample ID: Method	
Matrix: Water												Prep Type: To	tal/NA
Analysis Batch: 331240		мп	МВ										
Analyte	P.		Qualifier		RL		MDL Unit		D	D	repared	Analyzed	Dil Fac
Total Dissolved Solids		26.0	Quanner		50.0	_	26.0 mg/L	_		-	epared	10/11/21 15:55	1
Lab Sample ID: LCS 310-331240/2									CI	ient	Sample	D: Lab Control S	ample
Matrix: Water												Prep Type: To	tal/NA
Analysis Batch: 331240				51.556566.00		677520	CHESTAGE					28027472	
**************************************				Spike			LCS				@#250007	%Rec. Limits	
Analyte										-			
otal Discolund Solide	35			Added		2000	Qualifier	Unit	_	D	%Rec	773377777	
Total Dissolved Solids			- F88	1000		920.0	Qualifier	mg/L		<u>D</u>	%Rec 92	90 - 110	
			- FR F		9	2000	Qualifier	Constant		D	117,000,000	773377777	MW11
Lab Sample ID: 310-216813-5 DU	38				-	2000	Qualifier	Constant		<u>D</u>	117,000,000	90 - 110	
Lab Sample ID: 310-216813-5 DU Matrix: Water			F#1			920.0		Constant		<u>D</u>	117,000,000	90 - 110 Client Sample ID:	
Lab Sample ID: 310-216813-5 DU Matrix: Water	Sample		50			920.0 DU	DU	Constant	-	<u>D</u>	117,000,000	90 - 110 Client Sample ID: Prep Type: To	tal/NA RPD
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240	Result		50			920.0 DU Result		mg/L Unit		<u>D</u>	117,000,000	90 - 110 Client Sample ID: Prep Type: To	RPD Limit
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240	565		50			920.0 DU	DU	mg/L			117,000,000	90 - 110 Client Sample ID: Prep Type: To	tal/NA RPD
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids	Result		50		-	920.0 DU Result	DU	mg/L Unit		_ D	92	90 - 110 Client Sample ID: Prep Type: To	RPD Limit
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1	Result		50			920.0 DU Result	DU	mg/L Unit		_ D	92	90-110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method	RPD Limit 20
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water	Result		50		-	920.0 DU Result	DU	mg/L Unit		_ D	92	90 - 110 Client Sample ID: Prep Type: To	RPD Limit 20
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water	Result	Qual	50			920.0 DU Result	DU	mg/L Unit		_ D	92	90-110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method	RPD Limit 20
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Otal Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323	Result 240	Qual	lifier		RL	920.0 DU Result	DU	mg/L Unit	D	<u>D</u>	92	90-110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method	RPD Limit 20
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Otal Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323 Analyte	Result 240	Qual	lifier MB		RL 50.0	920.0 DU Result	DU Qualifier	mg/L Unit	<u>D</u>	<u>D</u>	92 Client \$	90-110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method Prep Type: To	RPD Limit 20 Blank
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323 Analyte Total Dissolved Solids	Result 240	Qual MB esult	lifier MB			920.0 DU Result	DU Qualifier MDL Unit	mg/L Unit	.a <u>.E</u> .e. _e .	D Pr	92 Client \$	90 - 110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method Prep Type: To Analyzed 10/12/21 10:06	RPD Limit 20 Blank stal/NA
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Otal Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323 Analyte Otal Dissolved Solids Lab Sample ID: LCS 310-331323/2	Result 240	Qual MB esult	lifier MB			920.0 DU Result	DU Qualifier MDL Unit	mg/L Unit	.a <u>.E</u> .e. _e .	D Pr	92 Client \$	90 - 110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method Prep Type: To Analyzed 10/12/21 10:06	Blank otal/NA Dil Fac
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331323/2 Matrix: Water	Result 240	Qual MB esult	lifier MB			920.0 DU Result	DU Qualifier MDL Unit	mg/L Unit	.a <u>.E</u> .e. _e .	D Pr	92 Client \$	90 - 110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method Prep Type: To Analyzed 10/12/21 10:06	Blank otal/NA Dil Fac
Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331323/2 Matrix: Water	Result 240	Qual MB esult	lifier MB	1000		920.0 DU Result 240.0	DU Qualifier MDL Unit 26.0 mg/L	mg/L Unit	.a <u>.E</u> .e. _e .	D Pr	92 Client \$	Prep Type: To Analyzed 10/12/21 10:06 Prep Type: To	Blank otal/NA Dil Fac
Total Dissolved Solids Lab Sample ID: 310-216813-5 DU Matrix: Water Analysis Batch: 331240 Analyte Total Dissolved Solids Lab Sample ID: MB 310-331323/1 Matrix: Water Analysis Batch: 331323 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-331323/2 Matrix: Water Analyte Analyte Analysis Batch: 331323 Analysis Batch: 331323	Result 240	Qual MB esult	lifier MB			920.0 DU Result 240.0	DU Qualifier MDL Unit	mg/L Unit	.a <u>.E</u> .e. _e .	D Pr	92 Client \$	90 - 110 Client Sample ID: Prep Type: To RPD 0 Sample ID: Method Prep Type: To Analyzed 10/12/21 10:06	Blank otal/NA Dil Fac

Eurofins TestAmerica, Cedar Falls

QC Association Summary

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

Job ID: 310-216813-1

HPLC/IC

Analysis Batch: 331686

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NC1MW2	Total/NA	Water	9056A	
NC1MW3	Total/NA	Water	9056A	
NC1MW4	Total/NA	Water	9056A	
NC1MW9	Total/NA	Water	9056A	
MW11	Total/NA	Water	9056A	
MW14	Total/NA	Water	9056A	
DUP1	Total/NA	Water	9056A	
Method Blank	Total/NA	Water	9056A	
Lab Control Sample	Total/NA	Water	9056A	
	NC1MW2 NC1MW3 NC1MW4 NC1MW9 MW11 MW14 DUP1 Method Blank	NC1MW2 Total/NA NC1MW3 Total/NA NC1MW4 Total/NA NC1MW9 Total/NA MW11 Total/NA MW14 Total/NA DUP1 Total/NA Method Blank Total/NA	Client Sample ID Prep Type Matrix NC1MW2 Total/NA Water NC1MW3 Total/NA Water NC1MW4 Total/NA Water NC1MW9 Total/NA Water MY11 Total/NA Water MW14 Total/NA Water DUP1 Total/NA Water Method Blank Total/NA Water	Client Sample ID Prep Type Matrix Method NC1MW2 Total/NA Water 9056A NC1MW3 Total/NA Water 9056A NC1MW4 Total/NA Water 9056A NC1MW9 Total/NA Water 9056A MW11 Total/NA Water 9056A MW14 Total/NA Water 9056A DUP1 Total/NA Water 9056A Method Blank Total/NA Water 9056A

Metals

Prep Batch: 330872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
310-216813-1	NC1MW2	Total/NA	Water	3010A	35
310-216813-2	NC1MW3	Total/NA	Water	3010A	
310-216813-3	NC1MW4	Total/NA	Water	3010A	
310-216813-4	NC1MW9	Total/NA	Water	3010A	
310-216813-5	MW11	Total/NA	Water	3010A	
310-216813-6	MW14	Total/NA	Water	3010A	
310-216813-7	DUP1	Total/NA	Water	3010A	
MB 310-330872/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-330872/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 331208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-1	NC1MW2	Total/NA	Water	7470A	
310-216813-2	NC1MW3	Total/NA	Water	7470A	
MB 310-331208/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-331208/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 331210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-3	NC1MW4	Total/NA	Water	7470A	
310-216813-4	NC1MW9	Total/NA	Water	7470A	
310-216813-5	MW11	Total/NA	Water	7470A	
310-216813-6	MW14	Total/NA	Water	7470A	
310-216813-7	DUP1	Total/NA	Water	7470A	
MB 310-331210/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-331210/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-216813-3 MS	NC1MW4	Total/NA	Water	7470A	
310-216813-3 MSD	NC1MW4	Total/NA	Water	7470A	

Analysis Batch: 331367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-1	NC1MW2	Total/NA	Water	7470A	331208
310-216813-2	NC1MW3	Total/NA	Water	7470A	331208
310-216813-3	NC1MW4	Total/NA	Water	7470A	331210
310-216813-4	NC1MW9	Total/NA	Water	7470A	331210
310-216813-5	MW11	Total/NA	Water	7470A	331210
310-216813-6	MW14	Total/NA	Water	7470A	331210

Eurofins TestAmerica, Cedar Falls

Page 17 of 27 10/25/2021 Page 18 of 27 10/25/2021







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QC.	Association	Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-1

Metals (Continued)

Analysis Batch: 331367 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-7	DUP1	Total/NA	Water	7470A	331210
MB 310-331208/1-A	Method Blank	Total/NA	Water	7470A	331208
MB 310-331210/1-A	Method Blank	Total/NA	Water	7470A	331210
LCS 310-331208/2-A	Lab Control Sample	Total/NA	Water	7470A	331208
LCS 310-331210/2-A	Lab Control Sample	Total/NA	Water	7470A	331210
310-216813-3 MS	NC1MW4	Total/NA	Water	7470A	331210
310-216813-3 MSD	NC1MW4	Total/NA	Water	7470A	331210

