

Prepared for
Dynegy Miami Fort, LLC

Date
January 31, 2023

Project No.
1940102203-014

**2022 ANNUAL GROUNDWATER
MONITORING AND CORRECTIVE
ACTION REPORT**
POND SYSTEM
MIAMI FORT POWER PLANT
NORTH BEND, OHIO
CCR UNIT 115

**2022 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT POND SYSTEM**

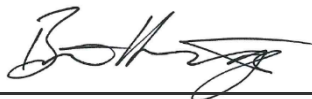
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ACRONYMS AND ABBREVIATIONS

§	Section
40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternate Source Demonstration
CCR	coal combustion residuals
CMA	Corrective Measures Assessment
GWPS	groundwater protection standard
MFPP	Miami Fort Power Plant
NA	not applicable
OBG	OBG, Part of Ramboll
PS	Pond System
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSL	statistically significant level
TBD	to be determined

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.90(e) for the Pond System (PS) located at the Miami Fort Power Plant (MFPP) near North Bend, Ohio.

Groundwater is being monitored at the PS in accordance with the assessment monitoring program requirements specified in 40 C.F.R. § 257.95. Assessment Monitoring was initiated at the PS on April 9, 2018.

No changes were made to the monitoring system in 2022 (no wells were installed or decommissioned).

The following Statistically Significant Levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters were determined:

- Arsenic at wells MW-2, MW-3A, MW-6, MW-10, and MW-13
- Cobalt at wells 4A, MW-4, and MW-6
- Molybdenum at well MW-6

As required by 40 C.F.R. § 257.95(g)(3)(i), a Corrective Measures Assessment (CMA) (OBG, part of Ramboll (OBG), 2019) following the requirements of 40 C.F.R. § 257.96 was initiated on May 8, 2019 and completed on September 5, 2019.

A public meeting was held on December 16, 2019 at the the Miami Township Community Center in North Bend, Ohio to discuss the results of the CMA in accordance with 40 C.F.R. § 257.96(e).

The CMA was revised on November 12, 2020, to reflect the characterization of the Pond System as a single multi-unit comprised of Basins A and B, including an Alternate Source Demonstration (ASD) for SSLs of total arsenic (identified for Basin B) and total molybdenum (Ramboll Americas Engineering Solutions, Inc. [Ramboll], 2020a). The CMA was revised again on November 30, 2020, to include additional information related to site geology and hydrogeology, apply evaluation criteria to potential corrective measures, and provide an independent evaluation of monitored natural attenuation (MNA) (Ramboll, 2020b).

Remedy selection is in progress and the associated semiannual reports required by 40 C.F.R. § 257.97(a) are being completed.

1. INTRODUCTION

This report has been prepared by Ramboll on behalf of Dynegy Miami Fort, LLC, to provide the information required by 40 C.F.R. § 257.90(e) for the PS located at the MFPP near North Bend, Ohio.

In accordance with 40 C.F.R. § 257.90(e), the owner or operator of a coal combustion residuals (CCR) unit must prepare an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year that documents the status of the Groundwater Monitoring and Corrective Action Program for the CCR unit, summarizes key actions completed, describes any problems encountered, discusses actions to resolve the problems, and projects key activities for the upcoming year. At a minimum, the annual report must contain the following information, to the extent available:

1. A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit.
2. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken.
3. In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs.
4. A narrative discussion of any transition between monitoring programs (*e.g.*, the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase relative to background levels).
5. Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.
6. A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:
 - i. At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95.
 - ii. At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95.
 - iii. If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III of §257 pursuant to §257.94(e):
 - A. Identify those constituents listed in Appendix III of §257 and the names of the monitoring wells associated with such an increase.
 - B. Provide the date when the assessment monitoring program was initiated for the CCR unit.

- iv. If it was determined that there was a statistically significant level above the groundwater protection standard [GWPS] for one or more constituents listed in Appendix IV of §257 pursuant to §257.95(g) include all of the following:
 - A. Identify those constituents listed in Appendix IV of §257 and the names of the monitoring wells associated with such an increase.
 - B. Provide the date when the assessment of corrective measures was initiated for the CCR unit.
 - C. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.
 - D. Provide the date when the assessment of corrective measures was completed for the CCR unit.
- v. Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of remedy selection.
- vi. Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

This report provides the required information for the PS for calendar year 2022.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

Groundwater is being monitored at the PS in accordance with the assessment monitoring program requirements specified in 40 C.F.R. § 257.95. Assessment monitoring was initiated on April 9, 2018. SSLs were determined for the PS and alternate source evaluations were inconclusive for one or more SSLs. In accordance with 40 C.F.R. § 257.95(g)(5), a CMA following the requirements of 40 C.F.R. § 257.96 was initiated on May 8, 2019 and completed on September 5, 2019.

A public meeting was held on December 16, 2019 at the the Miami Township Community Center in North Bend, Ohio to discuss the results of the CMA in accordance with 40 C.F.R. § 257.96(e).

The CMA was revised on November 12, 2020, to reflect the characterization of the Pond System as a single multi-unit comprised of Basins A and B, including an Alternate Source Demonstration for SSLs of total arsenic (identified for Basin B) and total molybdenum. The CMA was revised again on November 30, 2020, to include additional information related to site geology and hydrogeology, apply evaluation criteria to potential corrective measures, and provide an independent evaluation of MNA. Remedy selection is in progress and the associated semiannual reports required by 40 C.F.R. § 257.97(a) are being completed.

The PS remains in the assessment monitoring program in accordance with 40 C.F.R. § 257.96(b).

3. KEY ACTIONS COMPLETED IN 2022

The assessment monitoring program is summarized in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1**. No changes were made to the monitoring system in 2022 (no wells were installed or decommissioned). In general, one groundwater sample was collected from each background and compliance well during each monitoring event. All samples were collected and analyzed in accordance with the Sampling and Analysis Plan (SAP) (Ramboll, 2020c). Potentiometric surface maps for third quarter of 2021 and both monitoring events in 2022 are included in **Figures 2 through 4**. All monitoring data and analytical results obtained under 40 C.F.R. § 257.90 through 257.98 (as applicable) in the third quarter of 2021 and both monitoring events in 2022 are presented in **Tables 1 through 3**. Laboratory reports for the third quarter of 2021 and both monitoring events in 2022 are included in **Appendix A**.

Analytical data were evaluated in accordance with the Statistical Analysis Plan (Ramboll, 2020d) to determine any SSLs of Appendix IV parameters over GWPSs and statistically significant increases (SSIs) of Appendix III parameters greater than background values. SSL notifications were completed in accordance with 40 C.F.R. § 257.95(g). SSIs are highlighted in **Table 2**. Statistical background values are provided in **Table 4** and GWPSs in **Table 5**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**. A summary of the determination of SSLs is included in **Table 6**. A flow chart showing the statistical methodology for determination of SSLs is included as **Appendix C**.

Table A. 2021-2022 Assessment Monitoring Program Summary

Sampling Dates	Analytical Data Receipt Date	Parameters Collected	SSL(s)	SSL(s) Determination Date	CMA Initiated
September 15-16, 2021	October 04, 2021	Appendix III Appendix IV Detected ¹	Arsenic at wells MW-10, MW-13, MW-2, and MW-6; Cobalt at wells 4A and MW-4; Molybdenum at well MW-6	January 03, 2022	NA
March 23-24, 2022	April 20, 2022	Appendix III Appendix IV	Arsenic at wells MW-2, MW-6, MW-10, and MW-13; Cobalt at well MW-4	July 19, 2022	NA
September 21-22, 2022	October 14, 2022	Appendix III Appendix IV Detected ¹	Arsenic at wells MW-2, MW-3A, MW-6, MW-10, and MW-13; Cobalt at well MW-4 and MW-6	January 31, 2023	NA

Notes:

ASD: Alternate Source Demonstration

NA: not applicable

SSL: Statistically Significant Level

TBD: to be determined

¹ Groundwater sample analysis was limited to Appendix IV parameters detected during previous events in accordance with 40 C.F.R. § 257.95(d)(1).

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2022. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2023

The following key activities are planned for 2023:

- Continuation of the assessment monitoring program with semi-annual sampling scheduled for the first and third quarters of 2023.
- Complete evaluation of analytical data from the compliance wells to determine whether an SSL of Appendix IV parameters using GWPSs has occurred.
- Remedy selection will continue; semiannual progress reports required by 40 C.F.R. § 257.97(a) will be completed and posted to the publicly accessible website as required by 40 C.F.R. § 257.107(h)(9).
- The following documents were developed in 2022 and will be implemented beginning in the first quarter of 2023:
 - Multi-Site Quality Assurance Project Plan (Ramboll, 2022a)
 - Multi-Site Data Management Plan (Ramboll, 2022b)
 - Multi-Site Statistical Analysis Plan and Certification (Ramboll, 2022c)

6. REFERENCES

OBG, Part of Ramboll (OBG), 2019. Corrective Measures Assessment, Miami Fort Basin A, Miami Fort Power Station, 11021 Brower Road, North Bend, Ohio, Dynegy Miami Fort, LLC, September 5, 2019.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2020a. Corrective Measures Assessment Revision 1, Miami Fort Pond System, Miami Fort Power Station, 11021 Brower Road, North Bend, Ohio, Dynegy Miami Fort, LLC, November 12, 2020.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2020b. Corrective Measures Assessment Revision 2, Miami Fort Pond System, Miami Fort Power Station, 11021 Brower Road, North Bend, Ohio, Dynegy Miami Fort, LLC, November 30, 2020.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2020c, Sampling and Analysis Plan, Miami Fort Pond System, Project No. 74922, Revision 0, May 22, 2020.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2020d, Statistical Analysis Plan, Miami Fort Power Station Pond System, Project No. 74922, Revision 1, May 22, 2020.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022a. Multi-Site Quality Assurance Project Plan. December 28, 2022.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022b. Multi-Site Data Management Plan. December 28, 2022.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2022c. Multi-Site Statistical Analysis Plan, 40 C.F.R. § 257. December 28, 2022.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Monitored Unit	Well Screen Interval (feet BGS)	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
MW-1	UA	52.76 - 62.76	Compliance	39.11443	-84.81030	09/15/2021	49.79	454.70
MW-1	UA	52.76 - 62.76	Compliance	39.11443	-84.81030	03/23/2022	44.95	459.54
MW-1	UA	52.76 - 62.76	Compliance	39.11443	-84.81030	09/21/2022	49.30	455.19
MW-2	UA	29.86 - 39.86	Compliance	39.11210	-84.81576	09/15/2021	18.74	453.49
MW-2	UA	29.86 - 39.86	Compliance	39.11210	-84.81576	03/23/2022	16.60	455.63
MW-2	UA	29.86 - 39.86	Compliance	39.11210	-84.81576	09/21/2022	18.28	453.95
MW-3A	UA	42.04 - 52.04	Compliance	39.10982	-84.81220	09/15/2021	19.03	454.20
MW-3A	UA	42.04 - 52.04	Compliance	39.10982	-84.81220	03/24/2022	15.87	457.36
MW-3A	UA	42.04 - 52.04	Compliance	39.10982	-84.81220	09/21/2022	18.77	454.46
MW-4	UA	35 - 45	Compliance	39.11035	-84.80939	09/15/2021	23.49	454.40
MW-4	UA	35 - 45	Compliance	39.11035	-84.80939	03/23/2022	20.04	457.85
MW-4	UA	35 - 45	Compliance	39.11035	-84.80939	09/21/2022	23.16	454.73
MW-5	UA	64.99 - 74.99	Compliance	39.11154	-84.80745	09/15/2021	55.39	454.57
MW-5	UA	64.99 - 74.99	Compliance	39.11154	-84.80745	03/23/2022	51.77	458.19
MW-5	UA	64.99 - 74.99	Compliance	39.11154	-84.80745	09/21/2022	55.23	454.73
MW-6	UA	64.41 - 74.41	Compliance	39.11321	-84.80799	09/15/2021	53.65	454.69
MW-6	UA	64.41 - 74.41	Compliance	39.11321	-84.80799	03/23/2022	49.19	459.15
MW-6	UA	64.41 - 74.41	Compliance	39.11321	-84.80799	09/21/2022	53.47	454.87
MW-7	UA	53.99 - 63.99	Background	39.11521	-84.80826	09/15/2021	56.46	453.71
MW-7	UA	53.99 - 63.99	Background	39.11521	-84.80826	03/23/2022	51.42	458.75
MW-7	UA	53.99 - 63.99	Background	39.11521	-84.80826	09/21/2022	56.40	453.77
MW-8	UA	36.91 - 46.91	Compliance	39.11353	-84.81383	09/15/2021	39.76	NA
MW-8	UA	36.91 - 46.91	Compliance	39.11353	-84.81383	03/23/2022	35.55	457.88
MW-9	UA	19.3 - 29.3	Compliance	39.11313	-84.81568	09/15/2021	20.23	452.82
MW-9	UA	19.3 - 29.3	Compliance	39.11313	-84.81568	03/23/2022	16.33	456.72
MW-9	UA	19.3 - 29.3	Compliance	39.11313	-84.81568	09/21/2022	19.12	453.93
MW-10S	Other	19.53 - 29.53	Water Level Only	39.11130	-84.81486	09/15/2021	13.06	460.45
MW-10S	Other	19.53 - 29.53	Water Level Only	39.11130	-84.81486	03/23/2022	9.60	463.91
MW-10S	Other	19.53 - 29.53	Water Level Only	39.11130	-84.81486	09/21/2022	13.16	460.35
MW-10	UA	48 - 58	Compliance	39.11130	-84.81480	09/15/2021	20.17	453.18
MW-10	UA	48 - 58	Compliance	39.11130	-84.81480	03/23/2022	16.57	456.78
MW-10	UA	48 - 58	Compliance	39.11130	-84.81480	09/21/2022	19.07	454.28
MW-11S	Other	19.53 - 29.53	Water Level Only	39.11069	-84.81385	09/15/2021	13.59	460.05
MW-11S	Other	19.53 - 29.53	Water Level Only	39.11069	-84.81385	03/23/2022	8.55	465.09
MW-11S	Other	19.53 - 29.53	Water Level Only	39.11069	-84.81385	09/21/2022	14.14	459.50
MW-11	UA	49 - 59	Compliance	39.11062	-84.81375	09/15/2021	21.20	453.25
MW-11	UA	49 - 59	Compliance	39.11062	-84.81375	03/23/2022	17.63	456.82
MW-11	UA	49 - 59	Compliance	39.11062	-84.81375	09/21/2022	20.41	454.04
MW-12	UA	54.92 - 64.92	Compliance	39.11110	-84.81034	09/15/2021	54.30	454.14
MW-12	UA	54.92 - 64.92	Compliance	39.11110	-84.81034	03/23/2022	50.57	457.87
MW-12	UA	54.92 - 64.92	Compliance	39.11110	-84.81034	09/21/2022	53.89	454.55
MW-13S	Other	24.01 - 34.01	Water Level Only	39.11079	-84.80757	09/15/2021	21.37	458.51

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 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Monitored Unit	Well Screen Interval (feet BGS)	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
MW-13S	Other	24.01 - 34.01	Water Level Only	39.11079	-84.80757	03/23/2022	19.05	460.83
MW-13S	Other	24.01 - 34.01	Water Level Only	39.11079	-84.80757	09/21/2022	23.19	456.69
MW-13	UA	49 - 59	Compliance	39.11081	-84.80753	09/15/2021	26.18	454.52
MW-13	UA	49 - 59	Compliance	39.11081	-84.80753	03/23/2022	22.79	457.91
MW-13	UA	49 - 59	Compliance	39.11081	-84.80753	09/21/2022	26.09	454.61
MW-14	UA	75 - 85	Compliance	39.11035	-84.80936	09/15/2021	25.35	454.54
MW-14	UA	75 - 85	Compliance	39.11035	-84.80936	03/23/2022	21.91	457.98
MW-14	UA	75 - 85	Compliance	39.11035	-84.80936	09/21/2022	25.16	454.73
MW-15	UA	65 - 75	Compliance	39.11306	-84.80667	09/15/2021	42.68	454.84
MW-15	UA	65 - 75	Compliance	39.11306	-84.80667	03/23/2022	38.48	459.04
MW-15	UA	65 - 75	Compliance	39.11306	-84.80667	09/21/2022	42.65	454.87
MW-16	UA	100 - 110	Compliance	39.11303	-84.80666	09/15/2021	42.51	454.78
MW-16	UA	100 - 110	Compliance	39.11303	-84.80666	03/23/2022	38.27	459.02
MW-16	UA	100 - 110	Compliance	39.11303	-84.80666	09/21/2022	42.77	454.52
MW-17	UA	110 - 120	Water Level Only	39.11521	-84.80830	09/15/2021	56.93	454.89
MW-17	UA	110 - 120	Water Level Only	39.11521	-84.80830	03/23/2022	51.88	459.94
MW-17	UA	110 - 120	Water Level Only	39.11521	-84.80830	09/21/2022	56.81	455.01
MW-18	Other	54 - 64	Water Level Only	39.11738	-84.80692	09/15/2021	55.10	471.36
MW-18	Other	54 - 64	Water Level Only	39.11738	-84.80692	03/23/2022	54.95	471.51
MW-18	Other	54 - 64	Water Level Only	39.11738	-84.80692	09/21/2022	54.82	471.64
MW-19	UA	60 - 70	Water Level Only	39.11644	-84.80450	09/15/2021	46.04	455.34
MW-19	UA	60 - 70	Water Level Only	39.11644	-84.80450	03/23/2022	40.48	460.90
MW-19	UA	60 - 70	Water Level Only	39.11644	-84.80450	09/21/2022	46.22	455.16

Notes:
 BGS = below ground surface
 BMP = below measuring point
 NAVD88 = North American Vertical Datum of 1988
 Monitored Unit Abbreviations:
 UA = uppermost aquifer
 Other = monitored unit not defined

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Well Type	Date	Event ID	Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (SU)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
<i>Background Value(s)</i>	--	--	--	0.266	184	19.4	0.128	5.9/8.1	75.1	553
MW-7	Background	09/15/2021	A4D	0.0937	103	3.58	0.15 U	7.0	35.3	444
MW-7	Background	03/23/2022	A5	0.0732	108	5.09	0.15 U	7.0	37.6	466 J
MW-7	Background	09/21/2022	A5D	0.0841	108	4.06	0.122 J	7.5	46.5	491
4A	Compliance	09/16/2021	A4D	4.07	169	125	0.177	7.2	286	20 U
4A	Compliance	09/21/2022	A5D	0.343	140	157	0.396	--	140	1,060
MW-1	Compliance	09/15/2021	A4D	0.654	146	38.8	0.387	7.1	273	735
MW-1	Compliance	03/23/2022	A5	0.772	159	43.7	0.366	7.0	359	775 J
MW-1	Compliance	09/22/2022	A5D	0.653	149	40.4	0.416	7.1	323	600
MW-2	Compliance	09/15/2021	A4D	0.724	142	32.4	0.15 U	6.7	35.0	693
MW-2	Compliance	03/23/2022	A5	0.956	136	36.5	0.15 U	6.7	60.1	655
MW-2	Compliance	09/22/2022	A5D	0.564	143	33.2	0.109 J	6.8	23.8	643
MW-3A	Compliance	09/16/2021	A4D	0.0712	45.6	23.5	0.189	7.1	13.6	243
MW-3A	Compliance	03/24/2022	A5	0.0673	54.2	24.2	0.15 U	7.1	5 U	287 J
MW-3A	Compliance	09/22/2022	A5D	0.0598 J	50.3	23.7	0.121 J	7.4	4.52 J	250
MW-4	Compliance	09/16/2021	A4D	0.544	306	18.9	0.75 U	6.0	1,070	1,750
MW-4	Compliance	03/23/2022	A5	0.476	281	21.6	0.15 U	5.8	1,010	1,600
MW-4	Compliance	09/22/2022	A5D	0.248	160	23.5	0.208	6.5	473	819
MW-5	Compliance	09/16/2021	A4D	15.0	294	332	0.15 U	6.9	318	1,520
MW-5	Compliance	03/24/2022	A5	21.1	339	406	0.15 U	6.7	413	1,830 J
MW-5	Compliance	09/21/2022	A5D	26.6	437	580	0.064 U	7.2	532	2,250
MW-6	Compliance	09/16/2021	A4D	1.11	52.6	93.4	0.817	7.2	5.25	513
MW-6	Compliance	03/24/2022	A5	13.4	148	564	0.547	7.0	330	1,420
MW-6	Compliance	09/21/2022	A5D	10.2	146	493	0.591	7.9	169	1,580
MW-8	Compliance	09/15/2021	A4D	0.731	118	44.2	0.255	7.1	265	651

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Well Type	Date	Event ID	Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (SU)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
MW-8	Compliance	03/23/2022	A5	2.91	149	44.8	0.183	7.0	366	817
MW-8	Compliance	09/22/2022	A5D	0.992	139	40.8	0.229	7.2	319	696
MW-9	Compliance	09/15/2021	A4D	4.01	187	99.2	0.378	7.0	430	1,020
MW-9	Compliance	03/24/2022	A5	2.86	164	73.0	0.352	7.0	396	841
MW-9	Compliance	09/22/2022	A5D	3.18	177	76.0	0.332	7.2	423	909
MW-10	Compliance	09/15/2021	A4D	0.0742	54.7	34.9	0.243	7.5	18.1	301
MW-10	Compliance	03/24/2022	A5	0.0681	58.5	42.9	0.221	7.6	23.2	312
MW-10	Compliance	09/22/2022	A5D	0.108	53.2	32.4	0.222	7.8	15.0	285
MW-11	Compliance	09/16/2021	A4D	0.0724	54.7	34.3	0.199	7.4	33.0	295
MW-11	Compliance	03/24/2022	A5	0.0642	47.2	33.5	0.178	7.7	31.8	240
MW-11	Compliance	09/22/2022	A5D	0.0556	53.9	43.0	0.150 J	7.8	33.9	294
MW-12	Compliance	09/16/2021	A4D	6.41	165	183	0.15 U	5.8	5 U	20 U
MW-12	Compliance	03/24/2022	A5	5.28	159	203	0.15 U	5.8	411	876
MW-12	Compliance	09/22/2022	A5D	5.76	170	221	0.0664 J	5.9	374	964 J
MW-13	Compliance	09/16/2021	A4D	0.0701	40.7	26.8	0.194	7.6	49.0	244
MW-13	Compliance	03/24/2022	A5	0.0735	43.9	28.9	0.15 U	7.7	54.3	250 J
MW-13	Compliance	09/22/2022	A5D	0.0567	40.4	28.9	0.158	8.0	49.0	245
MW-14	Compliance	09/16/2021	A4D	0.0761	41.3	24.2	0.153	7.7	47.7	222
MW-14	Compliance	03/23/2022	A5	0.0809	42.1	29.5	0.15 U	7.8	47.7	229
MW-14	Compliance	09/22/2022	A5D	0.0581	42.6	27.2	0.1 J	8.0	52.2	208
MW-15	Compliance	09/15/2021	A4D	0.333	123	149	0.241	7.1	82.4	687
MW-15	Compliance	03/23/2022	A5	0.366	124	182	0.214	7.2	58.5	675
MW-15	Compliance	09/21/2022	A5D	0.342	136	214	0.149 J	7.5	34.2	752
MW-16	Compliance	09/15/2021	A4D	0.0896	180	131	0.15 U	6.8	98.2	932
MW-16	Compliance	03/23/2022	A5	0.0888	187	77.7	0.15 U	6.7	144	942 J

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Well Type	Date	Event ID	Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (SU)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
MW-16	Compliance	09/21/2022	A5D	0.0732	183	103	0.114 J	7.3	198	958

Notes:

Exceedance of Background

mg/L = milligrams per liter

SU = Standard Units

- = not analyzed

U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate. Lab reports may or may not report both the limit of detection and the limit of quantitation. Limits are provided in the electronic data deliverable. As such, the U-flagged result value provided in this table may not match the result value provided in the lab report.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Well Type	Date	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Cadmium, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	Radium 226 + 228 (pCi/L)	Selenium, total (mg/L)	Thallium, total (mg/L)
MW-7	Background	09/15/2021	0.004 U	0.002 U	0.0851	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.00456	0.0002 U	0.005 U	1.12	0.002 U	0.002 U
MW-7	Background	03/23/2022	0.004 U	0.002 U	0.0938	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.00465	0.0002 U	0.005 U	0.951	0.00202	0.002 U
MW-7	Background	09/21/2022	0.00103 U	0.000245 J	0.0919	0.00019 U	0.00015 U	0.00124 U	0.000123 J	0.122 J	0.000849 U	0.00455	0.0001 U	0.000592 J	0.414	0.0003 U	0.000121 U
4A	Compliance	09/16/2021	0.004 U	0.00943	0.125	0.002 U	0.001 U	0.002 U	0.00928	0.177	0.00534	0.00859	0.0002 U	0.0193	--	0.002 U	0.002 U
4A	Compliance	09/21/2022	0.00103 U	0.000598 J	0.0807	0.00019 U	0.000163 J	0.00124 U	0.00128 J	0.396	0.00761	0.0128	0.0001 U	0.0461	--	0.0003 U	0.000121 U
MW-1	Compliance	09/15/2021	0.004 U	0.002 U	0.0394	0.002 U	0.001 U	0.002 U	0.002 U	0.387	0.002 U	0.0392	0.0002 U	0.0466	0.258	0.002 U	0.002 U
MW-1	Compliance	03/23/2022	0.004 U	0.002 U	0.0456	0.002 U	0.001 U	0.002 U	0.002 U	0.366	0.002 U	0.0332	0.0002 U	0.0450	0.0859	0.002 U	0.002 U
MW-1	Compliance	09/22/2022	0.00103 U	0.000398 J	0.0397	0.00019 U	0.00015 U	0.00124 U	0.000257 J	0.416	0.000849 U	0.0371	0.0001 U	0.0629	0.558	0.0003 U	0.000225 J
MW-2	Compliance	09/15/2021	0.004 U	0.0355	0.500	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.00206	0.0002 U	0.005 U	0.555	0.002 U	0.002 U
MW-2	Compliance	03/23/2022	0.004 U	0.0256	0.448	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.002 U	0.0002 U	0.005 U	1.14	0.002 U	0.002 U
MW-2	Compliance	09/22/2022	0.00103 U	0.0338	0.479	0.00019 U	0.00015 U	0.00124 U	0.000487 J	0.109 J	0.000849 U	0.00125 J	0.0001 U	0.000348 U	1.80	0.000347 J	0.000121 U
MW-3A	Compliance	09/16/2021	0.004 U	0.00578	0.107	0.002 U	0.001 U	0.002 U	0.002 U	0.189	0.002 U	0.002 U	0.0002 U	0.005 U	0.948	0.002 U	0.002 U
MW-3A	Compliance	03/24/2022	0.004 U	0.0119	0.152	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.002 U	0.0002 U	0.005 U	1.21	0.002 U	0.002 U
MW-3A	Compliance	09/22/2022	0.00103 U	0.0110	0.128	0.00019 U	0.00015 U	0.00124 U	0.0000655 J	0.121 J	0.000849 U	0.00134 J	0.0001 U	0.000597 J	0.166 U	0.0003 U	0.000121 U
MW-4	Compliance	09/16/2021	0.004 U	0.002 U	0.0221	0.002 U	0.001 U	0.002 U	0.0158	0.75 U	0.002 U	0.00578	0.0002 U	0.005 U	0.427	0.002 U	0.002 U
MW-4	Compliance	03/23/2022	0.004 U	0.002 U	0.0191	0.002 U	0.001 U	0.00418	0.0130	0.15 U	0.002 U	0.00557	0.0002 U	0.005 U	1.40	0.002 U	0.002 U
MW-4	Compliance	09/22/2022	0.00103 U	0.00133 J	0.0128	0.00019 U	0.00044 J	0.00124 U	0.00619	0.208	0.00121 J	0.00424	0.0001 U	0.000925 J	0.601 J	0.0003 U	0.000121 U
MW-5	Compliance	09/16/2021	0.004 U	0.002 U	0.0699	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.00982	0.0002 U	0.0267	0.164	0.002 U	0.002 U
MW-5	Compliance	03/24/2022	0.004 U	0.00213	0.0876	0.002 U	0.001 U	0.00288	0.002 U	0.15 U	0.00322	0.0124	0.0002 U	0.0160	0.840	0.002 U	0.002 U
MW-5	Compliance	09/21/2022	0.00103 U	0.0006 J	0.0868	0.00019 U	0.000226 J	0.00124 U	0.000349 J	0.064 U	0.000849 U	0.0114	0.0001 U	0.0172	0.606	0.000882 J	0.000191 J
MW-6	Compliance	09/16/2021	0.004 U	0.0126	0.711	0.002 U	0.001 U	0.002 U	0.00294	0.817	0.002 U	0.00899	0.0002 U	0.249	1.22	0.002 U	0.002 U
MW-6	Compliance	03/24/2022	0.004 U	0.0147	0.159	0.002 U	0.001 U	0.00226	0.00766	0.547	0.002 U	0.0134	0.0002 U	0.167	0	0.002 U	0.002 U
MW-6	Compliance	09/21/2022	0.00103 U	0.0178	0.562	0.00019 U	0.00015 U	0.00124 U	0.00689	0.591	0.00259	0.0127	0.0001 U	0.159	0.873	0.000341 J	0.000121 U
MW-8	Compliance	09/15/2021	0.004 U	0.002 U	0.0463	0.002 U	0.001 U	0.002 U	0.002 U	0.255	0.002 U	0.0130	0.0002 U	0.00776	0.778	0.002 U	0.002 U
MW-8	Compliance	03/23/2022	0.004 U	0.002 U	0.0393	0.002 U	0.001 U	0.002 U	0.002 U	0.183	0.002 U	0.0189	0.0002 U	0.00737	0.812	0.002 U	0.002 U
MW-8	Compliance	09/22/2022	0.00103 U	0.000339 J	0.0456	0.00019 U	0.00015 U	0.00124 U	0.0000596 U	0.229	0.000849 U	0.0141	0.0001 U	0.00824	0.829	0.0011 J	0.000121 U
MW-9	Compliance	09/15/2021	0.004 U	0.002 U	0.106	0.002 U	0.001 U	0.002 U	0.002 U	0.378	0.002 U	0.0138	0.0002 U	0.0687	0.333	0.002 U	0.002 U
MW-9	Compliance	03/24/2022	0.004 U	0.002 U	0.0764	0.002 U	0.001 U	0.002 U	0.002 U	0.352	0.002 U	0.0112	0.0002 U	0.0564	0.346	0.002 U	0.002 U
MW-9	Compliance	09/22/2022	0.00103 U	0.000368 J	0.0816	0.00019 U	0.00015 U	0.00124 U	0.000215 J	0.332	0.000849 U	0.00862	0.0001 U	0.0484	0.758	0.0003 U	0.000121 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Well ID	Well Type	Date	Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Cadmium, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	Radium 226 + 228 (pCi/L)	Selenium, total (mg/L)	Thallium, total (mg/L)
MW-10	Compliance	09/15/2021	0.004 U	0.0230	0.154	0.002 U	0.001 U	0.002 U	0.002 U	0.243	0.002 U	0.00256	0.0002 U	0.005 U	1.54	0.002 U	0.002 U
MW-10	Compliance	03/24/2022	0.004 U	0.0161	0.146	0.002 U	0.001 U	0.002 U	0.002 U	0.221	0.002 U	0.00228	0.0002 U	0.005 U	1.38	0.002 U	0.002 U
MW-10	Compliance	09/22/2022	0.00103 U	0.0164	0.153	0.00019 U	0.00015 U	0.00124 U	0.000329 J	0.222	0.000849 U	0.00181 J	0.0001 U	0.00503	0.853	0.0003 U	0.000121 U
MW-11	Compliance	09/16/2021	0.004 U	0.0205	0.257	0.002 U	0.001 U	0.002 U	0.002 U	0.199	0.002 U	0.00368	0.0002 U	0.005 U	1.06	0.002 U	0.002 U
MW-11	Compliance	03/24/2022	0.004 U	0.0122	0.195	0.002 U	0.001 U	0.002 U	0.002 U	0.178	0.002 U	0.00315	0.0002 U	0.005 U	1.01	0.002 U	0.002 U
MW-11	Compliance	09/22/2022	0.00103 U	0.00908	0.212	0.00019 U	0.00015 U	0.00124 U	0.000586 J	0.150 J	0.000849 U	0.00330	0.0001 U	0.00377 J	0.995	0.0003 U	0.000121 U
MW-12	Compliance	09/16/2021	0.004 U	0.002 U	0.0153	0.002 U	0.00134	0.002 U	0.00290	0.15 U	0.002 U	0.00392	0.000923	0.005 U	1.25	0.002 U	0.002 U
MW-12	Compliance	03/24/2022	0.004 U	0.002 U	0.0151	0.002 U	0.00134	0.002 U	0.00295	0.15 U	0.002 U	0.00402	0.00377	0.005 U	0.658	0.002 U	0.002 U
MW-12	Compliance	09/22/2022	0.00103 U	0.000342 J	0.0146	0.00019 U	0.00124	0.00124 U	0.00300	0.0664 J	0.000849 U	0.00379	0.00147	0.000348 U	0.793	0.0003 U	0.000121 U
MW-13	Compliance	09/16/2021	0.004 U	0.0143	0.163	0.002 U	0.001 U	0.002 U	0.002 U	0.194	0.002 U	0.00549	0.0002 U	0.0124	1.09	0.002 U	0.002 U
MW-13	Compliance	03/24/2022	0.004 U	0.0165	0.189	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.00536	0.0002 U	0.0103	0.953	0.002 U	0.002 U
MW-13	Compliance	09/22/2022	0.00103 U	0.0173	0.171	0.00019 U	0.00015 U	0.00124 U	0.000572 J	0.158	0.000849 U	0.00531	0.0001 U	0.0110	0.693 J	0.0003 U	0.000121 U
MW-14	Compliance	09/16/2021	0.004 U	0.002 U	0.0413	0.002 U	0.001 U	0.002 U	0.002 U	0.153	0.002 U	0.00439	0.0002 U	0.00624	--	0.002 U	0.002 U
MW-14	Compliance	03/23/2022	0.004 U	0.002 U	0.0413	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.00435	0.0002 U	0.00548	0.0336	0.002 U	0.002 U
MW-14	Compliance	09/22/2022	0.00103 U	0.000893 J	0.0405	0.00019 U	0.00015 U	0.00124 U	0.00052 J	0.1 J	0.000849 U	0.00415	0.0001 U	0.00562	--	0.0003 U	0.000121 U
MW-15	Compliance	09/15/2021	0.004 U	0.00342	0.0837	0.002 U	0.001 U	0.002 U	0.00405	0.241	0.002 U	0.00770	0.0002 U	0.0314	--	0.002 U	0.002 U
MW-15	Compliance	03/23/2022	0.004 U	0.002 U	0.0779	0.002 U	0.001 U	0.002 U	0.00284	0.214	0.002 U	0.00769	0.0002 U	0.0240	0.895	0.002 U	0.002 U
MW-15	Compliance	09/21/2022	0.00103 U	0.000731 J	0.0831	0.00019 U	0.00015 U	0.00124 U	0.00241	0.149 J	0.000849 U	0.00745	0.0001 U	0.0224	--	0.0003 U	0.000121 U
MW-16	Compliance	09/15/2021	0.004 U	0.002 U	0.0849	0.002 U	0.001 U	0.002 U	0.00376	0.15 U	0.002 U	0.0130	0.0002 U	0.005 U	--	0.002 U	0.002 U
MW-16	Compliance	03/23/2022	0.004 U	0.002 U	0.0927	0.002 U	0.001 U	0.002 U	0.002 U	0.15 U	0.002 U	0.0130	0.0002 U	0.005 U	1.58	0.002 U	0.002 U
MW-16	Compliance	09/21/2022	0.00103 U	0.000244 J	0.0762	0.00019 U	0.00015 U	0.00124 U	0.000554 J	0.114 J	0.000849 U	0.0116	0.0001 U	0.00035 J	--	0.0003 U	0.000121 U