Analysis Batch: 332689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-1	NC1MW2	Total/NA	Water	6020A	330872
310-216813-2	NC1MW3	Total/NA	Water	6020A	330872
310-216813-3	NC1MW4	Total/NA	Water	6020A	330872
310-216813-4	NC1MW9	Total/NA	Water	6020A	330872
310-216813-5	MW11	Total/NA	Water	6020A	330872
310-216813-6	MW14	Total/NA	Water	6020A	330872
310-216813-7	DUP1	Total/NA	Water	6020A	330872
MB 310-330872/1-A	Method Blank	Total/NA	Water	6020A	330872
LCS 310-330872/2-A	Lab Control Sample	Total/NA	Water	6020A	330872

General Chemistry

Analysis Batch: 331052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-6	MW14	Total/NA	Water	SM 2540C	
MB 310-331052/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-331052/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-216813-6 DU	MW14	Total/NA	Water	SM 2540C	

Analysis Batch: 331240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-1	NC1MW2	Total/NA	Water	SM 2540C	
310-216813-3	NC1MW4	Total/NA	Water	SM 2540C	
310-216813-5	MW11	Total/NA	Water	SM 2540C	
MB 310-331240/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-331240/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-216813-5 DU	MW11	Total/NA	Water	SM 2540C	

Analysis Batch: 331323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batci
310-216813-2	NC1MW3	Total/NA	Water	SM 2540C	
310-216813-4	NC1MW9	Total/NA	Water	SM 2540C	
310-216813-7	DUP1	Total/NA	Water	SM 2540C	
MB 310-331323/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-331323/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Lab Chronicle

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

Lab Sample ID: 310-216813-1

Client Sample ID: NC1MW2 Date Collected: 10/05/21 13:44

Date Received: 10/07/21 09:40

Matrix: Water

Job ID: 310-216813-1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	82	5	331686	10/12/21 21:24	JNR	TAL CF
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	332689	10/22/21 18:59	SAP	TAL CF
Total/NA	Prep	7470A			331208	10/11/21 11:22	EAM	TAL CF
Total/NA	Analysis	7470A		1	331367	10/12/21 11:11	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	331240	10/11/21 15:55	ARG	TAL CF

Client Sample ID: NC1MW3

Date Collected: 10/06/21 11:04

Lab Sample ID: 310-216813-2

Matrix: Water

Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	331686	10/12/21 21:40	JNR	TAL CF
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	332689	10/22/21 19:01	SAP	TAL CF
Total/NA	Prep	7470A			331208	10/11/21 11:22	EAM	TAL CF
Total/NA	Analysis	7470A		1:	331367	10/12/21 11:13	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	331323	10/12/21 10:06	ARG	TAL CF

Client Sample ID: NC1MW4

Date Collected: 10/05/21 14:21 Date Received: 10/07/21 09:40

Lab Sample ID: 310-216813-3

Matrix: Water

Batch Prep Type Method or Analyzed Lab Type Factor Total/NA Analysis 9056A 331686 10/12/21 21:55 JNR TAL CF Total/NA Prep 3010A 330872 10/08/21 09:00 ACM2 TAL CF Total/NA Analysis 6020A 332689 10/22/21 19:04 SAP TAL CF Total/NA Prep 7470A 10/11/21 11:25 EAM TAL CF Total/NA Analysis 7470A 331367 10/12/21 11:19 EAM TAL CF 331240 10/11/21 15:55 ARG TAL CF Total/NA Analysis SM 2540C

Client Sample ID: NC1MW9

Date Collected: 10/06/21 11:53

Date Received: 10/07/21 09:40

Lab Sample ID: 310-216813-4

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	331686	10/12/21 22:11	JNR	TAL CF
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		10	332689	10/22/21 19:07	SAP	TAL CF
Total/NA	Prep	7470A			331210	10/11/21 11:25	EAM	TAL CF
Total/NA	Analysis	7470A		1	331367	10/12/21 11:30	EAM	TAL CF
Total/NA	Analysis	SM 2540C		15	331323	10/12/21 10:06	ARG	TAL CF

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Page 19 of 27 10/25/2021 Page 20 of 27 10/25/2021







Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR. Job ID: 310-216813-1

Client Sample ID: MW11

Lab Sample ID: 310-216813-5

Date Collected: 10/05/21 13:06 Date Received: 10/07/21 09:40 Matrix: Water

Wi Gr	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	9056A	88	5	331686	10/12/21 22:26	JNR	TAL CF	
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF	
Total/NA	Analysis	6020A		1	332689	10/22/21 19:19	SAP	TAL CF	
Total/NA	Prep	7470A			331210	10/11/21 11:25	EAM	TAL CF	
Total/NA	Analysis	7470A		1	331367	10/12/21 11:32	EAM	TAL CF	
Total/NA	Analysis	SM 2540C		1:	331240	10/11/21 15:55	ARG	TAL CF	

Client Sample ID: MW14 Date Collected: 10/04/21 11:53 Lab Sample ID: 310-216813-6

Matrix: Water

Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	9056A		5	331686	10/12/21 22:42	JNR	TAL CF	
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF	
Total/NA	Analysis	6020A		1	332689	10/22/21 19:22	SAP	TAL CF	12
Total/NA	Prep	7470A			331210	10/11/21 11:25	EAM	TAL CF	110
Total/NA	Analysis	7470A		t	331367	10/12/21 11:34	EAM	TAL CF	
Total/NA	Analysis	SM 2540C		40	331052	10/08/21 15:24	ARG	TAL CE	100

Client Sample ID: DUP1

Lab Sample ID: 310-216813-7

Date Collected: 10/06/21 00:00

Date Received: 10/07/21 09:40

d: 10/06/21 00:00 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	331686	10/12/21 22:57	JNR	TAL CF
Total/NA	Prep	3010A			330872	10/08/21 09:00	ACM2	TAL CF
Total/NA	Analysis	6020A		1	332689	10/22/21 19:25	SAP	TAL CF
Total/NA	Prep	7470A			331210	10/11/21 11:25	EAM	TAL CF
Total/NA	Analysis	7470A		1	331367	10/12/21 11:36	EAM	TAL CF
Total/NA	Analysis	SM 2540C		1	331323	10/12/21 10:06	ARG	TAL CF

Laboratory References:

TAL CF = Eurofins TestAmerica, 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 CCR Job ID: 310-216813-1

Laboratory: Eurofins TestAmerica, 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	11-29-21
lowa	State	007	12-01-21
Kansas	NELAP	E-10341	01-31-22
Minnesota	NELAP	019-999-319	12-31-21
Minnesota (Petrofund)	State	3349	04-06-23
North Dakota	State	R-186	09-29-21 *
Oregon	NELAP	IA100001	09-29-22
USDA	US Federal Programs	P220 10 00002	01.02.22

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10/25/2021

Page 21 of 27 10/25/2021 Page 22 of 27

100

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13

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

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-1

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
3010A	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 TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

13

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Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

City/State: CITY	81	The state of the s	STATE	Destruction of the distriction
Receipt Information		5/2.5 Sanda	NE	Project: Nebraska City Station Unit 1/2
	DATE	1-21	TIME 0940	Received By: HED
	Courier [☐ FedEx Ground ☐ US Mail ☐ Spee-De
Sample(s) received in C		⊠ Yes	□ No	If yes: Cooler ID:
	OOIEI ?		=	1 2
Multiple Coolers?		✓ Yes	□ No	If yes: Cooler # 2 of 5 (0 10-7 21
Cooler Custody Seals P	resent?	Yes	□ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals F	resent?	☐ Yes	₩ No	If yes: Sample custody seals intact? Yes No
Trip Blank Present?		☐ Yes	⊠No	If yes: Which VOA samples are in cooler?
Coolant: Wet ice Thermometer ID: N Temp Blank:Temperatur Uncorrected Temp (°C):	Blue := K.no tem		Dry ice	Other:NONE Correction Factor (*C): 0 riperature above criteria, proceed to Sample Container Temperature Corrected Temp (*C): 7,1
The second secon		Mrefori Ser So	Activered areas	Corrected Temp (C). Z. (
Container(s) used:	CONTAIN		4,797.01, \$24, -207	CONTAINER 2
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted	estorace	C. T. A. A.	Z THE VEG	Commence of the commence of th
 If temperature exceed a) If yes: Is there ev 				ved same day of sampling? Yes No s began? Yes No
2) If temperature is <0°0 (e.g., bulging septa, b				the integrity of sample containers is compromised? solid?)
	M before pr	oceeding.	If no, procee	ed with login
Note: If yes, contact Pf	20.47			ROSE CONTROL OF THE PROPERTY O
Additional Comments				NY, NCIMWS, NCIMWS, DUPI

Document: CF-LG-WI-002 Revision: 25

Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Eurofins TestAmerica, Cedar Falls