Notes:

mg/L = milligrams per liter

pCi/L = picoCuries per liter

- = not analyzed

U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate. Lab reports may or may not report both the limit of detection and the limit of quantitation. Limits are provided in the electronic data deliverable. As such, the U-flagged result value provided in this table may not match the result value provided in the lab report.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

TABLE 4
STATISTICAL BACKGROUND VALUES
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Parameter	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	12/08/2015 - 07/10/2017	8	12	Parametric UPL	0.266
Calcium (mg/L)	12/08/2015 - 07/10/2017	8	0	Parametric UPL	184
Chloride (mg/L)	12/08/2015 - 07/10/2017	8	12	Parametric UPL	19.4
Fluoride (mg/L)	12/08/2015 - 07/10/2017	7	71	Non-parametric UPL	0.128
pH (field) (SU)	12/08/2015 - 07/10/2017	7	0	Parametric LPL/UPL	5.9/8.1
Sulfate (mg/L)	12/08/2015 - 07/10/2017	8	25	Parametric UPL (log-transformed)	75.1
Total Dissolved Solids (mg/L)	12/08/2015 - 07/10/2017	8	0	Parametric UPL	553

Notes:
 LPL = lower prediction limit (applicable for pH only)
 mg/L = milligrams per liter
 SU = standard units
 UPL = upper prediction limit

TABLE 5
GROUNDWATER PROTECTION STANDARDS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Parameter	Background					MCL/HBL	Groundwater Protection Standard*	Groundwater Protection Standard Source
	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Value			
Antimony (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.002	0.006	0.006	MCL/HBL
Arsenic (mg/L)	12/08/2015 - 07/10/2017	8	88	Non-parametric UTL	0.00143	0.010	0.010	MCL/HBL
Barium (mg/L)	12/08/2015 - 07/10/2017	8	0	Parametric UTL	0.148	2	2	MCL/HBL
Beryllium (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.001	0.004	0.004	MCL/HBL
Cadmium (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.001	0.005	0.005	MCL/HBL
Chromium (mg/L)	12/08/2015 - 07/10/2017	8	88	Non-parametric UTL	0.000574	0.1	0.1	MCL/HBL
Cobalt (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.0005	0.006	0.006	MCL/HBL
Fluoride (mg/L)	12/08/2015 - 07/10/2017	7	71	Non-parametric UTL	0.128	4.0	4.0	MCL/HBL
Lead (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.001	0.015	0.015	MCL/HBL
Lithium (mg/L)	12/08/2015 - 07/10/2017	8	75	Non-parametric UTL	0.00949	0.04	0.04	MCL/HBL
Mercury (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.0002	0.002	0.002	MCL/HBL
Molybdenum (mg/L)	12/08/2015 - 07/10/2017	8	88	Non-parametric UTL	0.00231	0.1	0.1	MCL/HBL
Radium 226 + Radium 228 (pCi/L)	12/08/2015 - 07/10/2017	8	0	Parametric UTL	0.922	5	5	MCL/HBL
Selenium (mg/L)	12/08/2015 - 07/10/2017	8	88	Non-parametric UTL	0.000740	0.05	0.05	MCL/HBL
Thallium (mg/L)	12/08/2015 - 07/10/2017	8	100	All ND - Last Reporting Limit	0.001	0.002	0.002	MCL/HBL

Notes:
 * Groundwater Protection Standard is the higher of the MCL/HBL or background.
 MCL/HBL = maximum contaminant level/health-based level
 mg/L = milligrams per liter
 ND = non-detect
 pCi/L = picoCuries per liter
 UTL = upper tolerance limit

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
4A	Antimony, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.004	0.006	MCL/HBL
4A	Arsenic, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	29	CI around geomean	0.00133	0.010	MCL/HBL
4A	Barium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	0	CI around median	0.107	2	MCL/HBL
4A	Beryllium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.004	MCL/HBL
4A	Cadmium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	86	CI around median	0.00100	0.005	MCL/HBL
4A	Chromium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	57	CI around median	0.00200	0.1	MCL/HBL
4A	Cobalt, total	mg/L	A4D	06/12/2020 - 09/16/2021	8	0	CI around mean	0.00921	0.006	MCL/HBL
4A	Fluoride, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	29	CI around mean	0.149	4.0	MCL/HBL
4A	Lead, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	43	CI around geomean	0.00147	0.015	MCL/HBL
4A	Lithium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	14	CI around geomean	0.00590	0.04	MCL/HBL
4A	Mercury, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.0002	0.002	MCL/HBL
4A	Molybdenum, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	0	CI around mean	0.0121	0.1	MCL/HBL
4A	Selenium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	86	CI around median	0.00200	0.05	MCL/HBL
4A	Thallium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.002	MCL/HBL
MW-1	Antimony, total	mg/L	A4D	12/08/2015 - 09/15/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-1	Antimony, total	mg/L	A5	12/08/2015 - 03/23/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-1	Arsenic, total	mg/L	A4D	12/08/2015 - 09/15/2021	16	94	CI around median	0.00100	0.010	MCL/HBL
MW-1	Arsenic, total	mg/L	A5	12/08/2015 - 03/23/2022	17	94	CI around median	0.00100	0.010	MCL/HBL
MW-1	Barium, total	mg/L	A4D	12/08/2015 - 09/15/2021	16	6	CI around geomean	0.0391	2	MCL/HBL
MW-1	Barium, total	mg/L	A5	12/08/2015 - 03/23/2022	17	6	CI around median	0.0373	2	MCL/HBL
MW-1	Beryllium, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-1	Beryllium, total	mg/L	A5	12/08/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-1	Cadmium, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-1	Cadmium, total	mg/L	A5	12/08/2015 - 03/23/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-1	Chromium, total	mg/L	A4D	12/08/2015 - 09/15/2021	16	94	CI around median	0.00200	0.1	MCL/HBL
MW-1	Chromium, total	mg/L	A5	12/08/2015 - 03/23/2022	17	94	CI around median	0.00200	0.1	MCL/HBL
MW-1	Cobalt, total	mg/L	A4D	12/08/2015 - 09/15/2021	17	100	All ND - Last	0.002	0.006	MCL/HBL
MW-1	Cobalt, total	mg/L	A5	12/08/2015 - 03/23/2022	18	100	All ND - Last	0.002	0.006	MCL/HBL
MW-1	Fluoride, total	mg/L	A4D	12/08/2015 - 09/15/2021	17	65	CI around median	0.373	4.0	MCL/HBL
MW-1	Fluoride, total	mg/L	A5	12/08/2015 - 03/23/2022	18	61	CI around median	0.373	4.0	MCL/HBL

TABLE 6
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2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
115 - POND SYSTEM
NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-1	Lead, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	93	CB around linear reg	0.00120	0.015	MCL/HBL
MW-1	Lead, total	mg/L	A5	12/08/2015 - 03/23/2022	16	94	CB around T-S line	0.00100	0.015	MCL/HBL
MW-1	Lithium, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	33	CB around linear reg	0.0110	0.04	MCL/HBL
MW-1	Lithium, total	mg/L	A5	12/08/2015 - 03/23/2022	16	31	CB around linear reg	0.0113	0.04	MCL/HBL
MW-1	Mercury, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-1	Mercury, total	mg/L	A5	12/08/2015 - 03/23/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-1	Molybdenum, total	mg/L	A4D	12/08/2015 - 09/15/2021	17	0	CI around mean	0.0307	0.1	MCL/HBL
MW-1	Molybdenum, total	mg/L	A5	12/08/2015 - 03/23/2022	18	0	CI around mean	0.0314	0.1	MCL/HBL
MW-1	Radium 226 + Radium 228, total	pCi/L	A4D	12/08/2015 - 09/15/2021	16	0	CI around geomean	0.627	5	MCL/HBL
MW-1	Radium 226 + Radium 228, total	pCi/L	A5	12/08/2015 - 03/23/2022	17	0	CI around geomean	0.151	5	MCL/HBL
MW-1	Selenium, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.05	MCL/HBL
MW-1	Selenium, total	mg/L	A5	12/08/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.05	MCL/HBL
MW-1	Thallium, total	mg/L	A4D	12/08/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-1	Thallium, total	mg/L	A5	12/08/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-2	Antimony, total	mg/L	A4D	12/09/2015 - 09/15/2021	13	92	CI around mean	0.00179	0.006	MCL/HBL
MW-2	Antimony, total	mg/L	A5	12/09/2015 - 03/23/2022	14	93	CB around linear reg	0.00269	0.006	MCL/HBL
MW-2	Arsenic, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around mean	0.0262	0.010	MCL/HBL
MW-2	Arsenic, total	mg/L	A5	12/09/2015 - 03/23/2022	17	0	CI around mean	0.0261	0.010	MCL/HBL
MW-2	Barium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around mean	0.414	2	MCL/HBL
MW-2	Barium, total	mg/L	A5	12/09/2015 - 03/23/2022	17	0	CI around mean	0.417	2	MCL/HBL
MW-2	Beryllium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-2	Beryllium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-2	Cadmium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-2	Cadmium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-2	Chromium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	69	CI around median	0.00200	0.1	MCL/HBL
MW-2	Chromium, total	mg/L	A5	12/09/2015 - 03/23/2022	17	71	CI around median	0.00200	0.1	MCL/HBL
MW-2	Cobalt, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	60	CI around geomean	0.000687	0.006	MCL/HBL
MW-2	Cobalt, total	mg/L	A5	12/09/2015 - 03/23/2022	16	62	CI around geomean	0.000732	0.006	MCL/HBL
MW-2	Fluoride, total	mg/L	A4D	12/09/2015 - 09/15/2021	17	88	CI around median	0.150	4.0	MCL/HBL

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MIAMI FORT POWER PLANT
115 - POND SYSTEM
NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-2	Fluoride, total	mg/L	A5	12/09/2015 - 03/23/2022	18	89	CI around median	0.150	4.0	MCL/HBL
MW-2	Lead, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	60	CI around geomean	0.00123	0.015	MCL/HBL
MW-2	Lead, total	mg/L	A5	12/09/2015 - 03/23/2022	16	62	CI around geomean	0.00127	0.015	MCL/HBL
MW-2	Lithium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	73	CI around median	0.00436	0.04	MCL/HBL
MW-2	Lithium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	75	CB around linear reg	-0.0260	0.04	MCL/HBL
MW-2	Mercury, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-2	Mercury, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-2	Molybdenum, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	94	CI around median	0.00500	0.1	MCL/HBL
MW-2	Molybdenum, total	mg/L	A5	12/09/2015 - 03/23/2022	17	94	CI around median	0.00500	0.1	MCL/HBL
MW-2	Radium 226 + Radium 228, total	pCi/L	A4D	12/09/2015 - 09/15/2021	16	0	CB around linear reg	-0.0863	5	MCL/HBL
MW-2	Radium 226 + Radium 228, total	pCi/L	A5	12/09/2015 - 03/23/2022	17	0	CI around geomean	0.624	5	MCL/HBL
MW-2	Selenium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	93	CI around median	0.00200	0.05	MCL/HBL
MW-2	Selenium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	94	CI around median	0.00200	0.05	MCL/HBL
MW-2	Thallium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-2	Thallium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-3A	Antimony, total	mg/L	A4D	12/09/2015 - 09/16/2021	13	92	CB around linear reg	0.00329	0.006	MCL/HBL
MW-3A	Antimony, total	mg/L	A5	12/09/2015 - 03/24/2022	14	93	CB around linear reg	0.00351	0.006	MCL/HBL
MW-3A	Arsenic, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	0	CI around geomean	0.00581	0.010	MCL/HBL
MW-3A	Arsenic, total	mg/L	A5	12/09/2015 - 03/24/2022	17	0	CI around geomean	0.00602	0.010	MCL/HBL
MW-3A	Barium, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	6	CI around mean	0.115	2	MCL/HBL
MW-3A	Barium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	6	CI around mean	0.117	2	MCL/HBL
MW-3A	Beryllium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-3A	Beryllium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-3A	Cadmium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-3A	Cadmium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-3A	Chromium, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	75	CB around T-S line	0.00200	0.1	MCL/HBL
MW-3A	Chromium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	76	CI around median	0.00200	0.1	MCL/HBL
MW-3A	Cobalt, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	73	CI around geomean	0.000528	0.006	MCL/HBL
MW-3A	Cobalt, total	mg/L	A5	12/09/2015 - 03/24/2022	16	75	CI around geomean	0.000570	0.006	MCL/HBL

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 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-3A	Fluoride, total	mg/L	A4D	12/09/2015 - 09/16/2021	17	76	CI around median	0.178	4.0	MCL/HBL
MW-3A	Fluoride, total	mg/L	A5	12/09/2015 - 03/24/2022	18	78	CI around median	0.178	4.0	MCL/HBL
MW-3A	Lead, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	73	CB around linear reg	0.00146	0.015	MCL/HBL
MW-3A	Lead, total	mg/L	A5	12/09/2015 - 03/24/2022	16	75	CB around T-S line	0.00100	0.015	MCL/HBL
MW-3A	Lithium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	80	CB around linear reg	-0.0306	0.04	MCL/HBL
MW-3A	Lithium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	81	CB around linear reg	-0.0304	0.04	MCL/HBL
MW-3A	Mercury, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-3A	Mercury, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-3A	Molybdenum, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	94	CI around median	0.00500	0.1	MCL/HBL
MW-3A	Molybdenum, total	mg/L	A5	12/09/2015 - 03/24/2022	17	94	CI around median	0.00500	0.1	MCL/HBL
MW-3A	Radium 226 + Radium 228, total	pCi/L	A4D	12/09/2015 - 09/16/2021	16	0	CI around mean	1.02	5	MCL/HBL
MW-3A	Radium 226 + Radium 228, total	pCi/L	A5	12/09/2015 - 03/24/2022	17	0	CI around mean	0.463	5	MCL/HBL
MW-3A	Selenium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.05	MCL/HBL
MW-3A	Selenium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.05	MCL/HBL
MW-3A	Thallium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-3A	Thallium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-4	Antimony, total	mg/L	A4D	12/07/2015 - 09/16/2021	19	95	CB around T-S line	0.00200	0.006	MCL/HBL
MW-4	Antimony, total	mg/L	A5	12/07/2015 - 03/23/2022	20	95	CB around T-S line	0.00244	0.006	MCL/HBL
MW-4	Arsenic, total	mg/L	A4D	12/07/2015 - 09/16/2021	22	36	CI around geomean	0.00171	0.010	MCL/HBL
MW-4	Arsenic, total	mg/L	A5	12/07/2015 - 03/23/2022	23	39	CI around geomean	0.00173	0.010	MCL/HBL
MW-4	Barium, total	mg/L	A4D	12/07/2015 - 09/16/2021	22	18	CI around median	0.0199	2	MCL/HBL
MW-4	Barium, total	mg/L	A5	12/07/2015 - 03/23/2022	23	17	CI around median	0.0197	2	MCL/HBL
MW-4	Beryllium, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	100	All ND - Last	0.002	0.004	MCL/HBL
MW-4	Beryllium, total	mg/L	A5	12/07/2015 - 03/23/2022	22	100	All ND - Last	0.002	0.004	MCL/HBL
MW-4	Cadmium, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	67	CI around median	0.00100	0.005	MCL/HBL
MW-4	Cadmium, total	mg/L	A5	12/07/2015 - 03/23/2022	22	68	CI around median	0.00100	0.005	MCL/HBL
MW-4	Chromium, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	62	CI around median	0.00200	0.1	MCL/HBL
MW-4	Chromium, total	mg/L	A5	12/07/2015 - 03/23/2022	22	59	CI around median	0.00200	0.1	MCL/HBL
MW-4	Cobalt, total	mg/L	A4D	12/07/2015 - 09/16/2021	23	0	CI around mean	0.00903	0.006	MCL/HBL

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Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-4	Cobalt, total	mg/L	A5	12/07/2015 - 03/23/2022	24	0	CI around mean	0.00921	0.006	MCL/HBL
MW-4	Fluoride, total	mg/L	A4D	12/07/2015 - 09/16/2021	23	70	CI around median	0.162	4.0	MCL/HBL
MW-4	Fluoride, total	mg/L	A5	12/07/2015 - 03/23/2022	24	71	CB around T-S line	-0.220	4.0	MCL/HBL
MW-4	Lead, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	67	CI around median	0.00111	0.015	MCL/HBL
MW-4	Lead, total	mg/L	A5	12/07/2015 - 03/23/2022	22	68	CI around median	0.00111	0.015	MCL/HBL
MW-4	Lithium, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	38	CB around linear reg	-0.0125	0.04	MCL/HBL
MW-4	Lithium, total	mg/L	A5	12/07/2015 - 03/23/2022	22	36	CB around linear reg	-0.0155	0.04	MCL/HBL
MW-4	Mercury, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-4	Mercury, total	mg/L	A5	12/07/2015 - 03/23/2022	22	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-4	Molybdenum, total	mg/L	A4D	12/07/2015 - 09/16/2021	23	96	CI around median	0.00500	0.1	MCL/HBL
MW-4	Molybdenum, total	mg/L	A5	12/07/2015 - 03/23/2022	24	96	CI around median	0.00500	0.1	MCL/HBL
MW-4	Radium 226 + Radium 228, total	pCi/L	A4D	12/07/2015 - 09/16/2021	22	0	CI around median	0.427	5	MCL/HBL
MW-4	Radium 226 + Radium 228, total	pCi/L	A5	12/07/2015 - 03/23/2022	23	0	CI around median	0.340	5	MCL/HBL
MW-4	Selenium, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	86	CB around T-S line	0.000804	0.05	MCL/HBL
MW-4	Selenium, total	mg/L	A5	12/07/2015 - 03/23/2022	22	86	CB around T-S line	0.000878	0.05	MCL/HBL
MW-4	Thallium, total	mg/L	A4D	12/07/2015 - 09/16/2021	21	100	All ND - Last	0.002	0.002	MCL/HBL
MW-4	Thallium, total	mg/L	A5	12/07/2015 - 03/23/2022	22	100	All ND - Last	0.002	0.002	MCL/HBL
MW-5	Antimony, total	mg/L	A4D	12/08/2015 - 09/16/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-5	Antimony, total	mg/L	A5	12/08/2015 - 03/24/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-5	Arsenic, total	mg/L	A4D	12/08/2015 - 09/16/2021	16	81	CI around median	0.00100	0.010	MCL/HBL
MW-5	Arsenic, total	mg/L	A5	12/08/2015 - 03/24/2022	17	76	CI around median	0.00100	0.010	MCL/HBL
MW-5	Barium, total	mg/L	A4D	12/08/2015 - 09/16/2021	16	6	CI around mean	0.0568	2	MCL/HBL
MW-5	Barium, total	mg/L	A5	12/08/2015 - 03/24/2022	17	6	CI around mean	0.0585	2	MCL/HBL
MW-5	Beryllium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-5	Beryllium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-5	Cadmium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	93	CI around median	0.00100	0.005	MCL/HBL
MW-5	Cadmium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	94	CI around median	0.00100	0.005	MCL/HBL
MW-5	Chromium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	80	CI around median	0.00200	0.1	MCL/HBL
MW-5	Chromium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	75	CI around median	0.00200	0.1	MCL/HBL

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
115 - POND SYSTEM
NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-5	Cobalt, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	76	CI around median	0.000500	0.006	MCL/HBL
MW-5	Cobalt, total	mg/L	A5	12/08/2015 - 03/24/2022	18	78	CI around median	0.000500	0.006	MCL/HBL
MW-5	Fluoride, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	88	CI around median	0.150	4.0	MCL/HBL
MW-5	Fluoride, total	mg/L	A5	12/08/2015 - 03/24/2022	18	89	CI around median	0.150	4.0	MCL/HBL
MW-5	Lead, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	93	CB around linear reg	0.00116	0.015	MCL/HBL
MW-5	Lead, total	mg/L	A5	12/08/2015 - 03/24/2022	16	88	CB around T-S line	0.00100	0.015	MCL/HBL
MW-5	Lithium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	60	CI around median	0.00724	0.04	MCL/HBL
MW-5	Lithium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	56	CI around median	0.00889	0.04	MCL/HBL
MW-5	Mercury, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-5	Mercury, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-5	Molybdenum, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	18	CI around median	0.00550	0.1	MCL/HBL
MW-5	Molybdenum, total	mg/L	A5	12/08/2015 - 03/24/2022	18	17	CI around median	0.00554	0.1	MCL/HBL
MW-5	Radium 226 + Radium 228, total	pCi/L	A4D	12/08/2015 - 09/16/2021	16	0	CI around median	0.295	5	MCL/HBL
MW-5	Radium 226 + Radium 228, total	pCi/L	A5	12/08/2015 - 03/24/2022	17	0	CI around mean	0.209	5	MCL/HBL
MW-5	Selenium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.05	MCL/HBL
MW-5	Selenium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.05	MCL/HBL
MW-5	Thallium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-5	Thallium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-6	Antimony, total	mg/L	A4D	12/07/2015 - 09/16/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-6	Antimony, total	mg/L	A5	12/07/2015 - 03/24/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-6	Arsenic, total	mg/L	A4D	12/07/2015 - 09/16/2021	16	6	CB around linear reg	0.0103	0.010	MCL/HBL
MW-6	Arsenic, total	mg/L	A5	12/07/2015 - 03/24/2022	17	6	CB around linear reg	0.0117	0.010	MCL/HBL
MW-6	Barium, total	mg/L	A4D	12/07/2015 - 09/16/2021	16	0	CI around mean	0.304	2	MCL/HBL
MW-6	Barium, total	mg/L	A5	12/07/2015 - 03/24/2022	17	0	CI around mean	0.290	2	MCL/HBL
MW-6	Beryllium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-6	Beryllium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-6	Cadmium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-6	Cadmium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-6	Chromium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	80	CI around median	0.00200	0.1	MCL/HBL

TABLE 6
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2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
115 - POND SYSTEM
NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-6	Chromium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	75	CI around median	0.00200	0.1	MCL/HBL
MW-6	Cobalt, total	mg/L	A4D	12/07/2015 - 09/16/2021	17	0	CI around geomean	0.00271	0.006	MCL/HBL
MW-6	Cobalt, total	mg/L	A5	12/07/2015 - 03/24/2022	18	0	CI around geomean	0.00283	0.006	MCL/HBL
MW-6	Fluoride, total	mg/L	A4D	12/07/2015 - 09/16/2021	17	6	CB around T-S line	0.384	4.0	MCL/HBL
MW-6	Fluoride, total	mg/L	A5	12/07/2015 - 03/24/2022	18	6	CB around T-S line	0.310	4.0	MCL/HBL
MW-6	Lead, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	93	CB around linear reg	0.00119	0.015	MCL/HBL
MW-6	Lead, total	mg/L	A5	12/07/2015 - 03/24/2022	16	94	CB around T-S line	0.00100	0.015	MCL/HBL
MW-6	Lithium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	53	CB around linear reg	-0.0178	0.04	MCL/HBL
MW-6	Lithium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	50	CI around median	0.00925	0.04	MCL/HBL
MW-6	Mercury, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-6	Mercury, total	mg/L	A5	12/07/2015 - 03/24/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-6	Molybdenum, total	mg/L	A4D	12/07/2015 - 09/16/2021	17	0	CB around linear reg	0.114	0.1	MCL/HBL
MW-6	Molybdenum, total	mg/L	A5	12/07/2015 - 03/24/2022	18	0	CB around linear reg	0.0839	0.1	MCL/HBL
MW-6	Radium 226 + Radium 228, total	pCi/L	A4D	12/07/2015 - 09/16/2021	16	0	CI around mean	0.910	5	MCL/HBL
MW-6	Radium 226 + Radium 228, total	pCi/L	A5	12/07/2015 - 03/24/2022	17	0	CI around mean	0.391	5	MCL/HBL
MW-6	Selenium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	93	CI around median	0.00200	0.05	MCL/HBL
MW-6	Selenium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	94	CI around median	0.00200	0.05	MCL/HBL
MW-6	Thallium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-6	Thallium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-8	Antimony, total	mg/L	A4D	12/09/2015 - 09/15/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-8	Antimony, total	mg/L	A5	12/09/2015 - 03/23/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-8	Arsenic, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	94	CI around median	0.00100	0.010	MCL/HBL
MW-8	Arsenic, total	mg/L	A5	12/09/2015 - 03/23/2022	17	94	CI around median	0.00100	0.010	MCL/HBL
MW-8	Barium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	6	CI around median	0.0347	2	MCL/HBL
MW-8	Barium, total	mg/L	A5	12/09/2015 - 03/23/2022	17	6	CI around median	0.0347	2	MCL/HBL
MW-8	Beryllium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-8	Beryllium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-8	Cadmium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-8	Cadmium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL

TABLE 6
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 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-8	Chromium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	88	CI around median	0.00200	0.1	MCL/HBL
MW-8	Chromium, total	mg/L	A5	12/09/2015 - 03/23/2022	17	88	CI around median	0.00200	0.1	MCL/HBL
MW-8	Cobalt, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	93	CI around median	0.000500	0.006	MCL/HBL
MW-8	Cobalt, total	mg/L	A5	12/09/2015 - 03/23/2022	16	94	CI around median	0.000500	0.006	MCL/HBL
MW-8	Fluoride, total	mg/L	A4D	12/09/2015 - 09/15/2021	17	65	CI around median	0.197	4.0	MCL/HBL
MW-8	Fluoride, total	mg/L	A5	12/09/2015 - 03/23/2022	18	61	CI around median	0.197	4.0	MCL/HBL
MW-8	Lead, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.015	MCL/HBL
MW-8	Lead, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.015	MCL/HBL
MW-8	Lithium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	53	CI around median	0.0130	0.04	MCL/HBL
MW-8	Lithium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	50	CI around median	0.0169	0.04	MCL/HBL
MW-8	Mercury, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-8	Mercury, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-8	Molybdenum, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	12	CI around median	0.00606	0.1	MCL/HBL
MW-8	Molybdenum, total	mg/L	A5	12/09/2015 - 03/23/2022	17	12	CI around median	0.00606	0.1	MCL/HBL
MW-8	Radium 226 + Radium 228, total	pCi/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around geomean	0.637	5	MCL/HBL
MW-8	Radium 226 + Radium 228, total	pCi/L	A5	12/09/2015 - 03/23/2022	17	0	CI around geomean	0.374	5	MCL/HBL
MW-8	Selenium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	87	CI around median	0.00200	0.05	MCL/HBL
MW-8	Selenium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	88	CI around median	0.00200	0.05	MCL/HBL
MW-8	Thallium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-8	Thallium, total	mg/L	A5	12/09/2015 - 03/23/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-9	Antimony, total	mg/L	A4D	12/09/2015 - 09/15/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-9	Antimony, total	mg/L	A5	12/09/2015 - 03/24/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-9	Arsenic, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	94	CI around median	0.00100	0.010	MCL/HBL
MW-9	Arsenic, total	mg/L	A5	12/09/2015 - 03/24/2022	17	94	CI around median	0.00100	0.010	MCL/HBL
MW-9	Barium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	6	CI around mean	0.0971	2	MCL/HBL
MW-9	Barium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	6	CB around linear reg	0.0665	2	MCL/HBL
MW-9	Beryllium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-9	Beryllium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-9	Cadmium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL

TABLE 6
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2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
115 - POND SYSTEM
NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-9	Cadmium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-9	Chromium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	88	CI around median	0.00200	0.1	MCL/HBL
MW-9	Chromium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	88	CI around median	0.00200	0.1	MCL/HBL
MW-9	Cobalt, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	87	CI around median	0.000500	0.006	MCL/HBL
MW-9	Cobalt, total	mg/L	A5	12/09/2015 - 03/24/2022	16	88	CI around median	0.000500	0.006	MCL/HBL
MW-9	Fluoride, total	mg/L	A4D	12/09/2015 - 09/15/2021	17	65	CI around median	0.378	4.0	MCL/HBL
MW-9	Fluoride, total	mg/L	A5	12/09/2015 - 03/24/2022	18	61	CI around median	0.378	4.0	MCL/HBL
MW-9	Lead, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	93	CB around linear reg	0.00117	0.015	MCL/HBL
MW-9	Lead, total	mg/L	A5	12/09/2015 - 03/24/2022	16	94	CB around T-S line	0.00100	0.015	MCL/HBL
MW-9	Lithium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	60	CI around median	0.0100	0.04	MCL/HBL
MW-9	Lithium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	56	CI around median	0.0110	0.04	MCL/HBL
MW-9	Mercury, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-9	Mercury, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-9	Molybdenum, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around mean	0.0583	0.1	MCL/HBL
MW-9	Molybdenum, total	mg/L	A5	12/09/2015 - 03/24/2022	17	0	CI around mean	0.0581	0.1	MCL/HBL
MW-9	Radium 226 + Radium 228, total	pCi/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around median	0.333	5	MCL/HBL
MW-9	Radium 226 + Radium 228, total	pCi/L	A5	12/09/2015 - 03/24/2022	17	0	CI around median	0.227	5	MCL/HBL
MW-9	Selenium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.05	MCL/HBL
MW-9	Selenium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.05	MCL/HBL
MW-9	Thallium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-9	Thallium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-10	Antimony, total	mg/L	A4D	12/09/2015 - 09/15/2021	13	92	CI around mean	0.00177	0.006	MCL/HBL
MW-10	Antimony, total	mg/L	A5	12/09/2015 - 03/24/2022	14	93	CI around median	0.00200	0.006	MCL/HBL
MW-10	Arsenic, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around mean	0.0157	0.010	MCL/HBL
MW-10	Arsenic, total	mg/L	A5	12/09/2015 - 03/24/2022	17	0	CI around mean	0.0157	0.010	MCL/HBL
MW-10	Barium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	6	CB around linear reg	-0.0869	2	MCL/HBL
MW-10	Barium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	6	CB around linear reg	-0.0824	2	MCL/HBL
MW-10	Beryllium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-10	Beryllium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL

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 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-10	Cadmium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-10	Cadmium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-10	Chromium, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	88	CI around median	0.00200	0.1	MCL/HBL
MW-10	Chromium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	88	CI around median	0.00200	0.1	MCL/HBL
MW-10	Cobalt, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	60	CI around mean	0.00131	0.006	MCL/HBL
MW-10	Cobalt, total	mg/L	A5	12/09/2015 - 03/24/2022	16	62	CI around mean	0.00136	0.006	MCL/HBL
MW-10	Fluoride, total	mg/L	A4D	12/09/2015 - 09/15/2021	17	65	CI around median	0.229	4.0	MCL/HBL
MW-10	Fluoride, total	mg/L	A5	12/09/2015 - 03/24/2022	18	61	CI around median	0.229	4.0	MCL/HBL
MW-10	Lead, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	87	CB around linear reg	0.00118	0.015	MCL/HBL
MW-10	Lead, total	mg/L	A5	12/09/2015 - 03/24/2022	16	88	CB around T-S line	0.00100	0.015	MCL/HBL
MW-10	Lithium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	67	CI around median	0.00226	0.04	MCL/HBL
MW-10	Lithium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	62	CB around linear reg	-0.0305	0.04	MCL/HBL
MW-10	Mercury, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-10	Mercury, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-10	Molybdenum, total	mg/L	A4D	12/09/2015 - 09/15/2021	16	62	CI around median	0.00500	0.1	MCL/HBL
MW-10	Molybdenum, total	mg/L	A5	12/09/2015 - 03/24/2022	17	65	CI around median	0.00500	0.1	MCL/HBL
MW-10	Radium 226 + Radium 228, total	pCi/L	A4D	12/09/2015 - 09/15/2021	16	0	CI around mean	1.22	5	MCL/HBL
MW-10	Radium 226 + Radium 228, total	pCi/L	A5	12/09/2015 - 03/24/2022	17	0	CI around mean	0.718	5	MCL/HBL
MW-10	Selenium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	93	CI around median	0.00200	0.05	MCL/HBL
MW-10	Selenium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	94	CI around median	0.00200	0.05	MCL/HBL
MW-10	Thallium, total	mg/L	A4D	12/09/2015 - 09/15/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-10	Thallium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-11	Antimony, total	mg/L	A4D	12/09/2015 - 09/16/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-11	Antimony, total	mg/L	A5	12/09/2015 - 03/24/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-11	Arsenic, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	0	CI around median	0.00894	0.010	MCL/HBL
MW-11	Arsenic, total	mg/L	A5	12/09/2015 - 03/24/2022	17	0	CI around median	0.00894	0.010	MCL/HBL
MW-11	Barium, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	0	CI around mean	0.233	2	MCL/HBL
MW-11	Barium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	0	CI around mean	0.229	2	MCL/HBL
MW-11	Beryllium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-11	Beryllium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-11	Cadmium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.001	0.005	MCL/HBL
MW-11	Cadmium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.001	0.005	MCL/HBL
MW-11	Chromium, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	69	CI around median	0.00200	0.1	MCL/HBL
MW-11	Chromium, total	mg/L	A5	12/09/2015 - 03/24/2022	17	71	CI around median	0.00200	0.1	MCL/HBL
MW-11	Cobalt, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	33	CB around linear reg	-0.00243	0.006	MCL/HBL
MW-11	Cobalt, total	mg/L	A5	12/09/2015 - 03/24/2022	16	38	CB around linear reg	-0.00223	0.006	MCL/HBL
MW-11	Fluoride, total	mg/L	A4D	12/09/2015 - 09/16/2021	17	71	CI around median	0.199	4.0	MCL/HBL
MW-11	Fluoride, total	mg/L	A5	12/09/2015 - 03/24/2022	18	67	CI around median	0.199	4.0	MCL/HBL
MW-11	Lead, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	60	CI around geomean	0.00115	0.015	MCL/HBL
MW-11	Lead, total	mg/L	A5	12/09/2015 - 03/24/2022	16	62	CI around geomean	0.00120	0.015	MCL/HBL
MW-11	Lithium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	67	CI around median	0.00366	0.04	MCL/HBL
MW-11	Lithium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	62	CB around linear reg	-0.0293	0.04	MCL/HBL
MW-11	Mercury, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	93	CI around median	0.000200	0.002	MCL/HBL
MW-11	Mercury, total	mg/L	A5	12/09/2015 - 03/24/2022	16	94	CI around median	0.000200	0.002	MCL/HBL
MW-11	Molybdenum, total	mg/L	A4D	12/09/2015 - 09/16/2021	16	69	CB around T-S line	0.00376	0.1	MCL/HBL
MW-11	Molybdenum, total	mg/L	A5	12/09/2015 - 03/24/2022	17	71	CB around T-S line	0.00395	0.1	MCL/HBL
MW-11	Radium 226 + Radium 228, total	pCi/L	A4D	12/09/2015 - 09/16/2021	16	0	CI around mean	1.33	5	MCL/HBL
MW-11	Radium 226 + Radium 228, total	pCi/L	A5	12/09/2015 - 03/24/2022	17	0	CI around mean	0.736	5	MCL/HBL
MW-11	Selenium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	93	CI around geomean	0.00245	0.05	MCL/HBL
MW-11	Selenium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	94	CI around geomean	0.00240	0.05	MCL/HBL
MW-11	Thallium, total	mg/L	A4D	12/09/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-11	Thallium, total	mg/L	A5	12/09/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-12	Antimony, total	mg/L	A4D	12/07/2015 - 09/16/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-12	Antimony, total	mg/L	A5	12/07/2015 - 03/24/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-12	Arsenic, total	mg/L	A4D	12/07/2015 - 09/16/2021	16	94	CI around median	0.00100	0.010	MCL/HBL
MW-12	Arsenic, total	mg/L	A5	12/07/2015 - 03/24/2022	17	94	CI around median	0.00100	0.010	MCL/HBL
MW-12	Barium, total	mg/L	A4D	12/07/2015 - 09/16/2021	16	25	CI around median	0.0171	2	MCL/HBL
MW-12	Barium, total	mg/L	A5	12/07/2015 - 03/24/2022	17	24	CI around median	0.0162	2	MCL/HBL