Environment Testing TestAmerica

Place COC scanning label

Cooler/Sample Receipt and Temperature Log Form

Client: Omaha Public Pou	wer Dis	STATE	
City/State: Omaha		NE	Project: Nebraska City Station
Receipt Information a	的小学的知识	TIME	
Date/Time Received: DATE 10-	7-21	0940	Received By: H&D
	☑ FedEx □ Lab Fie	eld Services	☐ FedEx Ground ☐ US Mail ☐ Spee-De
			ANGEL COMPANY OF THE PROPERTY
Sample(s) received in Cooler?	⊠ Yes	□No	If yes: Cooler ID:
Multiple Coolers?	∀es	□ No	If yes: Cooler # 3 of 5 (6 (0.7-3)
Cooler Custody Seals Present?	Yes	□ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	Yes	⊠ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	'⊠No	If yes: Which VOA samples are in cooler? ↓
	lue ice	☐ Dry ice	☐ Other: NONE
	iue ice	□ Dry ice	
Thermometer ID: N			Correction Factor (°C): 0
 Temp Blank: Temperature = If,no.ter Uncorrected Temp (°C): 1.9 	mp blank, ör	temp blank ten	Corrected Temp (°C): 9
Sample Container Temperature	describe to	Districted nesses	
Container(s) used:		1. 400 1 150 160	CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted	4. 1	第二十七十七十	Charles and the second of the
 If temperature exceeds criteria a) If yes: Is there evidence the 		A STATE OF THE PARTY OF THE PAR	- 1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (
 If temperature is <0°C, are the (e.g., bulging septa, broken/cr. 			the integrity of sample containers is compromised? solid?)
Note: If yes, contact PM before p	proceeding.	If no, procee	ed with login
	The second secon		
contained: 1	NWHIM	IL NCIMWY	NCIMWZ

Document: CF-LG-WI-00	02
Revision: 25	
Date: 06/17/2019	

Eurofins TestAmerica, Cedar Falls

General temperature criteria is 0 to 6* Bacteria temperature criteria is 0 to 10*

*c	E6	
	10/25/20)21

TestAmerica Cedar Falls

Mail Part Companies Co		Sampler			Lab PM	1	3			Camer Tre	Camer Tracking No(s)	0	COCNO	
Analysis Requested Control C	Client Information	Ryle K. Uhing			Haye	s. Sha	wu M			Т				
Analysis Requested (says) 70 e Sample Date Francisco Sample Date Sample Date Sample Date Sample Francisco Sample Date Sample Date Sample Date Sample Francisco Sample Date Sample	Cleek Contact Kyle Uhing	(402) 226-2515			shaw	Thaye	s@tes	lame	icainc.com			Δ.	age.	
A / Landfill Signification of the Requested (says) Type Protection of the Protec	Company Omaha Public Power District								Analysis	Requested		3	g qo	
A Transcended (case) A Transcended (case)	Address. 444 South 16th Street Mall 9E/EP1	Due Date Requested:						-					reservation Co	des:
Sample Date	Chy. Omaha Siste, Zio	TAT Requested (days):					250000	Lenu)					B - NaOH C - Zn Acetate	N Hexane N Noce O Ashubb
Sample Date Sample Date Sample Cleared Sample Cleared Sample Cleared Sample Cleared Sample Cleared Cleared Sample Constant Cleared Sample Constant	NE. 68102-2247					9	0.000.00		too				E-NaHSOA	0.8880
Sample Date	Phone (531) 226-2515	*04				-	A	11.500					G - Amchlor H - Ascorbic Acid	
Sample Date Time General Matrix Sample (Vessel Matrix Sample Date Time General Date of Containing Sample Date Time General Date of Sample (Vessel Matrix Sample Date Time General Date of Containing Sample Date Time General Date of Sample	Email kkelning@opped.com	WOR						1000					lce J - Di Waler	
Sample Date Time General Nature Sample (Core Cross	Project Name. Nebraska City Station Unit 1 CCR / Landfill	TestAmenca Project # 31007558						4.00.0					K-EDIA L-EDA	Wight 4-5 Z-other (specify)
Sample Date Time Capable Printing and Pri	Sale Nebraska City Station Unit 1	SSOW#					-000000	28512					Wher:	
	Sample Identification			mple (in Ample (fatrix		ELIA CONTRACTOR					Total Number	Special	nstructions/Not
Olfo 3 13-44 G W N X X X			V	reservation	Code	X	۵	-				X	/	V
Oliginary Olig	NC1MW2.			9	*	z	-	-					CCR Appendix III	and N.Corstituer
	NC1MW3 #		port	9	W	z	-	-					CCR Appendix III	and IV Constitutor
O	NC1MW4		(6)	9	W	z	-	-					3CR Appendix III	and IV Constituen
O		-)	1		8	-	_	8	_			4	A DO A COLUMN	
Date	NCTMW9 ,	-	53	9	W	z	-	-					3CR Appendix III	and IV Constituen
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	MW14 »	-		o	W	z	-	-				4	3CR Appendix III	and IV Constitution
Semple Disposal (A fee may be assessed if samples are retained longer than 1 mo Semple Disposal (A fee may be assessed if samples are retained longer than 1 mo Semple Disposal (A fee may be assessed if samples are retained longer than 1 mo Semple Disposal (A fee may be assessed if samples are retained longer than 1 mo Semple Disposal (A fee may be assessed if samples are retained longer than 1 mo Date: Time: Time	OUP1 、	16/9/01	1	U	3	z		-					3CR Appendix III	and IV Consaluer
Special Instructions of Special Instructions of Special Instructions of Requirements Archive For Archive For Special Instructions of Requirements Special Instructions of Requirements Time Date T		- [Saz	nple D	Ispo	sal (A fee may	pe assessed	if samples ar	re retained	Llonger than 1	mouth)
Date: Time. Date: Time. Date: Deletime: Date: Deletime: Date: Date	V. Other (specify)	Polson B	100	ological		Spi	Ret icial In	urn T	ons/QC Requir	Disposal I		Archiv	e For	Months
Desertine Obsertine Company Received by Company Received by Construct Construct Company Received by Construct Construct Company Received by Construct Constr	Empty Kit Relinquished by:	Dat				Time:				Men	had of Shipment			
Company Reserved by Desertine Ownitime Company Reserved by Contract	1	2	-	30	8		Receive	Ag pa			DateTime	107		Contains
Debatine Campary Reserved by Ch. Control	Reinquished by			Com	husd.		Receive	AG PA			Date/Time			Conpliny
1	Reingushed by	DataTime		Cam	Aued.		Receive	13	220	¥	Date/Time	12-6-	0460	Competit

Page 25 of 27

Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-216813-1

Login Number: 216813 List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1 Creator: Muehling, Angela C

Sample collection date/times are provided.

Appropriate sample containers are used.

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

Containers requiring zero headspace have no headspace or bubble is

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

<6mm (1/4").

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	

True

True

True

True

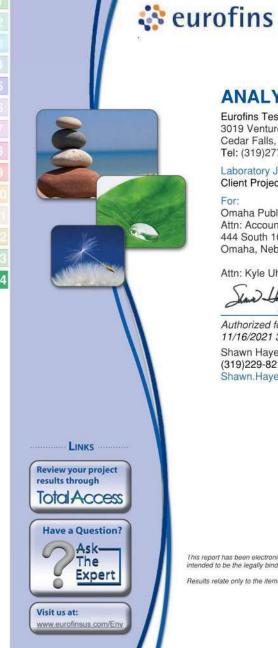
True

True

True

True

N/A





ANALYTICAL REPORT

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

Laboratory Job ID: 310-216813-2

Client Project/Site: Nebraska City Station Unit 1 CCR

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: 11/16/2021 3:39:33 PM

Shawn Hayes, Senior Project Manager

(319)229-8211

Shawn.Hayes@Eurofinset.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 CCR Laboratory Job ID: 310-216813-2

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
	5
	12
QC Sample Results	13
QC Association	16
Chronicle	17
Certification Summary	19
Method Summary	20
Chain of Custody	21
	24
Tracer Carrier Summary	27

Case Narrative

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-2

Job ID: 310-216813-2

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-216813-2

Comments

No additional comments.

Receip

The samples were received on 10/7/2021 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.9° C and 2.1° C.