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MIAMI FORT POWER PLANT
115 - POND SYSTEM
NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-12	Beryllium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-12	Beryllium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-12	Cadmium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	13	CI around mean	0.00134	0.005	MCL/HBL
MW-12	Cadmium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	12	CI around mean	0.00133	0.005	MCL/HBL
MW-12	Chromium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	73	CI around median	0.00200	0.1	MCL/HBL
MW-12	Chromium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	75	CI around median	0.00200	0.1	MCL/HBL
MW-12	Cobalt, total	mg/L	A4D	12/07/2015 - 09/16/2021	17	6	CB around linear reg	0.00225	0.006	MCL/HBL
MW-12	Cobalt, total	mg/L	A5	12/07/2015 - 03/24/2022	18	6	CB around linear reg	0.00239	0.006	MCL/HBL
MW-12	Fluoride, total	mg/L	A4D	12/07/2015 - 09/16/2021	17	88	CI around median	0.150	4.0	MCL/HBL
MW-12	Fluoride, total	mg/L	A5	12/07/2015 - 03/24/2022	18	89	CI around median	0.150	4.0	MCL/HBL
MW-12	Lead, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	93	CB around linear reg	0.00117	0.015	MCL/HBL
MW-12	Lead, total	mg/L	A5	12/07/2015 - 03/24/2022	16	94	CB around T-S line	0.00100	0.015	MCL/HBL
MW-12	Lithium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	53	CI around median	0.00433	0.04	MCL/HBL
MW-12	Lithium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	50	CB around linear reg	-0.0228	0.04	MCL/HBL
MW-12	Mercury, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	60	CB around linear reg	0.000606	0.002	MCL/HBL
MW-12	Mercury, total	mg/L	A5	12/07/2015 - 03/24/2022	16	56	CB around T-S line	0.000200	0.002	MCL/HBL
MW-12	Molybdenum, total	mg/L	A4D	12/07/2015 - 09/16/2021	17	94	CI around median	0.00500	0.1	MCL/HBL
MW-12	Molybdenum, total	mg/L	A5	12/07/2015 - 03/24/2022	18	94	CI around median	0.00500	0.1	MCL/HBL
MW-12	Radium 226 + Radium 228, total	pCi/L	A4D	12/07/2015 - 09/16/2021	16	0	CI around mean	0.801	5	MCL/HBL
MW-12	Radium 226 + Radium 228, total	pCi/L	A5	12/07/2015 - 03/24/2022	17	0	CI around mean	0.255	5	MCL/HBL
MW-12	Selenium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	93	CI around median	0.00200	0.05	MCL/HBL
MW-12	Selenium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	94	CI around median	0.00200	0.05	MCL/HBL
MW-12	Thallium, total	mg/L	A4D	12/07/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-12	Thallium, total	mg/L	A5	12/07/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-13	Antimony, total	mg/L	A4D	12/08/2015 - 09/16/2021	13	100	All ND - Last	0.004	0.006	MCL/HBL
MW-13	Antimony, total	mg/L	A5	12/08/2015 - 03/24/2022	14	100	All ND - Last	0.004	0.006	MCL/HBL
MW-13	Arsenic, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	12	CB around linear reg	0.0121	0.010	MCL/HBL
MW-13	Arsenic, total	mg/L	A5	12/08/2015 - 03/24/2022	18	11	CB around linear reg	0.0130	0.010	MCL/HBL
MW-13	Barium, total	mg/L	A4D	12/08/2015 - 09/16/2021	16	6	CB around linear reg	0.146	2	MCL/HBL

TABLE 6
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 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-13	Barium, total	mg/L	A5	12/08/2015 - 03/24/2022	17	6	CB around linear reg	0.154	2	MCL/HBL
MW-13	Beryllium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.004	MCL/HBL
MW-13	Beryllium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.004	MCL/HBL
MW-13	Cadmium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	60	CI around median	0.00100	0.005	MCL/HBL
MW-13	Cadmium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	62	CI around median	0.00100	0.005	MCL/HBL
MW-13	Chromium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	73	CI around median	0.00200	0.1	MCL/HBL
MW-13	Chromium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	75	CI around median	0.00200	0.1	MCL/HBL
MW-13	Cobalt, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	65	CB around linear reg	-0.00733	0.006	MCL/HBL
MW-13	Cobalt, total	mg/L	A5	12/08/2015 - 03/24/2022	18	67	CB around linear reg	-0.00699	0.006	MCL/HBL
MW-13	Fluoride, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	76	CI around median	0.150	4.0	MCL/HBL
MW-13	Fluoride, total	mg/L	A5	12/08/2015 - 03/24/2022	18	78	CI around median	0.150	4.0	MCL/HBL
MW-13	Lead, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	87	CI around geomean	0.000870	0.015	MCL/HBL
MW-13	Lead, total	mg/L	A5	12/08/2015 - 03/24/2022	16	88	CI around geomean	0.000919	0.015	MCL/HBL
MW-13	Lithium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	47	CB around linear reg	-0.0256	0.04	MCL/HBL
MW-13	Lithium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	44	CB around linear reg	-0.0254	0.04	MCL/HBL
MW-13	Mercury, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-13	Mercury, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-13	Molybdenum, total	mg/L	A4D	12/08/2015 - 09/16/2021	17	35	CB around linear reg	0.0108	0.1	MCL/HBL
MW-13	Molybdenum, total	mg/L	A5	12/08/2015 - 03/24/2022	18	33	CB around linear reg	0.0104	0.1	MCL/HBL
MW-13	Radium 226 + Radium 228, total	pCi/L	A4D	12/08/2015 - 09/16/2021	16	0	CI around geomean	0.847	5	MCL/HBL
MW-13	Radium 226 + Radium 228, total	pCi/L	A5	12/08/2015 - 03/24/2022	17	0	CI around geomean	0.487	5	MCL/HBL
MW-13	Selenium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	93	CI around median	0.00200	0.05	MCL/HBL
MW-13	Selenium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	94	CI around geomean	0.00229	0.05	MCL/HBL
MW-13	Thallium, total	mg/L	A4D	12/08/2015 - 09/16/2021	15	100	All ND - Last	0.002	0.002	MCL/HBL
MW-13	Thallium, total	mg/L	A5	12/08/2015 - 03/24/2022	16	100	All ND - Last	0.002	0.002	MCL/HBL
MW-14	Antimony, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.004	0.006	MCL/HBL
MW-14	Antimony, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.004	0.006	MCL/HBL
MW-14	Arsenic, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.010	MCL/HBL
MW-14	Arsenic, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.010	MCL/HBL

TABLE 6
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 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-14	Barium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	0	CI around mean	0.0387	2	MCL/HBL
MW-14	Barium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.0391	2	MCL/HBL
MW-14	Beryllium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.004	MCL/HBL
MW-14	Beryllium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.004	MCL/HBL
MW-14	Cadmium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.001	0.005	MCL/HBL
MW-14	Cadmium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.001	0.005	MCL/HBL
MW-14	Chromium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.1	MCL/HBL
MW-14	Chromium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.1	MCL/HBL
MW-14	Cobalt, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.006	MCL/HBL
MW-14	Cobalt, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.006	MCL/HBL
MW-14	Fluoride, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	43	CI around mean	0.149	4.0	MCL/HBL
MW-14	Fluoride, total	mg/L	A5	09/15/2020 - 03/23/2022	8	50	CI around mean	0.149	4.0	MCL/HBL
MW-14	Lead, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.015	MCL/HBL
MW-14	Lead, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.015	MCL/HBL
MW-14	Lithium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	0	CI around mean	0.00359	0.04	MCL/HBL
MW-14	Lithium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.00371	0.04	MCL/HBL
MW-14	Mercury, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-14	Mercury, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-14	Molybdenum, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	0	CI around mean	0.00594	0.1	MCL/HBL
MW-14	Molybdenum, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.00576	0.1	MCL/HBL
MW-14	Radium 226 + Radium 228, total	pCi/L	A5	09/15/2020 - 03/23/2022	6	0	CI around mean	-0.168	5	MCL/HBL
MW-14	Selenium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	86	CI around median	0.00200	0.05	MCL/HBL
MW-14	Selenium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	88	CI around median	0.00200	0.05	MCL/HBL
MW-14	Thallium, total	mg/L	A4D	09/15/2020 - 09/16/2021	7	100	All ND - Last	0.002	0.002	MCL/HBL
MW-14	Thallium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.002	MCL/HBL
MW-15	Antimony, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.004	0.006	MCL/HBL
MW-15	Antimony, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.004	0.006	MCL/HBL
MW-15	Arsenic, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	86	CI around median	0.00200	0.010	MCL/HBL
MW-15	Arsenic, total	mg/L	A5	09/15/2020 - 03/23/2022	8	88	CI around median	0.00200	0.010	MCL/HBL
MW-15	Barium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around mean	0.0816	2	MCL/HBL

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Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-15	Barium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.0802	2	MCL/HBL
MW-15	Beryllium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.004	MCL/HBL
MW-15	Beryllium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.004	MCL/HBL
MW-15	Cadmium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.001	0.005	MCL/HBL
MW-15	Cadmium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.001	0.005	MCL/HBL
MW-15	Chromium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	71	CI around median	0.00200	0.1	MCL/HBL
MW-15	Chromium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	75	CI around median	0.00200	0.1	MCL/HBL
MW-15	Cobalt, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around mean	0.00350	0.006	MCL/HBL
MW-15	Cobalt, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.00324	0.006	MCL/HBL
MW-15	Fluoride, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around mean	0.212	4.0	MCL/HBL
MW-15	Fluoride, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.212	4.0	MCL/HBL
MW-15	Lead, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	86	CI around median	0.00200	0.015	MCL/HBL
MW-15	Lead, total	mg/L	A5	09/15/2020 - 03/23/2022	8	88	CI around median	0.00200	0.015	MCL/HBL
MW-15	Lithium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around mean	0.00577	0.04	MCL/HBL
MW-15	Lithium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.00596	0.04	MCL/HBL
MW-15	Mercury, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-15	Mercury, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-15	Molybdenum, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around mean	0.0237	0.1	MCL/HBL
MW-15	Molybdenum, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.0237	0.1	MCL/HBL
MW-15	Radium 226 + Radium 228, total	pCi/L	A5	09/15/2020 - 03/23/2022	6	0	CI around geomean	0.0767	5	MCL/HBL
MW-15	Selenium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.05	MCL/HBL
MW-15	Selenium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.05	MCL/HBL
MW-15	Thallium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.002	MCL/HBL
MW-15	Thallium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.002	MCL/HBL
MW-16	Antimony, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.004	0.006	MCL/HBL
MW-16	Antimony, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.004	0.006	MCL/HBL
MW-16	Arsenic, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.010	MCL/HBL
MW-16	Arsenic, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.010	MCL/HBL
MW-16	Barium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around median	0.0849	2	MCL/HBL
MW-16	Barium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around median	0.0849	2	MCL/HBL

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
 2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER PLANT
 115 - POND SYSTEM
 NORTH BEND, OH

Sample Location	Constituent	Result Unit	Event	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Result	GWPS	GWPS Source
MW-16	Beryllium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.004	MCL/HBL
MW-16	Beryllium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.004	MCL/HBL
MW-16	Cadmium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.001	0.005	MCL/HBL
MW-16	Cadmium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.001	0.005	MCL/HBL
MW-16	Chromium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.1	MCL/HBL
MW-16	Chromium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.1	MCL/HBL
MW-16	Cobalt, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	43	CI around median	0.00200	0.006	MCL/HBL
MW-16	Cobalt, total	mg/L	A5	09/15/2020 - 03/23/2022	8	50	CI around median	0.00200	0.006	MCL/HBL
MW-16	Fluoride, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.15	4.0	MCL/HBL
MW-16	Fluoride, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.15	4.0	MCL/HBL
MW-16	Lead, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.015	MCL/HBL
MW-16	Lead, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.015	MCL/HBL
MW-16	Lithium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	0	CI around mean	0.0107	0.04	MCL/HBL
MW-16	Lithium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	0	CI around mean	0.0110	0.04	MCL/HBL
MW-16	Mercury, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-16	Mercury, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.0002	0.002	MCL/HBL
MW-16	Molybdenum, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.005	0.1	MCL/HBL
MW-16	Molybdenum, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.005	0.1	MCL/HBL
MW-16	Radium 226 + Radium 228, total	pCi/L	A5	09/15/2020 - 03/23/2022	6	0	CI around mean	-0.285	5	MCL/HBL
MW-16	Selenium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.05	MCL/HBL
MW-16	Selenium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.05	MCL/HBL
MW-16	Thallium, total	mg/L	A4D	09/15/2020 - 09/15/2021	7	100	All ND - Last	0.002	0.002	MCL/HBL
MW-16	Thallium, total	mg/L	A5	09/15/2020 - 03/23/2022	8	100	All ND - Last	0.002	0.002	MCL/HBL

Notes:

Exceedance of GWPS

mg/L = milligrams per liter

pCi/L = picocuries per liter

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown

CB around linear reg = Confidence band around linear regression

CB around T-S line = Confidence band around Thiel-Sen line

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Statistical Result = calculated in accordance with Statistical Analysis Plan using constituent concentrations observed at monitoring well during all sampling events within the specified date range

GWPS = Groundwater Protection Standard

GWPS Source:

MCL/HBL = maximum contaminant level/health-based level

Background = background concentration

FIGURES



- BACKGROUND WELL
- COMPLIANCE WELL
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

0 150 300
Feet

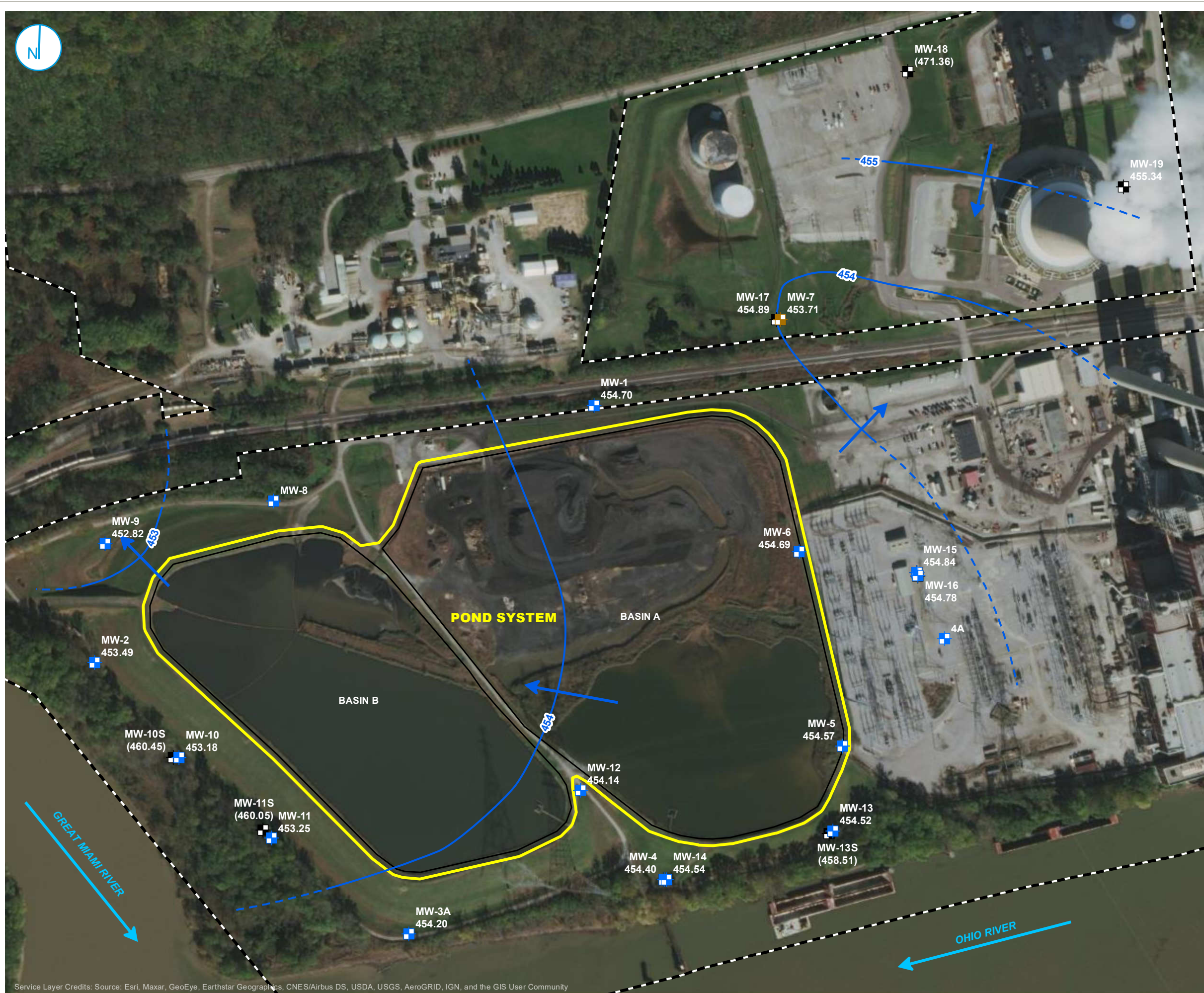
MONITORING WELL LOCATION MAP

2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
POND SYSTEM
MIAMI FORT POWER PLANT
NORTH BEND, OHIO

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- BACKGROUND WELL
- COMPLIANCE WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTE:
ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
NM = NOT MEASURED



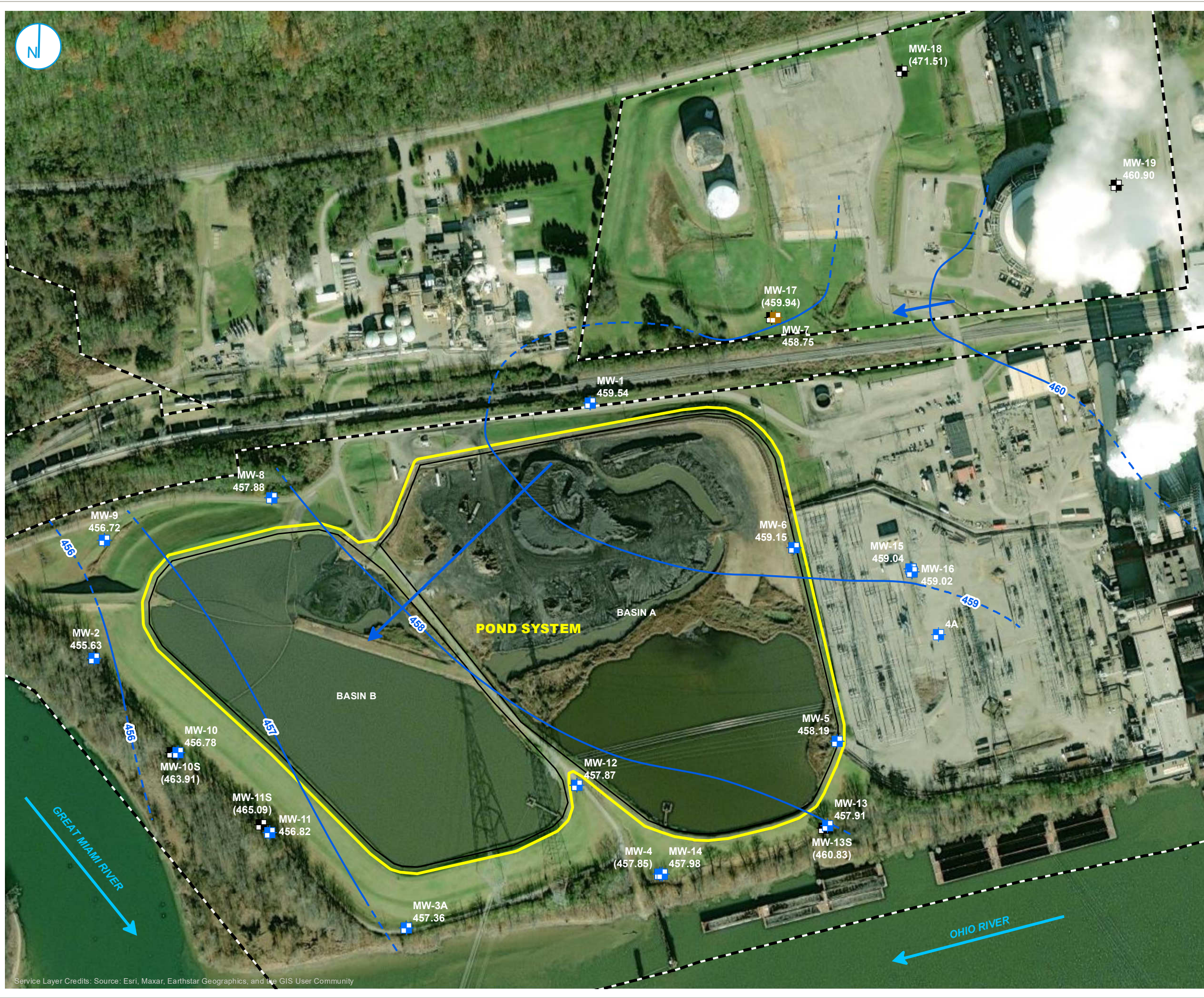
**POTENTIOMETRIC SURFACE MAP
SEPTEMBER 15, 2021**

**2022 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
POND SYSTEM
MIAMI FORT POWER PLANT
NORTH BEND, OHIO**

FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- BACKGROUND WELL
- COMPLIANCE WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTES:
 1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
 2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

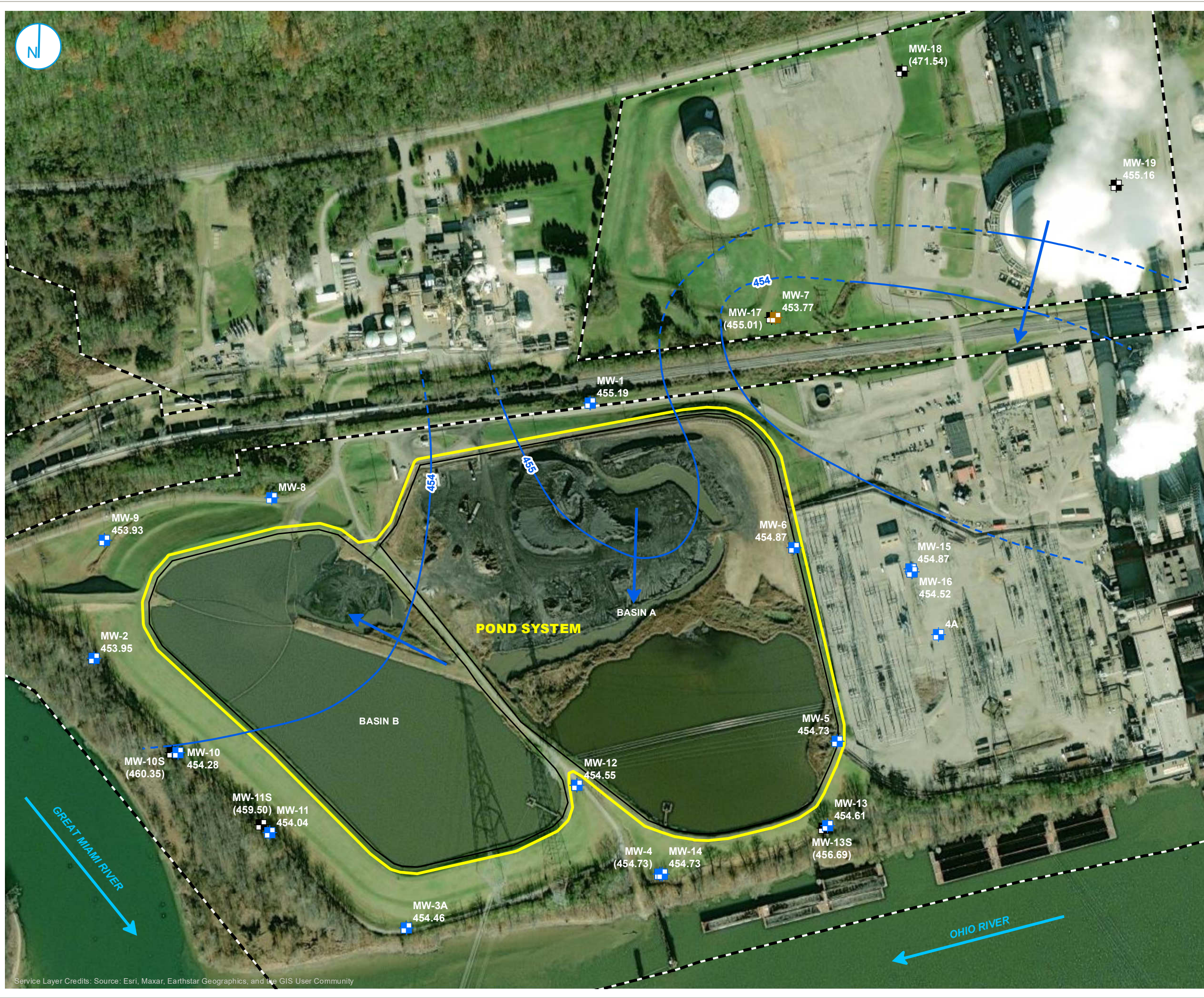


**POTENTIOMETRIC SURFACE MAP
 MARCH 23-24, 2022**

**2022 ANNUAL GROUNDWATER MONITORING
 AND CORRECTIVE ACTION REPORT
 POND SYSTEM
 MIAMI FORT POWER PLANT
 NORTH BEND, OHIO**

FIGURE 3





- COMPLIANCE WELL
- BACKGROUND WELL
- MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 40 C.F.R. § 257 REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- PROPERTY BOUNDARY

NOTES:
 1. ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
 2. ELEVATION CONTOURS SHOWN IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)



**POTENTIOMETRIC SURFACE MAP
 SEPTEMBER 21, 2022**

**2022 ANNUAL GROUNDWATER MONITORING
 AND CORRECTIVE ACTION REPORT
 POND SYSTEM
 MIAMI FORT POWER PLANT
 NORTH BEND, OHIO**

FIGURE 4



APPENDICES

**APPENDIX A
LABORATORY REPORTS**

October 04, 2021

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

S&ME - Nashville, TN

Sample Delivery Group: L1405085
Samples Received: 09/17/2021
Project Number: 7217-17-003D
Description: Miami Fort Station - North Bend, OH
Site: MIAMI (SITE 115)
Report To: Vince Epps
862 East Crescentville Road
Cincinnati, OH 45246

Entire Report Reviewed By:



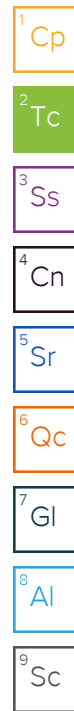
Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

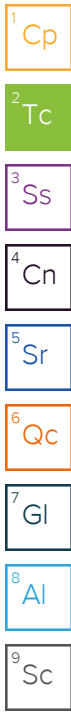
Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

MW-7 L1405085-01 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 11:45 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744744	1	09/22/21 15:46	09/22/21 19:46	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:51	09/23/21 17:51	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/24/21 21:16	09/24/21 21:16	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742874	1	09/23/21 15:56	09/24/21 12:08	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:17	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 09:38	JPD	Mt. Juliet, TN



MW-2 L1405085-02 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 18:35 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744744	1	09/22/21 15:46	09/22/21 19:46	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:24	09/23/21 17:24	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/24/21 21:32	09/24/21 21:32	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742874	1	09/23/21 15:56	09/24/21 12:10	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:20	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 09:41	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	1	09/22/21 18:42	09/23/21 01:38	JPD	Mt. Juliet, TN

MW-3A L1405085-03 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 13:10 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745396	1	09/23/21 14:37	09/23/21 15:43	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:27	09/23/21 17:27	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/24/21 21:49	09/24/21 21:49	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742874	1	09/23/21 15:56	09/24/21 12:12	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:23	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 09:45	JPD	Mt. Juliet, TN

MW-4 L1405085-04 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 09:45 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:30	09/23/21 17:30	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	20	09/24/21 22:22	09/24/21 22:22	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	5	09/24/21 22:05	09/24/21 22:05	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742874	1	09/23/21 15:56	09/24/21 12:14	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:26	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 09:48	JPD	Mt. Juliet, TN

MW-5 L1405085-05 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 10:45 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:33	09/23/21 17:33	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/24/21 22:38	09/24/21 22:38	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	5	09/24/21 23:29	09/24/21 23:29	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:06	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:30	LD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-5 L1405085-05 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 10:45 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1744451	100	09/23/21 08:33	09/24/21 10:00	JPD	Mt. Juliet, TN



MW-6 L1405085-06 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 11:45 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:37	09/23/21 17:37	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/24/21 23:45	09/24/21 23:45	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:08	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:33	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	10	09/23/21 08:33	09/24/21 10:03	JPD	Mt. Juliet, TN

MW-1 L1405085-07 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 15:40 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744745	1	09/22/21 15:44	09/22/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:40	09/23/21 17:40	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/25/21 00:17	09/25/21 00:17	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	5	09/25/21 00:34	09/25/21 00:34	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:10	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:36	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:06	JPD	Mt. Juliet, TN

MW-8 L1405085-08 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 16:50 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744745	1	09/22/21 15:44	09/22/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 17:58	09/23/21 17:58	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/25/21 00:50	09/25/21 00:50	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1747516	5	09/28/21 06:12	09/28/21 06:12	MCG	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:12	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:39	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:10	JPD	Mt. Juliet, TN

MW-9 L1405085-09 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 17:50 Received date/time 09/17/21 14:30

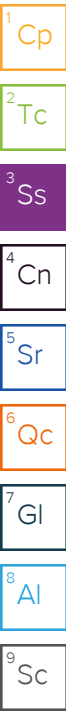
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744745	1	09/22/21 15:44	09/22/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:02	09/23/21 18:02	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/25/21 01:07	09/25/21 01:07	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	5	09/25/21 01:23	09/25/21 01:23	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:14	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:42	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	10	09/23/21 08:33	09/24/21 10:13	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-10 L1405085-10 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 19:35 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744745	1	09/22/21 15:44	09/22/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:05	09/23/21 18:05	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/25/21 01:39	09/25/21 01:39	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:31	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 18:55	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:16	JPD	Mt. Juliet, TN



MW-11 L1405085-11 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 13:35 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:08	09/23/21 18:08	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746186	1	09/25/21 02:29	09/25/21 02:29	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:33	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:05	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:19	JPD	Mt. Juliet, TN

MW-12 L1405085-12 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 12:25 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:12	09/23/21 18:12	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 17:18	09/25/21 17:18	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	5	09/25/21 17:34	09/25/21 17:34	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:35	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:09	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	10	09/23/21 08:33	09/24/21 10:22	JPD	Mt. Juliet, TN

MW-13 L1405085-13 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 11:20 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:15	09/23/21 18:15	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 17:51	09/25/21 17:51	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:37	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:12	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:26	JPD	Mt. Juliet, TN

MW-14 L1405085-14 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 10:30 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:18	09/23/21 18:18	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 18:24	09/25/21 18:24	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:39	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:15	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:29	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-15 L1405085-15 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 13:40 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744745	1	09/22/21 15:44	09/22/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:38	09/23/21 18:38	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 18:56	09/25/21 18:56	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	5	09/25/21 19:13	09/25/21 19:13	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:41	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:18	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 10:57	JPD	Mt. Juliet, TN



MW-16 L1405085-16 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 14:30 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744745	1	09/22/21 15:44	09/22/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:42	09/23/21 18:42	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 20:02	09/25/21 20:02	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	5	09/25/21 20:18	09/25/21 20:18	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:43	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:22	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 11:00	JPD	Mt. Juliet, TN

4A L1405085-17 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 08:35 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:45	09/23/21 18:45	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 20:35	09/25/21 20:35	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	5	09/25/21 20:51	09/25/21 20:51	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:51	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:25	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	10	09/23/21 08:33	09/24/21 11:03	JPD	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR_TOTAL L1405085-18 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 09:20 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745265	1	09/23/21 18:48	09/23/21 18:48	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	10	09/25/21 21:08	09/25/21 21:08	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	100	09/25/21 21:24	09/25/21 21:24	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:53	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:28	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	100	09/23/21 08:33	09/24/21 11:06	JPD	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR DISS L1405085-19 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 09:20 Received date/time 09/17/21 14:30

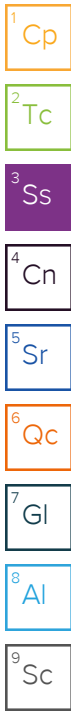
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1742884	1	09/21/21 09:47	09/21/21 16:10	BMF	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	1	09/22/21 18:42	09/23/21 01:48	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	100	09/22/21 18:42	09/23/21 21:36	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MFS_B1_SOURCE WATER CCR_TOTAL L1405085-20 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 09:40 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1745242	1	09/23/21 11:19	09/23/21 13:48	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745267	1	09/23/21 15:57	09/23/21 15:57	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 21:40	09/25/21 21:40	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	10	09/25/21 21:57	09/25/21 21:57	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 11:04	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 19:31	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	10	09/23/21 08:33	09/24/21 11:09	JPD	Mt. Juliet, TN