DA

Method PrecSep 0: Radium-228 Prep Batch 160-530648

The following samples were prepared at a reduced aliquot due to Matrix: NC1MW9 (310-216813-4), MW11 (310-216813-5), MW14 (310-216813-6) and DUP1 (310-216813-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-530645

The following samples were prepared at a reduced aliquot due to Matrix: NC1MW9 (310-216813-4), MW11 (310-216813-5), MW14 (310-216813-6) and DUP1 (310-216813-7). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

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 CCR Job ID: 310-216813-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-216813-1	NC1MW2	Water	10/05/21 13:44	10/07/21 09:40
310-216813-2	NC1MW3	Water	10/06/21 11:04	10/07/21 09:40
310-216813-3	NC1MW4	Water	10/05/21 14:21	10/07/21 09:40
310-216813-4	NC1MW9	Water	10/06/21 11:53	10/07/21 09:40
310-216813-5	MW11	Water	10/05/21 13:06	10/07/21 09:40
310-216813-6	MW14	Water	10/04/21 11:53	10/07/21 09:40
310-216813-7	DUP1	Water	10/06/21 00:00	10/07/21 09-40

Client Sample Results	Clie	nt Sam	ple R	esults
-----------------------	------	--------	-------	--------

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

Lab Sample ID: 310-216813-1

Job ID: 310-216813-2

Client Sample ID: NC1MW2 Date Collected: 10/05/21 13:44 Date Received: 10/07/21 09:40

Matrix: Water

10/12/21 11:32 11/05/21 20:29

Method:	9315	- Radium-226	(GFPC)

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0841	U	0.186	0.186	1.00	0.335	pCi/L	10/12/21 11:32	11/05/21 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac

40 - 110

Method: 9320 - Radium-228 (GFPC)

Ba Carrier

			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.452	U	0.446	0.448	1.00	0.722	pCi/L	10/12/21 12:13	11/04/21 20:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					10/12/21 12:13	11/04/21 20:35	- 1
Y Carrier	83.7		40 - 110					10/12/21 12:13	11/04/21 20:35	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.536	U	0.483	0.485	5.00	0.722	pCi/L		11/13/21 18:14	1

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls 11/16/2021 Page 5 of 27 11/16/2021

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public Po roject/Site: Nebraska (Job ID: 310-2	16813-2
Client Sample ID: Nate Collected: 10/06/2 Date Received: 10/07/2	11:04							Lab Samp	le ID: 310-21 Matri	6813-2 x: Water
Method: 9315 - Radiu	m-226 (GFF	C)								
			Count Uncert.	Total Uncert.						
Analyte		Qualifier	(2σ+/-)	(20+/-)	RL	MDC	2.500000	Prepared	Analyzed	Dil Fac
Radium-226	0.281	U	0.215	0.216	1.00	0.313	pCi/L	10/12/21 11:32	11/05/21 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/12/21 11:32	11/05/21 20:29	1
Method: 9320 - Radiu	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	11000000	100000	Prepared	Analyzed	Dil Fac
Radium-228	0.189	U	0.444	0.445	1.00	0.765	pCl/L	10/12/21 12:13	11/04/21 20:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/12/21 12:13	11/04/21 20:35	1
Y Carrier	87.5		40 - 110					10/12/21 12:13	11/04/21 20:35	1
Method: Ra226_Ra22	8 - Combine	ed Radium	226 and Rad Count Uncert.	ium-228 Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.470	U	0.493	0.495	5.00	0.765	pCi/L		11/13/21 18:14	1

			Clie	nt Samp	le Resu	ults				
lient: Omaha Public P roject/Site: Nebraska (0.00	Mark a croacronics							Job ID: 310-2	16813-2
Client Sample ID: Nate Collected: 10/05/2 late Received: 10/07/2	21 14:21							Lab Samp	le ID: 310-21 Matrix	6813-3 c: Water
Method: 9315 - Radiu	m-226 (GFF	C)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.246	The second second	0.246	0.247	1.00	0.393	170000	10/12/21 11:32	11/05/21 20:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6	-	40 - 110					10/12/21 11:32	11/05/21 20:29	1
Method: 9320 - Radiu	41123544	C) Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.837	- 52	0.376	0.383	1.00	0.546	pCl/L	10/12/21 12:13	11/04/21 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					10/12/21 12:13	11/04/21 16:36	- 1
Y Carrier	84.5		40 - 110					10/12/21 12:13	11/04/21 16:36	1
Method: Ra226_Ra22	8 - Combin	ed Radium-	226 and Rad Count Uncert.	ium-228 Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.449	0.456	5.00	0.546	pCi/L		11/13/21 18:14	1

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 6 of 27 11/16/2021 Page 7 of 27 11/16/2021

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public F roject/Site: Nebraska									Job ID: 310-2	16813-2
Client Sample ID: late Collected: 10/06/ late Received: 10/07/	/21 11:53							Lab Samp	le ID: 310-21 Matri	6813-4 x: Water
Method: 9315 - Radio	um-226 (GFF	PC)								
			Count Uncert.	Total Uncert.						
Analyte	-	Qualifier	(2σ+/-)	(20+/-)	RL	MDC	2.5700000	Prepared	Analyzed	Dil Fac
Radium-226	0.364	U	0.316	0.318	1.00	0.490	pCi/L	10/11/21 10:03	11/03/21 22:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Camer Method: 9320 - Radio	101 um-228 (GFF	(C)	40 - 110					10/11/21 10:03	11/03/21 22:50	1
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.18		0.408	0.422	1.00	0.550	pCi/L	10/11/21 10:40	11/03/21 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/11/21 10:40	11/03/21 13:14	1
Y Carrier	81.1		40 - 110					10/11/21 10:40	11/03/21 13:14	1
Method: Ra226_Ra2	28 - Combine	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	1.54		0.516	0.528	5.00	0.550	pCi/L		11/13/21 18:14	1

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public Po roject/Site: Nebraska C		Character restriction and							Job ID: 310-2	16813-2
	2	OHR I CON	š							
lient Sample ID: M								Lab Samp	le ID: 310-21	
ate Collected: 10/05/2									Matrix	c: Water
ate Received; 10/07/2	09.40									
Method: 9315 - Radiur	n-226 (GFF	PC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263	U	0.306	0.307	1.00	0.502	pCi/L	10/11/21 10:03	11/03/21 22:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier	92.7		40 - 110					10/11/21 10:03	11/03/21 22:51	1
Method: 9320 - Radiur	n-228 (GFF	PC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.329	0.329	1.00	0.572	pCi/L	10/11/21 10:40	11/03/21 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					10/11/21 10:40	11/03/21 13:14	1
Y Carrier	80.4		40 - 110					10/11/21 10:40	11/03/21 13:14	1
Method: Ra226 Ra228	- Combine	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	0.378	U	0.449	0.450	5.00	0.572	pCi/L		11/13/21 18:14	1

Eurofins TestAmerica, Cedar Falls

Eurofins TestAmerica, Cedar Falls

Page 8 of 27 11/16/2021 Page 9 of 27 11/16/2021

			Clie	nt Samp	le Resu	ılts				
lient: Omaha Public roject/Site: Nebraska									Job ID: 310-2	16813-2
lient Sample ID:	MW14							Lab Samp	le ID: 310-21	6813-6
late Collected: 10/04 late Received: 10/07									Matri	x: Water
Method: 9315 - Rad	ium-226 (GFF	C)								
		1	Count	Total						
12 1000	10.07 00	Bri 92200	Uncert.	Uncert.	2000	0.000000		W 85	60 20 900	12727-127
Analyte		Qualifier	(2σ+/-)	(20+/-)	RL	MDC	1 10000	Prepared	Analyzed	Dil Fac
Radium-226	0.741		0.392	0.397	1.00	0.519	pCi/L	10/11/21 10:03	11/03/21 22:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fac
Ba Carrier	86.5		40 - 110					10/11/21 10:03	11/03/21 22:51	1
Markada 0220 Bad	222 (CEE	101								
Method: 9320 - Rad	ium-228 (GFF	()	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.16		0.577	0.646	1.00	0.579	pCi/L	10/11/21 10:40	11/03/21 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		40 - 110					10/11/21 10:40	11/03/21 13:14	- 1
Y Carrier	79.6		40 - 110					10/11/21 10:40	11/03/21 13:14	1
Ba Carrier	86.5	Qualifier	40 - 110							Dil
Method: Ra226 Ra2	228 - Combin	ed Radium-								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Pozuit	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

			Clie	nt Samp	le Resu	ults				
lient: Omaha Public P									Job ID: 310-2	16813-2
roject/Site: Nebraska		OTHE I CCR								
lient Sample ID: I	DUP1							Lab Samp	le ID: 310-21	6813-7
ate Collected: 10/06/2									Matri	k: Water
late Received: 10/07/2	1 09:40									
Method: 9315 - Radiu	m-226 (GFF	C)								
		1.	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(20+/-)	(20+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0996	U	0.237	0.238	1.00	0.430	pCi/L	10/11/21 10:03	11/03/21 22:51	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	DII Fa
Ba Carrier	97.9		40 - 110					10/11/21 10:03	11/03/21 22:51	
Method: 9320 - Radiu		Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fa
Radium-228	0.941	(manessassassassassassassassassassassassassa	0.425	0.434	1.00	0.612	pCi/L	10/11/21 10:40	11/03/21 13:14	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fa
Ba Carrier	97.9		40 - 110					10/11/21 10:40	11/03/21 13:14	8
Y Carrier	77.8		40 - 110					10/11/21 10:40	11/03/21 13:14	31
Method: Ra226 Ra22	8 - Combine	ad Padium.	226 and Rad	ium-228						
Michiga, Nazzo_Nazz	o - Combin	va radium	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	1.04		0.487	0.495	5.00	0.612	20200		11/13/21 18:14	

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Page 10 of 27 11/16/2021 Page 11 of 27 11/16/2021

Definitions/G	lossary
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	3 Public Power District Job ID: 310-2 lebraska City Station Unit 1 CCR	10013-2
Qualifiers		
Rad	According to the second	
Qualifier U	Qualifier Description Result is less than the sample detection limit.	
3	result is essibliar the sample selection min.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
и	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	
ac	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	

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

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

RPD

TEF

TEQ

TNTC

QC Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-2

lethod:	9315 -	Radium-22	6 (GFPC)	

Lab Sample ID: MB 160-530645/23-A Matrix: Water

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 530645

Analysis Batch: 535165

Analyte

Carrier

Ba Carrier

Analyte

Radium-226

Total MB MB Uncert. Uncert. Result Qualifier (20+/-) MDC Unit Dil Fac (20+/-) Prepared Analyzed Radium-226 0.2362 U 0.259 0.418 pCi/L 10/11/21 10:03 11/04/21 08:21

> MB MB %Yield Qualifier Limits 40 - 110

Prepared Analyzed Dil Fac 10/11/21 10:03 11/04/21 08:21 Client Sample ID: Lab Control Sample

Limits

Limits

RER Limit

Lab Sample ID: LCS 160-530645/1-A Matrix: Water

Analysis Batch: 534853

Added

15.1

Prep Type: Total/NA Prep Batch: 530645 %Rec.

%Rec

LCS LCS %Yield Qualifier Limits Carrier

Ba Carrier 40 - 110

Lab Sample ID: LCSD 160-530645/2-A Client Sample ID: Lab Control Sample Dup Matrix: Water Prep Type: Total/NA Analysis Batch: 534853 Prep Batch: 530645

Total

Uncert.

 $(2\sigma + l - 1)$

RL.

MDC Unit

0.489 pCi/L

Total LCSD LCSD Uncert. Analyte Added Result Qual (20+/-) MDC Unit %Rec Radium-226 15.1 13.33 1.70 0.422 pCi/L LCSD LCSD

LCS LCS

Result Qual

14.07

%Yield Qualifier Carrier Limits Ba Carrier 40 - 110

Lab Sample ID: MB 160-531167/24-A Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA Analysis Batch: 535209 Prep Batch: 531167 Count Total мв мв

Uncert. Uncert. Result Qualifier (20+/-) MDC Unit Dil Fac Analyte (20+/-) Prepared Analyzed Radium-226 0.1859 U 0.202 1.00 0.324 pCi/L 10/12/21 11:32 11/05/21 20:33

мв мв Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 101 40 - 110 10/12/21 11:32 11/05/21 20:33

Lab Sample ID: LCS 160-531167/1-A Matrix: Water

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 531167

Analysis Batch: 535209

Total LCS LCS Uncert. %Rec.

			1000000							
Analyte	Added	Result	Qual	(20+/-)	RL	MDC	Unit	%Rec	Limits	
Radium-226	15.1	13.20		1.64	1.00	0.378		87	75 - 125	

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Page 12 of 27 11/16/2021 Page 13 of 27

11/16/2021

				Q	C Sample	Resul	ts					
lient: Omaha	Public Power Dis	trict								Job ID: 310-2	16813-2	
Project/Site: N	ebraska City Stat	on Unit	t 1 CCR									
Method: 931	15 - Radium-2	26 (GF	PC) (Co	ntinued)	(
Lab Sample	ID: LCS 160-531	67/1-A	6						Client Sample I	D: Lab Control	Sample	
Matrix: Wate									de troubles emples de la company	Prep Type:	Mark Cold In Cold	
Analysis Bat	tch: 535209									Prep Batch	531167	
	LCS LCS										The same of	
Carrier	%Yield Quali	fior	Limits									
Ba Carrier	86.0	ilei	40 - 110									
	55775		SPECIAL SPECIA									
Method: 932	20 - Radium-2	28 (GF	PC)									6
Lab Sample	ID: MB 160-5306	18/23-A	¢ .						Client Sa	mple ID: Metho	d Blank	
Matrix: Wate		1000 300							CONTRACTOR OF THE	Prep Type:		
Analysis Bat	tch: 534860									Prep Batch:		
				Count	Total					NA STATISTICS		
		мв мв	ř.	Uncert.	Uncert.							
Analyte	Re	sult Qu	alifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-228	0.6	923		0.415	0.420	1.00	0.635	pCi/L	10/11/21 10:40	11/03/21 13:11	31	
Naululli-220												
rvaulum-220		мв мв	3									
Carrier	%)		alifier	Limits					Prepared	Analyzed	Dil Fac	
	0.01			Limits 40 - 110					Prepared 10/11/21 10:40	Analyzed 11/03/21 13:11	Dil Fac	

Analysis Batch: 534851									Prep Batch:	5306
				Total						
	Spike	LCS	LCS	Uncert.					%Rec.	
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	
Radium-228	12.2	12.37		1.47	1.00	0.488	pCi/L	101	75 - 125	

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	97.4		40 - 110
Y Carrier	80.4		40 - 110

Analysis Batch: 535010

Lab Sample ID: LCS 160-530648/1-A

Matrix: Water

Lab Sample ID: LCSD 160-530648/2-A Client Sample ID: Lab Control Sample Dup Matrix: Water

Total LCSD LCSD RER Spike Uncert Analyte Added Result Qual (20+/-) Limit 12.2 12.80 105 0.15 Radium-228 1.51 1.00 0.557 pCi/L 75 - 125

LCSD LCSD Carrier %Yield Qualifier Limits Ba Carrie 97.4 40 - 110 Y Carrier 81.5 40 - 110

F		and the second						100000000000000000000000000000000000000		
Lab Sample ID: ME	3 160-531213/2	4-A						Client Sa	mple ID: Metho	d Blank
Matrix: Water									Prep Type:	Total/NA
Analysis Batch: 53	5030								Prep Batch:	531213
The all appropriate and a second second			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4763		0.299	0.302	1.00	0.453	pCi/L	10/12/21 12:13	11/04/21 16:38	1

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Page 15 of 27

QC Sample Results

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-2

Prep Type: Total/NA

Prep Batch: 531213

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

Lab Sample ID: MB 160-531213/24-A Matrix: Water

Analysis Batch: 535030

Carrier

Ba Carrier

Y Carrier

Analyte

Radium-228

MB MB %Yield Qualifier

85.2

Limits 40 - 110 40 - 110

12.94

Added

12.2

Prepared 10/12/21 12:13 10/12/21 12:13 11/04/21 16:38

Analyzed Dil Fac 11/04/21 16:38

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Lab Sample ID: LCS 160-531213/1-A Matrix: Water

Analysis Batch: 535031

Total Uncert. Prep Type: Total/NA Prep Batch: 531213

LCS LCS %Rec. Limits Result Qual (20+/-) MDC Unit %Rec 1.78 1.05 pCi/L 106 75 - 125

LCS LCS %Yield Qualifier Carrier Limits Ba Carrier 86.0 40 - 110 40 - 110 Y Carrier 76.6

Page 14 of 27 11/16/2021

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 530648

11/16/2021

QC Association Sumr	mary
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Client: Omaha Public Power Dis	trict	
Project/Site: Nebraska City Stati	on Unit 1 CCR	

Job ID: 310-216813-2

Rad

Prep Batch: 530645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-4	NC1MW9	Total/NA	Water	PrecSep-21	
310-216813-5	MW11	Total/NA	Water	PrecSep-21	
310-216813-6	MW14	Total/NA	Water	PrecSep-21	
310-216813-7	DUP1	Total/NA	Water	PrecSep-21	
MB 160-530645/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-530645/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-530645/2-A	Lab Control Sample Dun	Total/NA	Water	PrecSep.21	

Prep Batch: 530648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-4	NC1MW9	Total/NA	Water	PrecSep_0	
310-216813-5	MW11	Total/NA	Water	PrecSep_0	
310-216813-6	MW14	Total/NA	Water	PrecSep_0	
310-216813-7	DUP1	Total/NA	Water	PrecSep_0	
MB 160-530648/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-530648/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-530648/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep 0	

Prep Batch: 531167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-1	NC1MW2	Total/NA	Water	PrecSep-21	S 20 11 11 11 11 11 11 11 11 11 11 11 11 11
310-216813-2	NC1MW3	Total/NA	Water	PrecSep-21	
310-216813-3	NC1MW4	Total/NA	Water	PrecSep-21	
MB 160-531167/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-531167/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 531213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-216813-1	NC1MW2	Total/NA	Water	PrecSep_0	101
310-216813-2	NC1MW3	Total/NA	Water	PrecSep_0	
310-216813-3	NC1MW4	Total/NA	Water	PrecSep_0	
MB 160-531213/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-531213/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

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

Job ID: 310-216813-2

Client Sample ID: NC1MW2 Date Collected: 10/05/21 13:44 Date Received: 10/07/21 09:40

Lab Sample ID: 310-216813-1 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared			
гер Туре	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
otal/NA	Prep	PrecSep-21	8%		531167	10/12/21 11:32	BMP	TAL SL	_
otal/NA	Analysis	9315		1	535213	11/05/21 20:29	MLK	TAL SL	
otal/NA	Prep	PrecSep_0			531213	10/12/21 12:13	BMP	TAL SL	
otal/NA	Analysis	9320		15	535031	11/04/21 20:35	FLC	TAL SL	
otal/NA	Analysis	Ra226 Ra228		1	536457	11/13/21 18:14	MLK	TAL SL	

Client Sample ID: NC1MW3 Date Collected: 10/06/21 11:04

Lab Sample ID: 310-216813-2

Date Received: 10/07/21 09:40

Matrix: Water

Batch		Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	33		531167	10/12/21 11:32	BMP	TAL SL
Total/NA	Analysis	9315		1	535213	11/05/21 20:29	MLK	TAL SL
Total/NA	Prep	PrecSep_0			531213	10/12/21 12:13	BMP	TAL SL
Total/NA	Analysis	9320		10	535031	11/04/21 20:35	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		f	536457	11/13/21 18:14	MLK	TAL SL

Client Sample ID: NC1MW4

Lab Sample ID: 310-216813-3

Matrix: Water

Date Collected: 10/05/21 14:21 Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	-		531167	10/12/21 11:32	BMP	TAL SL
Total/NA	Analysis	9315		1	535213	11/05/21 20:29	MLK	TAL SL
Total/NA	Prep	PrecSep_0			531213	10/12/21 12:13	BMP	TAL SL
Total/NA	Analysis	9320		1	535031	11/04/21 16:36	FLC	TAL SI
Total/NA	Analysis	Ra226 Ra228		1	536457	11/13/21 18:14	MLK	TAL SI

Client Sample ID: NC1MW9 Date Collected: 10/06/21 11:53

Lab Sample ID: 310-216813-4 Matrix: Water

Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530645	10/11/21 10:03	BMP	TAL SL
Total/NA	Analysis	9315		1	534860	11/03/21 22:50	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530648	10/11/21 10:40	BMP	TAL SL
Total/NA	Analysis	9320		1	534853	11/03/21 13:14	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		18	536457	11/13/21 18:14	MLK	TAL SL

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11/16/2021

Page 16 of 27 11/16/2021 Page 17 of 27

Lab Chronicle

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-2

Matrix: Water

Matrix: Water

Client Sample ID: MW11

Lab Sample ID: 310-216813-5 Matrix: Water

Lab Sample ID: 310-216813-6

Lab Sample ID: 310-216813-7

Date Collected: 10/05/21 13:06 Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	888	262 BBS	530645	10/11/21 10:03	BMP	TAL SL
Total/NA	Analysis	9315		1	534860	11/03/21 22:51	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530648	10/11/21 10:40	BMP	TAL SL
Total/NA	Analysis	9320		15	534853	11/03/21 13:14	FLC	TAL SL
Total/NA	Analysis	Ra226 Ra228		1	536457	11/13/21 18:14	MLK	TAL SL

Client Sample ID: MW14

Date Collected: 10/04/21 11:53 Date Received: 10/07/21 09:40

101 (0.101/s.) 101 (0.101/s.)	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	PrecSep-21	33	E02 E02	530645	10/11/21 10:03	BMP	TAL SL	
Total/NA	Analysis	9315		11	534860	11/03/21 22:51	FLC	TAL SL	
Total/NA	Prep	PrecSep_0			530648	10/11/21 10:40	BMP	TAL SL	
Total/NA	Analysis	9320		10	534853	11/03/21 13:14	FLC	TAL SL	
Total/NA	Analysis	Ra226 Ra228		ť	536457	11/13/21 18:14	MLK	TAL SL	

Client Sample ID: DUP1

Date Collected: 10/06/21 00:00

Date Received: 10/07/21 09:40

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	-		530645	10/11/21 10:03	BMP	TAL SL
Total/NA	Analysis	9315		1	534860	11/03/21 22:51	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530648	10/11/21 10:40	BMP	TAL SL
Total/NA	Analysis	9320		1	534853	11/03/21 13:14	FLC	TAL SL
Total/NA	Analysis	Ra226 Ra228		1	536457	11/13/21 18:14	MLK	TAL SL

TAL SL = Eurofins TestAmerica, 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 Station Unit 1 CCR Job ID: 310-216813-2

Laboratory: Eurofins TestAmerica, 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	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
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	10-31-21 *
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
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	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
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

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Page 18 of 27 11/16/2021 Page 19 of 27 11/16/2021



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

Method Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-2

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 TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

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Environment Testing TestAmerica



Cooler/Sample Receipt and Temperature Log Form

City/State: CITY Omolog		STATE	Project: Nebras	0'1 61 1	1.1.110
Receipt information	STATE OF STREET	NE	Mebras Mebras		
DATE	0-7-21	TIME 0940	Received By: HED		11 con since of a being sealing
		eld Services	FedEx Ground	US Mail Other:	☐ Spee-Dee
Condition of Cooler/Containers		国际表示中	者为成为 "人",他们们的	一 医 一	的大概。由中国
Sample(s) received in Cooler?	Yes	□ No	If yes: Cooler ID:		
Multiple Coolers?	✓ Yes	□ No	If yes: Cooler #	2 of 5 (10-7-21
Cooler Custody Seals Present	? ⊠ Yes	☐ No	If yes: Cooler custo	ody seals intact?	Yes No
Sample Custody Seals Preser	it? Yes	Ø No	If yes: Sample cust	ody seals intact?[Yes No
Trip Blank Present?	☐ Yes	⊠ No	If yes: Which VOA	samples are in coo	oler? ↓
Temperature Record: Coolant: ☑ Wet ice ☐ Thermometer ID: N	Blue ice	☐ Dry ice		DNC	DNE
Coolant: Wet ice	Blue ice	☐ Dry ice	Other:Correction Factor (°	C): O	ONE
Coolant: Wet ice Thermometer ID: N Temp Blank Température - tine Uncorrected Temp (°C): 2 (Sample Containe) Températuri	Blue ice	☐ Dry ice	Other: Correction Factor (* mperature above criteria, pro Corrected Temp (*C	C): 0 ceed to Sample Conta	ONE
Coolant: Wet ice Thermometer ID: N Temp Blank:Temperature = ft.n. Uncorrected Temp (°C): 2 . (Sample Containe):Temperature CON	Blue ice	☐ Dry ice	Correction Factor (° corrected Temp (°C	C): 0 ceed to Sample Conta	ONE
Coolant: Wet ice Thermometer ID: N Temp Blank Température - it.ne Uncorrected Temp (°C): 2 . (Sample Container Temperature CON Container(s) used:	Blue ice	☐ Dry ice	Other: Correction Factor (* mperature above criteria, pro Corrected Temp (*C	C): 0 ceed to Sample Conta	ONE
Coolant: Wet ice Thermometer ID: N Temp Blank Température - tine Uncorrected Temp (°C): 2 (Sample Containe) Températuri	Blue ice	☐ Dry ice	Other: Correction Factor (* mperature above criteria, pro Corrected Temp (*C	C): 0 ceed to Sample Conta	ONE
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Coolant: Wet ice Thermometer ID: N Temp Blank Température + tine Uncorrected Temp (°C): 2 . (Sample Container Temperature Container(s) used: CON Uncorrected Temp (°C): Corrected Temp (°C): Exceptions Noted	Blue ice temp blank, or TAINER 1 ria, was sam a that the chi	Dry ice	Other: Correction Factor (* moerature above criteria, pre- Corrected Temp (*C CONTAI CONTAI CONTAI CONTAI the integrity of sample	C): 0 coed to Sample Conta): 2 \ NER 2 ling?	iner Temperature
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Document: CF-LG-WI-002 Revision: 25

Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

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

Eurofins TestAmerica, Cedar Falls

Page 20 of 27

11/16/2021

Page 21 of 27

11/16/2021

E

4

7

9

12

13



Environment Testing TestAmerica

Place COC scanning label

Cooler/Sample Receipt and Temperature Log Form

Client Information	wer Dis	trict	
City/State: CITY Omaha		STATE	Project: Nebraska City Station
Receipt Information &	的公司和	の経過性がいた	A STATE OF THE PROPERTY OF THE
Date/Time Received: DATE 10-	7-21	0940	Received By: HED
	☑ FedEx □ Lab Fie		☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Client Drop-off ☐ Other:
Condition of Cooler/Containers	1 种4的化共康	经 存金的	1966年中的1967年中,1979年中的1967年中的1967年中
Sample(s) received in Cooler?	⊠ Yes	□ No	If yes: Cooler ID:
Multiple Coolers?	✓ Yes	□ No	#yes: Cooler# 3 of 5 (C (0.7-3)
Cooler Custody Seals Present?	Yes	□ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?	Yes	⊠ No	If yes: Sample custody seals intact? Yes No
Trip Blank Present?	☐ Yes	'⊠No	If yes: Which VOA samples are in cooler? ↓
Thermometer ID: N	lue ice mp blank, or,	Dry ice	Other: NONE Correction Factor (°C): O perature above criteria, proceed to Sample Container Temperature Corrected Temp (°C): 1, 9
Sample Container Temperature	ייי און איייי	Proposite and	
Container(s) used:		***************************************	CONTAINER 2
Uncorrected Temp (°C):	- 11/2/12		
Corrected Temp (°C):			
Exceptions Noted	4. 14. 15	第二十七二十二十	在新疆共和国共产业的 ,但是1985年,19
 If temperature exceeds criteria a) If yes: Is there evidence the 		A CONTRACTOR CONTRACTOR	
 If temperature is <0°C, are the (e.g., bulging septa, broken/cr. 			the integrity of sample containers is compromised? colid?) Yes No
Note: If yes, contact PM before p Additional Comments	proceeding.	If no, procee	d with login
contained: 1	NWHIM	II, NC IMW4	NCIMWZ

Document: CF-LG-WI-002	
Revision: 25	
Date: 06/17/2019	

Eurofins TestAmerica, Cedar Falls

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

11/16/2021

Ysis Requested The proposal By Lab The Disposal By Lab The Proposal By Lab The Disposal B	Client Information Client Contact Specific Contact Specif												
Proce	Seed Contact: syle Uhing	Sampler Kyle K. Uhing			Hay	es. Shaw	MH			Camer Tracking No	(9)	COCNO	
Total Tota		Phone (402) 226-2515			E-M sha	er wn.hayes.	@testa	mericainc.c	mo			Page	
Total Companies Total Comp	ompany Omaha Public Power District							An	alvsis Re	anested		Job 8	
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Sample Date Sample Date Sample Sa	ny mata (8102-2247	TAT Requested (da	3(3)				_					A - HCL B - NaOH C - Zn Acetate D - Nino Acid E - NaHSO4	M - Horann N - None O - Ashmood P - Na/2045 O - Na/2003
Sample Date Sample Date Sample	331) 226-2515	PO#					_	430 000				F - MeOH G - Amchlor	
310077698 3100	mail Kuhung@opad com	WOR				(0)	_					1-lce J-Di Waler	
Sample Date Sample Date Sample Date Time Garph Preservation Code (Garph Company (Garph Compa	oject Name. ebraska City Station Unit 1 CCR / Landfill	TestAmerica Project 31007558	Dr.			N 10 8	_	-				zainer: L-EDA A EDA	W. ph.4-5 Z-other (specify)
Sample Date Sample Sampl	ne ebraska City Station Unit 1	SSOW#				en) as		023/12				of conf	
N2. N3. N4. N4. N5. N6. N6. N6. N6. N6. N6. N6	ample Identification	Sample Date		Sample Type (C=comp, G=grab)	Matrix (www. Sweddi. Owenwest.	beretii4 biel4 Mi&M miohe9		CONTRACTOR OF STREET					Special Instructions/Note:
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Ne Hazard Identification On-Hazard Identification And Reduction In III. IV. Other (specify) See In Property Onter Inc. IV. Other (specify) Onter Time Inc. IV. Other (specify)	W14 ,	ICH/U	11:53	9	W		_	and the				4 CCR Appendix III	CCR Appendix III and IV Constituents
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Company Received by Machine Company Received by Machine 10-7-2,	singuished by	DataTime			Campany		ременер	Man	a	1	10-7	0460 12-	Company

Login Sample Receipt Checklist

Client: Ornaha Public Power District Job Number: 310-216813-2

List Source: Eurofins TestAmerica, Cedar Falls

Login Number: 216813 List Number: 1

Creator: Muehling, Angela C

Samples do not require splitting or compositing.

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	

True

N/A

Login Sample Receipt Checklist

Client: Ornaha Public Power District Job Number: 310-216813-2

Login Number: 216813 List Source: Eurofins TestAmerica, St. Louis
List Number: 2 List Creation: 10/08/21 07:17 PM

Creator: Mazariegos, Leonel A

and an instance of Eastern		
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 TestAmerica, Cedar Falls
 Eurofins TestAmerica, Cedar Falls
 Eurofins TestAmerica, Cedar Falls
 Page 24 of 27
 11/16/2021

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10

12





Login Sample Receipt Checklist

Client: Omaha Public Power District Job Number: 310-216813-2

Login Number: 216813 List Number: 3

List Source: Eurofins TestAmerica, St. Louis List Creation: 10/11/21 04:35 PM

Creator: Johnson, Autumn R

Residual Chlorine Checked.

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

Tracer/Carrier Summary

Client: Omaha Public Power District Project/Site: Nebraska City Station Unit 1 CCR Job ID: 310-216813-2

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

			Percent Yield (Acceptance Limits)
		Ba	
Lab Sample ID	Client Sample ID	(40-110)	
310-216813-1	NC1MW2	95.6	ti ili ka ka ka ka
310-216813-2	NC1MW3	101	
310-216813-3	NC1MW4	96.6	
310-216813-4	NC1MW9	101	
310-216813-5	MW11	92.7	
310-216813-6	MW14	86.5	
310-216813-7	DUP1	97.9	
LCS 160-530645/1-A	Lab Control Sample	97.4	
LCS 160-531167/1-A	Lab Control Sample	86.0	
LCSD 160-530645/2-A	Lab Control Sample Dup	97.4	
MB 160-530645/23-A	Method Blank	84.2	
MB 160-531167/24-A	Method Blank	101	
Tracer/Carrier Legend			
Ba = Ba Carrier			ā l

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)	
310-216813-1	NC1MW2	95.6	83.7	
310-216813-2	NC1MW3	101	87.5	
310-216813-3	NC1MW4	96.6	84.5	
310-216813-4	NC1MW9	101	81.1	
310-216813-5	MW11	92.7	80.4	
310-216813-6	MW14	86.5	79.6	
310-216813-7	DUP1	97.9	77.8	
LCS 160-530648/1-A	Lab Control Sample	97.4	80.4	
LCS 160-531213/1-A	Lab Control Sample	86.0	76.6	
LCSD 160-530648/2-A	Lab Control Sample Dup	97.4	81.5	
MB 160-530648/23-A	Method Blank	84.2	89.3	
MB 160-531213/24-A	Method Blank	101	85.2	
Tracer/Carrier Legend				

Ba = Ba Carrier

Y = Y Carrier

11/16/2021

Eurofins TestAmerica, Cedar Falls

Appendix C Semi-Annual Statistical **Analysis Memos**





Technical Memorandum

Date:	Friday, July 16, 2021
To:	Omaha Public Power District (OPPD)
From:	HDR Engineering, Inc.
Subject:	Summary of Statistical Analysis and Evaluation for SSLs Nebraska City Station Unit 1 - NC1 Ash Disposal Area

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 coal combustion residual (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 (EPA's) final CCR rule promulgated under U.S. Code of Federal Regulations (CFR), Title 40, Part 257 and Nebraska Department of Environment and Energy's Title 132 regulations for fossil fuel combustion ash disposal areas. This memorandum provides a discussion and evaluation of the NC1 Ash Disposal Area. The NC1 Ash Disposal Area is an unlined CCR landfill which encompasses a total area of approximately 52 acres. Final closure of the landfill was completed in November 2020.

Groundwater sampling was completed as part of an assessment monitoring program for the NC1 Ash Disposal Area in April 2021, as specified in 40 CFR §257.95(d) and Title 132 Chapter 7 Section 005.06. The statistical analysis of groundwater data was performed in accordance with the methods described in the Groundwater Monitoring Statistical Certification, dated July 31, 2018, and the facility's sampling and analysis plan 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 this April 2021 sampling event. The BTVs were calculated with data obtained during monitoring events performed between March 2016 and April 2021.

Downgradient sampling results from the April 2021 assessment monitoring were used to evaluate for statistically significant increases (SSIs) over background and statistically significant levels (SSLs) over the groundwater protection standard (GWPS). The calculated BTVs and the evaluation for SSIs over background for the Appendix III (detection monitoring) constituents and Appendix IV (assessment monitoring) constituents are provided in **Table C-1**. The calculated lower confidence levels and the evaluation for SSLs above the GWPS for the Appendix IV (assessment monitoring) constituents are provided in **Table C-2**.



Table C-1. Summary of Evaluation for SSIs over Background (April 2021)

		Well ID:		NC1MW-3	NC1MW-4	NC1MW-9		
Constituent	BTV (UPL):	Unit			Monitoring Results			
Detection Monitoring (Appendix III) Constituents								
Boron	1.53	mg/L	<u> </u>					
				<u>3.14</u>				
Calcium	163	mg/L	91.6	<u>180</u>	98.4	160		
Chloride	17.3	mg/L	3.82J	9.11	5.71	6.50		
Fluoride	1.18	mg/L	0.301J	0.520	0.535	0.739		
рН	6.27 - 7.86*	SU	6.69	6.63	6.87	6.70		
Sulfate	170	mg/L	54.4	<u>372</u>	165	162		
TDS	747	mg/L	318	<u>1,000</u>	498	<u>768</u>		
Assessment Monitoring (Appendix IV) Constituents								
Antimony	0.00235	mg/L	<0.00110	<0.00110	<0.00110	<0.00110		
Arsenic	0.0893	mg/L	0.000878J	0.0354	0.00109J	0.0110		
Barium	0.391	mg/L	0.134	0.144	0.0768	0.120		
Beryllium	0.001	mg/L	<0.000270	<0.000270	<0.000270	<0.000270		
Cadmium	0.0005	mg/L	0.000176	0.0000830J	0.000133	0.0000890J		
Chromium	0.005	mg/L	<0.00110	<0.00110	<0.00110	<0.00110		
Cobalt	0.00477	mg/L	0.000238J	0.00191	0.000976	0.00143		
Fluoride	1.18	mg/L	0.294J	0.557	0.441J	0.504		
Lead	0.0032	mg/L	0.000463J	<0.000210	<0.000210	<0.000210		
Lithium	0.0569	mg/L	0.00998J	0.0435	0.0190	0.0343		
Mercury	0.000262	mg/L	<0.000150	<0.000150	<0.000150	<0.000150		
Molybdenum	0.0164	mg/L	0.0886	0.00293	0.00154J	0.0234		
Radium 226+228	2.04	pCi/L	0.552	0.743	0.151U	0.205U		
Selenium	0.0112	mg/L	<0.000960	<0.000960	<0.000960	0.00280J		
Thallium	0.001	mg/L	<u>0.00278</u>	0.00320	0.000313J	<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 C-2. Summary of Evaluation for SSLs over GWPS (April 2021)

Well ID:			NC1MW-2	NC1MW-3	NC1MW-4	NC1MW-9	
Constituent	GWPS ^[1]	Unit	Lower Confidence Levels – Assessment Monitoring (Appendix IV) Constituents				
Antimony	0.006	mg/L	0.001	0.001	0.001	0.001	
Arsenic	0.0893 [2]	mg/L	0.000878	0.0211	0.00163	0.008722	
Barium	2.00	mg/L	0.1187	0.1026	0.0806	0.1079	
Beryllium	0.004	mg/L	0.001	0.001	0.001	0.001	
Cadmium	0.005	mg/L	0.000065	0.000083	0.0001	0.000044	
Chromium	0.1	mg/L	0.005	0.005	0.005	0.005	
Cobalt	0.006	mg/L	0.0001524	0.001639	0.0005624	0.001082	
Fluoride	4.00	mg/L	0.2784	0.500	0.4527	0.556	
Lead	0.015	mg/L	0.0002495	0.0005	0.0005	0.0005	
Lithium	0.0569 ^[2]	mg/L	0.00729	0.02961	0.01186	0.02199	
Mercury	0.002	mg/L	0.0002	0.0002	0.0002	0.0002	
Molybdenum	0.1	mg/L	0.06696	0.0014	0.007614	0.02445	
Radium 226+228	5.0	pCi/L	0.3435	0.3622	0.01329	0.415	
Selenium	0.05	mg/L	0.005	0.005	0.00199	0.002819	
Thallium	0.002	mg/L	0.001	0.001	0.000313	0.001	

Bold and underlined concentration indicates an SSL over the GWPS.

^[1] GWPS is established as the 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, January 31, 2022
To:	Omaha Public Power District (OPPD)
From:	HDR Engineering, Inc.
Subject:	Summary of Statistical Analysis and Evaluation for SSLs Nebraska City Station Unit 1 - NC1 Ash Disposal Area

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 coal combustion residual (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 (EPA's) final CCR rule promulgated under U.S. Code of Federal Regulations (CFR), Title 40, Part 257 and Nebraska Department of Environment and Energy's Title 132 regulations for fossil fuel combustion ash disposal areas. This memorandum provides a discussion and evaluation of the NC1 Ash Disposal Area. The NC1 Ash Disposal Area is an unlined CCR landfill which encompasses a total area of approximately 52 acres. Final closure of the landfill was completed in November 2020.

Groundwater sampling was completed as part of an assessment monitoring program for the NC1 Ash Disposal Area in October 2021, as specified in 40 CFR §257.95(d) and Title 132 Chapter 7 Section 005.06. The statistical analysis of groundwater data was performed in accordance with the methods described in the Groundwater Monitoring Statistical Certification, dated July 31, 2018, and the facility's sampling and analysis plan 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 2021 sampling event. The BTVs were calculated with data obtained during monitoring events performed between March 2016 and April 2021.

Downgradient sampling results from the October 2021 assessment monitoring were used to evaluate for statistically significant increases (SSIs) over background and statistically significant levels (SSLs) over the groundwater protection standard (GWPS). The calculated BTVs and the evaluation for SSIs over background for the Appendix III (detection monitoring) constituents and Appendix IV (assessment monitoring) constituents are provided in **Table C-1**. The calculated lower confidence levels and the evaluation for SSLs above the GWPS for the Appendix IV (assessment monitoring) constituents are provided in **Table C-2**.



Table C-1. Summary of Evaluation for SSIs over Background (October 2021)

Well ID:			NC1MW-2	NC1MW-3	NC1MW-4	NC1MW-9		
		NC TIVIVV-2			NCTIVIVV-9			
Constituent	BTV (UPL):	Unit	Assessment Monitoring Results					
Detection Monitoring (Appendix III) Constituents								
Boron	1.53	mg/L	0.430	<u>2.77</u>	1.25	1.45		
Calcium	163	mg/L	103	<u>181</u>	114	<u>174</u>		
Chloride	17.3	mg/L	5.31	9.86	6.82	6.84		
Fluoride	1.18	mg/L	<0.275	<0.275	<0.275	<0.275		
рН	6.27 - 7.86*	SU	6.54	6.34	6.68	6.41		
Sulfate	170	mg/L	72.1	<u>395</u>	<u>210</u>	<u>219</u>		
TDS	747	mg/L	340	<u>998</u>	518	<u>822</u>		
Assessment Monitoring (Appendix IV) Constituents								
Antimony	0.00235	mg/L	0.00111J	<0.00110	<0.00110	<0.00110		
Arsenic	0.0893	mg/L	0.00179J	0.0368	0.00125J	0.0121		
Barium	0.391	mg/L	0.154	0.144	0.111	0.139		
Beryllium	0.001	mg/L	0.000387J	<0.000270	<0.000270	<0.000270		
Cadmium	0.0005	mg/L	0.000592	<0.0000510	0.000134	0.0000780J		
Chromium	0.005	mg/L	<0.00110	<0.00110	<0.00110	<0.00110		
Cobalt	0.00477	mg/L	0.000568	0.00137	0.00200	0.00202		
Fluoride	1.18	mg/L	<0.275	<0.275	<0.275	<0.275		
Lead	0.0032	mg/L	0.000968	<0.000210	<0.000210	<0.000210		
Lithium	0.0569	mg/L	0.0124	0.0361	0.0187	0.0318		
Mercury	0.000262	mg/L	<0.000150	<0.000150	<0.000150	<0.000150		
Molybdenum	0.0164	mg/L	<u>0.102</u>	0.00179J	0.00664	0.0243		
Radium 226+228	2.04	pCi/L	0.536U	0.470U	1.08	1.54		
Selenium	0.0112	mg/L	0.00346J	<0.000960	<0.000960	0.00115J		
Thallium	0.001	mg/L	<u>0.00106</u>	<0.000260	<0.000260	<0.000260		
Rold and underlined concentration indicates an SSI over background								

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 C-2. Summary of Evaluation for SSLs over GWPS (October 2021)

Well ID:			NC1MW-2	NC1MW-3	NC1MW-4	NC1MW-9	
Constituent	GWPS ^[1]	Unit	Lower Confidence Levels – Assessment Monitoring (Appendix IV) Constituents				
Antimony	0.006	mg/L	0.0011	0.0011	0.0011	0.0011	
Arsenic	0.0893 ^[2]	mg/L	0.000878	0.02583	0.001364	0.008856	
Barium	2.00	mg/L	0.1229	0.1141	0.08559	0.1187	
Beryllium	0.004	mg/L	0.00027	0.00027	0.00027	0.00027	
Cadmium	0.005	mg/L	0.000051	0.000051	0.000051	0.000044	
Chromium	0.1	mg/L	0.0011	0.0011	0.0011	0.0011	
Cobalt	0.006	mg/L	0.00018	0.001542	0.000626	0.001332	
Fluoride	4.00	mg/L	0.275	0.3756	0.3723	0.4832	
Lead	0.015	mg/L	0.000216	0.00021	0.00021	0.00021	
Lithium	0.0569 ^[2]	mg/L	0.007946	0.03137	0.01285	0.02367	
Mercury	0.002	mg/L	0.00015	0.00015	0.00015	0.00015	
Molybdenum	0.1	mg/L	0.07752	0.0014	0.005608	0.02303	
Radium 226+228	5.0	pCi/L	0.3678	0.386	0.08842	0.5212	
Selenium	0.05	mg/L	0.00096	0.00096	0.00096	0.00096	
Thallium	0.002	mg/L	0.00026	0.00026	0.00026	0.00026	

Bold and underlined concentration indicates an SSL over the GWPS.

^[1] GWPS is established as the 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.