MFS_B1_SOURCE WATER CCR DISS L1405085-21 GW

Collected by Victoria Gallagher Collected date/time 09/16/21 09:40 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1742884	1	09/21/21 09:47	09/21/21 16:12	BMF	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	1	09/22/21 18:42	09/23/21 01:51	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744734	10	09/22/21 18:42	09/23/21 21:40	JPD	Mt. Juliet, TN

MW-17 L1405085-22 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 10:35 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744742	1	09/22/21 15:45	09/22/21 17:55	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745267	1	09/23/21 16:01	09/23/21 16:01	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 23:19	09/25/21 23:19	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 10:00	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/23/21 17:49	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744451	1	09/23/21 08:33	09/24/21 09:26	JPD	Mt. Juliet, TN

MW-19 L1405085-23 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 12:50 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744742	1	09/22/21 15:45	09/22/21 17:55	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745267	1	09/23/21 16:11	09/23/21 16:11	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/25/21 22:13	09/25/21 22:13	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 11:06	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744453	1	09/23/21 07:40	09/24/21 13:00	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744453	1	09/23/21 07:40	09/24/21 18:01	JPD	Mt. Juliet, TN

9152021B-DUP L1405085-24 GW

Collected by Victoria Gallagher Collected date/time 09/15/21 00:00 Received date/time 09/17/21 14:30

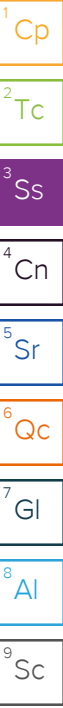
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744744	1	09/22/21 15:46	09/22/21 19:46	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745267	1	09/23/21 16:14	09/23/21 16:14	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/26/21 00:08	09/26/21 00:08	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 11:08	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744453	1	09/23/21 07:40	09/24/21 13:04	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744453	1	09/23/21 07:40	09/24/21 18:05	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

091521-A L1405085-25 GW

Collected by Victoria Gallagher
 Collected date/time 09/15/21 00:00
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1744744	1	09/22/21 15:46	09/22/21 19:46	VRP	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1745267	1	09/23/21 16:18	09/23/21 16:18	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1746190	1	09/26/21 00:41	09/26/21 00:41	ST	Mt. Juliet, TN
Mercury by Method 7470A	WG1742875	1	09/23/21 15:57	09/24/21 11:10	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744453	1	09/23/21 07:40	09/24/21 13:07	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1744453	1	09/23/21 07:40	09/24/21 18:08	JPD	Mt. Juliet, TN



MW-7 L1405085-26 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/15/21 11:45
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	10/01/21 20:48	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 20:48	RGT	Mt. Juliet, TN

MW-2 L1405085-27 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/15/21 18:35
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-3A L1405085-28 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 13:10
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-4 L1405085-29 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 09:45
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-5 L1405085-30 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 10:45
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-6 L1405085-31 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 11:45
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-1 L1405085-32 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/15/21 15:40
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-8 L1405085-33 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/15/21 16:50
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

MW-9 L1405085-34 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/15/21 17:50
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MW-10 L1405085-35 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/15/21 19:35
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-11 L1405085-36 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 13:35
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-12 L1405085-37 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 12:25
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743108	1	09/28/21 09:10	09/28/21 16:57	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743108	1	09/28/21 09:10	09/28/21 16:57	RGT	Mt. Juliet, TN

MW-13 L1405085-38 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/16/21 11:20
 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743109	1	09/28/21 14:38	09/29/21 14:28	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743109	1	09/28/21 14:38	09/29/21 14:28	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MFS_A1_SOURCE WATER CCR_TOTAL L1405085-39 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/16/21 09:20 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743109	1	09/28/21 14:38	09/29/21 14:28	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743109	1	09/28/21 14:38	09/29/21 14:28	RGT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

MFS_B1_SOURCE WATER CCR_TOTAL L1405085-40 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/16/21 09:40 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743109	1	09/28/21 14:38	09/29/21 14:28	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743109	1	09/28/21 14:38	09/29/21 14:28	RGT	Mt. Juliet, TN

⁴Cn

⁵Sr

⁶Qc

MW-17 L1405085-41 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/15/21 10:35 Received date/time 09/17/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method Calculation	WG1743109	1	09/28/21 14:38	09/29/21 14:28	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1743109	1	09/28/21 14:38	09/29/21 14:28	RGT	Mt. Juliet, TN

⁷Gl

⁸Al

⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	444000		10000	1	09/22/2021 19:46	WG1744744

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	345000		8450	20000	1	09/23/2021 17:51	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:51	WG1745265

Sample Narrative:

L1405085-01 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	3580	<u>B</u>	379	1000	1	09/24/2021 21:16	WG1746186
Fluoride	131	<u>J</u>	64.0	150	1	09/24/2021 21:16	WG1746186
Sulfate	35300		594	5000	1	09/24/2021 21:16	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 12:08	WG1742874

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:17	WG1744451
Arsenic	0.245	<u>J</u>	0.180	2.00	1	09/23/2021 18:17	WG1744451
Barium	85.1		0.381	2.00	1	09/23/2021 18:17	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:17	WG1744451
Boron	93.7		9.63	30.0	1	09/24/2021 09:38	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:17	WG1744451
Calcium	103000		93.6	1000	1	09/23/2021 18:17	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:17	WG1744451
Cobalt	0.112	<u>J</u>	0.0596	2.00	1	09/23/2021 18:17	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:17	WG1744451
Magnesium	31700		73.5	1000	1	09/23/2021 18:17	WG1744451
Molybdenum	0.846	<u>J</u>	0.348	5.00	1	09/23/2021 18:17	WG1744451
Potassium	1370	<u>J</u>	108	2000	1	09/23/2021 18:17	WG1744451
Selenium	0.739	<u>J</u>	0.300	2.00	1	09/23/2021 18:17	WG1744451
Sodium	5310		376	2000	1	09/23/2021 18:17	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:17	WG1744451
Lithium	4.56	<u>B</u>	0.695	2.00	1	09/23/2021 18:17	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	693000		13300	1	09/22/2021 19:46	WG1744744

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	608000		8450	20000	1	09/23/2021 17:24	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:24	WG1745265

Sample Narrative:

L1405085-02 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	32400		379	1000	1	09/24/2021 21:32	WG1746186
Fluoride	104	J	64.0	150	1	09/24/2021 21:32	WG1746186
Sulfate	35000		594	5000	1	09/24/2021 21:32	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 12:10	WG1742874

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:20	WG1744451
Arsenic	35.5		0.180	2.00	1	09/23/2021 18:20	WG1744451
Barium	500		0.381	2.00	1	09/23/2021 18:20	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:20	WG1744451
Boron	724		9.63	30.0	1	09/24/2021 09:41	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:20	WG1744451
Calcium	142000		93.6	1000	1	09/23/2021 18:20	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:20	WG1744451
Cobalt	1.10	J	0.0596	2.00	1	09/23/2021 18:20	WG1744451
Iron	53700		28.1	100	1	09/23/2021 18:20	WG1744451
Iron,Dissolved	U		28.1	100	1	09/23/2021 01:38	WG1744734
Lead	1.98	J	0.849	2.00	1	09/23/2021 18:20	WG1744451
Magnesium	65500		73.5	1000	1	09/23/2021 18:20	WG1744451
Molybdenum	0.608	J	0.348	5.00	1	09/23/2021 18:20	WG1744451
Potassium	995	J	108	2000	1	09/23/2021 18:20	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:20	WG1744451
Sodium	18300		376	2000	1	09/23/2021 18:20	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:20	WG1744451
Lithium	2.06	B	0.695	2.00	1	09/23/2021 18:20	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	243000		10000	1	09/23/2021 15:43	WG1745396

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	173000		8450	20000	1	09/23/2021 17:27	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:27	WG1745265

Sample Narrative:

L1405085-03 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

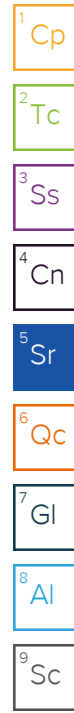
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23500		379	1000	1	09/24/2021 21:49	WG1746186
Fluoride	189		64.0	150	1	09/24/2021 21:49	WG1746186
Sulfate	13600		594	5000	1	09/24/2021 21:49	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 12:12	WG1742874

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:23	WG1744451
Arsenic	5.78		0.180	2.00	1	09/23/2021 18:23	WG1744451
Barium	107		0.381	2.00	1	09/23/2021 18:23	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:23	WG1744451
Boron	71.2		9.63	30.0	1	09/24/2021 09:45	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:23	WG1744451
Calcium	45600		93.6	1000	1	09/23/2021 18:23	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:23	WG1744451
Cobalt	0.125	J	0.0596	2.00	1	09/23/2021 18:23	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:23	WG1744451
Magnesium	12200		73.5	1000	1	09/23/2021 18:23	WG1744451
Molybdenum	1.50	J	0.348	5.00	1	09/23/2021 18:23	WG1744451
Potassium	2070		108	2000	1	09/23/2021 18:23	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:23	WG1744451
Sodium	20500		376	2000	1	09/23/2021 18:23	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:23	WG1744451
Lithium	1.95	B J	0.695	2.00	1	09/23/2021 18:23	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1750000		20000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	121000		8450	20000	1	09/23/2021 17:30	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:30	WG1745265

Sample Narrative:

L1405085-04 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	18900	<u>B</u>	1900	5000	5	09/24/2021 22:05	WG1746186
Fluoride	U		320	750	5	09/24/2021 22:05	WG1746186
Sulfate	1070000		11900	100000	20	09/24/2021 22:22	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 12:14	WG1742874

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:26	WG1744451
Arsenic	1.23	<u>J</u>	0.180	2.00	1	09/23/2021 18:26	WG1744451
Barium	22.1		0.381	2.00	1	09/23/2021 18:26	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:26	WG1744451
Boron	544		9.63	30.0	1	09/24/2021 09:48	WG1744451
Cadmium	0.686	<u>J</u>	0.150	1.00	1	09/23/2021 18:26	WG1744451
Calcium	306000		93.6	1000	1	09/23/2021 18:26	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:26	WG1744451
Cobalt	15.8		0.0596	2.00	1	09/23/2021 18:26	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:26	WG1744451
Magnesium	99100		73.5	1000	1	09/23/2021 18:26	WG1744451
Molybdenum	0.659	<u>J</u>	0.348	5.00	1	09/23/2021 18:26	WG1744451
Potassium	1020	<u>J</u>	108	2000	1	09/23/2021 18:26	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:26	WG1744451
Sodium	27000		376	2000	1	09/23/2021 18:26	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:26	WG1744451
Lithium	5.78	<u>B</u>	0.695	2.00	1	09/23/2021 18:26	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1520000		25000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	326000		8450	20000	1	09/23/2021 17:33	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:33	WG1745265

Sample Narrative:

L1405085-05 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

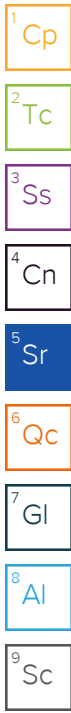
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	332000		1900	5000	5	09/24/2021 23:29	WG1746186
Fluoride	99.3	J	64.0	150	1	09/24/2021 22:38	WG1746186
Sulfate	318000		2970	25000	5	09/24/2021 23:29	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:06	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:30	WG1744451
Arsenic	0.597	J	0.180	2.00	1	09/23/2021 18:30	WG1744451
Barium	69.9		0.381	2.00	1	09/23/2021 18:30	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:30	WG1744451
Boron	15000		963	3000	100	09/24/2021 10:00	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:30	WG1744451
Calcium	294000		93.6	1000	1	09/23/2021 18:30	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:30	WG1744451
Cobalt	0.335	J	0.0596	2.00	1	09/23/2021 18:30	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:30	WG1744451
Magnesium	51700		73.5	1000	1	09/23/2021 18:30	WG1744451
Molybdenum	26.7		0.348	5.00	1	09/23/2021 18:30	WG1744451
Potassium	7270		108	2000	1	09/23/2021 18:30	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:30	WG1744451
Sodium	67300		376	2000	1	09/23/2021 18:30	WG1744451
Thallium	0.200	J	0.121	2.00	1	09/23/2021 18:30	WG1744451
Lithium	9.82		0.695	2.00	1	09/23/2021 18:30	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	513000		10000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	390000		8450	20000	1	09/23/2021 17:37	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:37	WG1745265

Sample Narrative:

L1405085-06 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

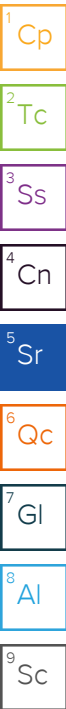
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	93400		379	1000	1	09/24/2021 23:45	WG1746186
Fluoride	817		64.0	150	1	09/24/2021 23:45	WG1746186
Sulfate	5250		594	5000	1	09/24/2021 23:45	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:08	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:33	WG1744451
Arsenic	12.6		0.180	2.00	1	09/23/2021 18:33	WG1744451
Barium	711		0.381	2.00	1	09/23/2021 18:33	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:33	WG1744451
Boron	1110		96.3	300	10	09/24/2021 10:03	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:33	WG1744451
Calcium	52600		93.6	1000	1	09/23/2021 18:33	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:33	WG1744451
Cobalt	2.94		0.0596	2.00	1	09/23/2021 18:33	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:33	WG1744451
Magnesium	68500		73.5	1000	1	09/23/2021 18:33	WG1744451
Molybdenum	249		0.348	5.00	1	09/23/2021 18:33	WG1744451
Potassium	4170		108	2000	1	09/23/2021 18:33	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:33	WG1744451
Sodium	47400		376	2000	1	09/23/2021 18:33	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:33	WG1744451
Lithium	8.99		0.695	2.00	1	09/23/2021 18:33	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	735000		13300	1	09/22/2021 21:08	WG1744745

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	199000		8450	20000	1	09/23/2021 17:40	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:40	WG1745265

Sample Narrative:

L1405085-07 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

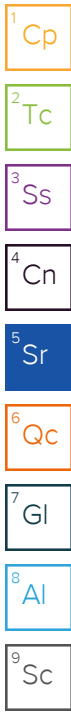
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	38800		379	1000	1	09/25/2021 00:17	WG1746186
Fluoride	387		64.0	150	1	09/25/2021 00:17	WG1746186
Sulfate	273000		2970	25000	5	09/25/2021 00:34	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:10	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:36	WG1744451
Arsenic	0.310	J	0.180	2.00	1	09/23/2021 18:36	WG1744451
Barium	39.4		0.381	2.00	1	09/23/2021 18:36	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:36	WG1744451
Boron	654		9.63	30.0	1	09/24/2021 10:06	WG1744451
Cadmium	0.171	J	0.150	1.00	1	09/23/2021 18:36	WG1744451
Calcium	146000		93.6	1000	1	09/23/2021 18:36	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:36	WG1744451
Cobalt	0.125	J	0.0596	2.00	1	09/23/2021 18:36	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:36	WG1744451
Magnesium	28200		73.5	1000	1	09/23/2021 18:36	WG1744451
Molybdenum	46.6		0.348	5.00	1	09/23/2021 18:36	WG1744451
Potassium	7930		108	2000	1	09/23/2021 18:36	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:36	WG1744451
Sodium	32200		376	2000	1	09/23/2021 18:36	WG1744451
Thallium	0.206	J	0.121	2.00	1	09/23/2021 18:36	WG1744451
Lithium	39.2		0.695	2.00	1	09/23/2021 18:36	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	651000		10000	1	09/22/2021 21:08	WG1744745

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	207000		8450	20000	1	09/23/2021 17:58	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 17:58	WG1745265

Sample Narrative:

L1405085-08 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	44200		379	1000	1	09/25/2021 00:50	WG1746186
Fluoride	255		64.0	150	1	09/25/2021 00:50	WG1746186
Sulfate	265000		2970	25000	5	09/28/2021 06:12	WG1747516

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:12	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:39	WG1744451
Arsenic	0.650	J	0.180	2.00	1	09/23/2021 18:39	WG1744451
Barium	46.3		0.381	2.00	1	09/23/2021 18:39	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:39	WG1744451
Boron	731		9.63	30.0	1	09/24/2021 10:10	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:39	WG1744451
Calcium	118000		93.6	1000	1	09/23/2021 18:39	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:39	WG1744451
Cobalt	0.440	J	0.0596	2.00	1	09/23/2021 18:39	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:39	WG1744451
Magnesium	31900		73.5	1000	1	09/23/2021 18:39	WG1744451
Molybdenum	7.76		0.348	5.00	1	09/23/2021 18:39	WG1744451
Potassium	5700		108	2000	1	09/23/2021 18:39	WG1744451
Selenium	0.405	J	0.300	2.00	1	09/23/2021 18:39	WG1744451
Sodium	32900		376	2000	1	09/23/2021 18:39	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:39	WG1744451
Lithium	13.0		0.695	2.00	1	09/23/2021 18:39	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1020000		20000	1	09/22/2021 21:08	WG1744745

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	193000		8450	20000	1	09/23/2021 18:02	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:02	WG1745265

Sample Narrative:

L1405085-09 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

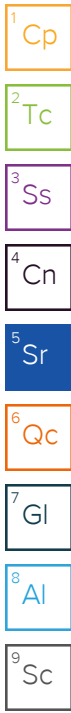
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	99200		379	1000	1	09/25/2021 01:07	WG1746186
Fluoride	378		64.0	150	1	09/25/2021 01:07	WG1746186
Sulfate	430000		2970	25000	5	09/25/2021 01:23	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:14	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:42	WG1744451
Arsenic	0.489	J	0.180	2.00	1	09/23/2021 18:42	WG1744451
Barium	106		0.381	2.00	1	09/23/2021 18:42	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:42	WG1744451
Boron	4010		96.3	300	10	09/24/2021 10:13	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:42	WG1744451
Calcium	187000		93.6	1000	1	09/23/2021 18:42	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:42	WG1744451
Cobalt	0.326	J	0.0596	2.00	1	09/23/2021 18:42	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:42	WG1744451
Magnesium	46100		73.5	1000	1	09/23/2021 18:42	WG1744451
Molybdenum	68.7		0.348	5.00	1	09/23/2021 18:42	WG1744451
Potassium	7870		108	2000	1	09/23/2021 18:42	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:42	WG1744451
Sodium	41600		376	2000	1	09/23/2021 18:42	WG1744451
Thallium	0.172	J	0.121	2.00	1	09/23/2021 18:42	WG1744451
Lithium	13.8		0.695	2.00	1	09/23/2021 18:42	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	301000		10000	1	09/22/2021 21:08	WG1744745

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	216000		8450	20000	1	09/23/2021 18:05	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:05	WG1745265

Sample Narrative:

L1405085-10 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	34900		379	1000	1	09/25/2021 01:39	WG1746186
Fluoride	243		64.0	150	1	09/25/2021 01:39	WG1746186
Sulfate	18100		594	5000	1	09/25/2021 01:39	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:31	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 18:55	WG1744451
Arsenic	23.0		0.180	2.00	1	09/23/2021 18:55	WG1744451
Barium	154		0.381	2.00	1	09/23/2021 18:55	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 18:55	WG1744451
Boron	74.2		9.63	30.0	1	09/24/2021 10:16	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 18:55	WG1744451
Calcium	54700		93.6	1000	1	09/23/2021 18:55	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 18:55	WG1744451
Cobalt	0.170	J	0.0596	2.00	1	09/23/2021 18:55	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 18:55	WG1744451
Magnesium	21100		73.5	1000	1	09/23/2021 18:55	WG1744451
Molybdenum	4.74	J	0.348	5.00	1	09/23/2021 18:55	WG1744451
Potassium	3610		108	2000	1	09/23/2021 18:55	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 18:55	WG1744451
Sodium	25300		376	2000	1	09/23/2021 18:55	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 18:55	WG1744451
Lithium	2.56	B	0.695	2.00	1	09/23/2021 18:55	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	295000		10000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	194000		8450	20000	1	09/23/2021 18:08	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:08	WG1745265

Sample Narrative:

L1405085-11 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

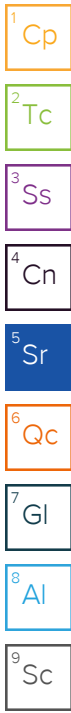
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	34300		379	1000	1	09/25/2021 02:29	WG1746186
Fluoride	199		64.0	150	1	09/25/2021 02:29	WG1746186
Sulfate	33000		594	5000	1	09/25/2021 02:29	WG1746186

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:33	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 19:05	WG1744451
Arsenic	20.5		0.180	2.00	1	09/23/2021 19:05	WG1744451
Barium	257		0.381	2.00	1	09/23/2021 19:05	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:05	WG1744451
Boron	72.4		9.63	30.0	1	09/24/2021 10:19	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 19:05	WG1744451
Calcium	54700		93.6	1000	1	09/23/2021 19:05	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:05	WG1744451
Cobalt	0.767	J	0.0596	2.00	1	09/23/2021 19:05	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 19:05	WG1744451
Magnesium	17100		73.5	1000	1	09/23/2021 19:05	WG1744451
Molybdenum	4.64	J	0.348	5.00	1	09/23/2021 19:05	WG1744451
Potassium	3300		108	2000	1	09/23/2021 19:05	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:05	WG1744451
Sodium	24900		376	2000	1	09/23/2021 19:05	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 19:05	WG1744451
Lithium	3.68	B	0.695	2.00	1	09/23/2021 19:05	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	920000	<u>J3</u>	20000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	62600		8450	20000	1	09/23/2021 18:12	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:12	WG1745265

Sample Narrative:

L1405085-12 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	183000		1900	5000	5	09/25/2021 17:34	WG1746190
Fluoride	96.4	<u>J</u>	64.0	150	1	09/25/2021 17:18	WG1746190
Sulfate	U		594	5000	1	09/25/2021 17:18	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	0.923		0.100	0.200	1	09/24/2021 10:35	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 19:09	WG1744451
Arsenic	0.280	<u>J</u>	0.180	2.00	1	09/23/2021 19:09	WG1744451
Barium	15.3		0.381	2.00	1	09/23/2021 19:09	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:09	WG1744451
Boron	6410		96.3	300	10	09/24/2021 10:22	WG1744451
Cadmium	1.34		0.150	1.00	1	09/23/2021 19:09	WG1744451
Calcium	165000		93.6	1000	1	09/23/2021 19:09	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:09	WG1744451
Cobalt	2.90		0.0596	2.00	1	09/23/2021 19:09	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 19:09	WG1744451
Magnesium	56300		73.5	1000	1	09/23/2021 19:09	WG1744451
Molybdenum	U		0.348	5.00	1	09/23/2021 19:09	WG1744451
Potassium	683	<u>J</u>	108	2000	1	09/23/2021 19:09	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:09	WG1744451
Sodium	45900		376	2000	1	09/23/2021 19:09	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 19:09	WG1744451
Lithium	3.92	<u>B</u>	0.695	2.00	1	09/23/2021 19:09	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	244000		10000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	120000		8450	20000	1	09/23/2021 18:15	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:15	WG1745265

Sample Narrative:

L1405085-13 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26800		379	1000	1	09/25/2021 17:51	WG1746190
Fluoride	194		64.0	150	1	09/25/2021 17:51	WG1746190
Sulfate	49000		594	5000	1	09/25/2021 17:51	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:37	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 19:12	WG1744451
Arsenic	14.3		0.180	2.00	1	09/23/2021 19:12	WG1744451
Barium	163		0.381	2.00	1	09/23/2021 19:12	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:12	WG1744451
Boron	70.1		9.63	30.0	1	09/24/2021 10:26	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 19:12	WG1744451
Calcium	40700		93.6	1000	1	09/23/2021 19:12	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:12	WG1744451
Cobalt	0.245	J	0.0596	2.00	1	09/23/2021 19:12	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 19:12	WG1744451
Magnesium	11900		73.5	1000	1	09/23/2021 19:12	WG1744451
Molybdenum	12.4		0.348	5.00	1	09/23/2021 19:12	WG1744451
Potassium	2400		108	2000	1	09/23/2021 19:12	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:12	WG1744451
Sodium	23100		376	2000	1	09/23/2021 19:12	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 19:12	WG1744451
Lithium	5.49	B	0.695	2.00	1	09/23/2021 19:12	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	222000		10000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	130000		8450	20000	1	09/23/2021 18:18	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:18	WG1745265

Sample Narrative:

L1405085-14 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

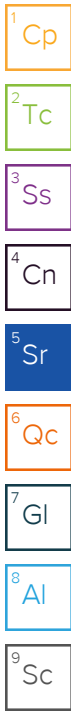
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	24200		379	1000	1	09/25/2021 18:24	WG1746190
Fluoride	153		64.0	150	1	09/25/2021 18:24	WG1746190
Sulfate	47700		594	5000	1	09/25/2021 18:24	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:39	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	1.29	J	1.03	4.00	1	09/23/2021 19:15	WG1744451
Arsenic	0.942	J	0.180	2.00	1	09/23/2021 19:15	WG1744451
Barium	41.3		0.381	2.00	1	09/23/2021 19:15	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:15	WG1744451
Boron	76.1		9.63	30.0	1	09/24/2021 10:29	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 19:15	WG1744451
Calcium	41300		93.6	1000	1	09/23/2021 19:15	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:15	WG1744451
Cobalt	0.536	J	0.0596	2.00	1	09/23/2021 19:15	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 19:15	WG1744451
Magnesium	11400		73.5	1000	1	09/23/2021 19:15	WG1744451
Molybdenum	6.24		0.348	5.00	1	09/23/2021 19:15	WG1744451
Potassium	2540		108	2000	1	09/23/2021 19:15	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:15	WG1744451
Sodium	24000		376	2000	1	09/23/2021 19:15	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 19:15	WG1744451
Lithium	4.39	B	0.695	2.00	1	09/23/2021 19:15	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Dissolved Solids	687000		13300	1	09/22/2021 21:08	WG1744745

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Alkalinity,Bicarbonate	320000		8450	20000	1	09/23/2021 18:38	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:38	WG1745265

Sample Narrative:

L1405085-15 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

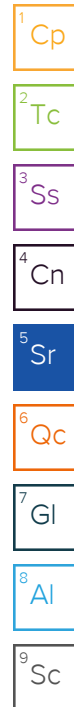
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Chloride	149000		1900	5000	5	09/25/2021 19:13	WG1746190
Fluoride	241		64.0	150	1	09/25/2021 18:56	WG1746190
Sulfate	82400		594	5000	1	09/25/2021 18:56	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Mercury	U		0.100	0.200	1	09/24/2021 10:41	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Antimony	U		1.03	4.00	1	09/23/2021 19:18	WG1744451
Arsenic	3.42		0.180	2.00	1	09/23/2021 19:18	WG1744451
Barium	83.7		0.381	2.00	1	09/23/2021 19:18	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:18	WG1744451
Boron	333		9.63	30.0	1	09/24/2021 10:57	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 19:18	WG1744451
Calcium	123000		93.6	1000	1	09/23/2021 19:18	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:18	WG1744451
Cobalt	4.05		0.0596	2.00	1	09/23/2021 19:18	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 19:18	WG1744451
Magnesium	35400		73.5	1000	1	09/23/2021 19:18	WG1744451
Molybdenum	31.4		0.348	5.00	1	09/23/2021 19:18	WG1744451
Potassium	3180		108	2000	1	09/23/2021 19:18	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:18	WG1744451
Sodium	63200		376	2000	1	09/23/2021 19:18	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 19:18	WG1744451
Lithium	7.70		0.695	2.00	1	09/23/2021 19:18	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	932000		20000	1	09/22/2021 21:08	WG1744745

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	446000		8450	20000	1	09/23/2021 18:42	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:42	WG1745265

Sample Narrative:

L1405085-16 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	131000		1900	5000	5	09/25/2021 20:18	WG1746190
Fluoride	125	J	64.0	150	1	09/25/2021 20:02	WG1746190
Sulfate	98200		594	5000	1	09/25/2021 20:02	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:43	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 19:22	WG1744451
Arsenic	0.642	J	0.180	2.00	1	09/23/2021 19:22	WG1744451
Barium	84.9		0.381	2.00	1	09/23/2021 19:22	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:22	WG1744451
Boron	89.6		9.63	30.0	1	09/24/2021 11:00	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 19:22	WG1744451
Calcium	180000		93.6	1000	1	09/23/2021 19:22	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:22	WG1744451
Cobalt	3.76		0.0596	2.00	1	09/23/2021 19:22	WG1744451
Lead	0.857	J	0.849	2.00	1	09/23/2021 19:22	WG1744451
Magnesium	60700		73.5	1000	1	09/23/2021 19:22	WG1744451
Molybdenum	1.14	J	0.348	5.00	1	09/23/2021 19:22	WG1744451
Potassium	5120		108	2000	1	09/23/2021 19:22	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:22	WG1744451
Sodium	54400		376	2000	1	09/23/2021 19:22	WG1744451
Thallium	0.169	J	0.121	2.00	1	09/23/2021 19:22	WG1744451
Lithium	13.0		0.695	2.00	1	09/23/2021 19:22	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1040000	<u>J3</u>	20000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	293000		8450	20000	1	09/23/2021 18:45	WG1745265
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 18:45	WG1745265

Sample Narrative:

L1405085-17 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	125000		1900	5000	5	09/25/2021 20:51	WG1746190
Fluoride	177		64.0	150	1	09/25/2021 20:35	WG1746190
Sulfate	286000		2970	25000	5	09/25/2021 20:51	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:51	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 19:25	WG1744451
Arsenic	9.43		0.180	2.00	1	09/23/2021 19:25	WG1744451
Barium	125		0.381	2.00	1	09/23/2021 19:25	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:25	WG1744451
Boron	4070		96.3	300	10	09/24/2021 11:03	WG1744451
Cadmium	0.287	<u>J</u>	0.150	1.00	1	09/23/2021 19:25	WG1744451
Calcium	169000		93.6	1000	1	09/23/2021 19:25	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 19:25	WG1744451
Cobalt	9.28		0.0596	2.00	1	09/23/2021 19:25	WG1744451
Lead	5.34		0.849	2.00	1	09/23/2021 19:25	WG1744451
Magnesium	79500		73.5	1000	1	09/23/2021 19:25	WG1744451
Molybdenum	19.3		0.348	5.00	1	09/23/2021 19:25	WG1744451
Potassium	4240		108	2000	1	09/23/2021 19:25	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 19:25	WG1744451
Sodium	44000		376	2000	1	09/23/2021 19:25	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 19:25	WG1744451
Lithium	8.59		0.695	2.00	1	09/23/2021 19:25	WG1744451

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	10900000		200000	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	81400		8450	20000	1	09/23/2021 18:48	WG1745265
Alkalinity,Carbonate	269000		8450	20000	1	09/23/2021 18:48	WG1745265

Sample Narrative:

L1405085-18 WG1745265: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

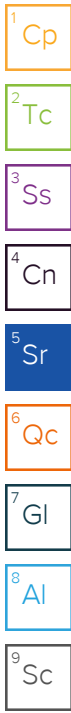
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	3500000		37900	100000	100	09/25/2021 21:24	WG1746190
Fluoride	5390		640	1500	10	09/25/2021 21:08	WG1746190
Sulfate	3940000		59400	500000	100	09/25/2021 21:24	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:53	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	1.29	J	1.03	4.00	1	09/23/2021 19:28	WG1744451
Arsenic	4.50		0.180	2.00	1	09/23/2021 19:28	WG1744451
Barium	110		0.381	2.00	1	09/23/2021 19:28	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:28	WG1744451
Boron	117000		963	3000	100	09/24/2021 11:06	WG1744451
Cadmium	0.217	J	0.150	1.00	1	09/23/2021 19:28	WG1744451
Calcium	482000		93.6	1000	1	09/23/2021 19:28	WG1744451
Chromium	5.28		1.24	2.00	1	09/23/2021 19:28	WG1744451
Cobalt	2.87		0.0596	2.00	1	09/23/2021 19:28	WG1744451
Lead	1.55	J	0.849	2.00	1	09/23/2021 19:28	WG1744451
Magnesium	1830000		7350	100000	100	09/24/2021 11:06	WG1744451
Molybdenum	45.2		0.348	5.00	1	09/23/2021 19:28	WG1744451
Potassium	31600		108	2000	1	09/23/2021 19:28	WG1744451
Selenium	194		0.300	2.00	1	09/23/2021 19:28	WG1744451
Sodium	154000		376	2000	1	09/23/2021 19:28	WG1744451
Thallium	4.82		0.121	2.00	1	09/23/2021 19:28	WG1744451
Lithium	226		0.695	2.00	1	09/23/2021 19:28	WG1744451



Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	09/21/2021 16:10	WG1742884

¹ Cp

² Tc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	1.22	J	1.03	4.00	1	09/23/2021 01:48	WG1744734
Arsenic,Dissolved	2.85		0.180	2.00	1	09/23/2021 01:48	WG1744734
Barium,Dissolved	88.1		0.381	2.00	1	09/23/2021 01:48	WG1744734
Beryllium,Dissolved	U		0.190	2.00	1	09/23/2021 01:48	WG1744734
Boron,Dissolved	115000		963	3000	100	09/23/2021 21:36	WG1744734
Cadmium,Dissolved	U		0.150	1.00	1	09/23/2021 01:48	WG1744734
Calcium,Dissolved	469000		93.6	1000	1	09/23/2021 01:48	WG1744734
Chromium,Dissolved	4.61		1.24	2.00	1	09/23/2021 01:48	WG1744734
Cobalt,Dissolved	1.76	J	0.0596	2.00	1	09/23/2021 01:48	WG1744734
Lead,Dissolved	U		0.849	2.00	1	09/23/2021 01:48	WG1744734
Magnesium,Dissolved	1780000		7350	100000	100	09/23/2021 21:36	WG1744734
Molybdenum,Dissolved	47.0		0.348	5.00	1	09/23/2021 01:48	WG1744734
Potassium,Dissolved	30500		108	2000	1	09/23/2021 01:48	WG1744734
Selenium,Dissolved	188		0.300	2.00	1	09/23/2021 01:48	WG1744734
Sodium,Dissolved	154000		376	2000	1	09/23/2021 01:48	WG1744734
Thallium,Dissolved	4.35		0.121	2.00	1	09/23/2021 01:48	WG1744734
Lithium,Dissolved	225		0.695	2.00	1	09/23/2021 01:48	WG1744734

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	823000		13300	1	09/23/2021 13:48	WG1745242

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	111000		8450	20000	1	09/23/2021 15:57	WG1745267
Alkalinity,Carbonate	27400		8450	20000	1	09/23/2021 15:57	WG1745267

Sample Narrative:

L1405085-20 WG1745267: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

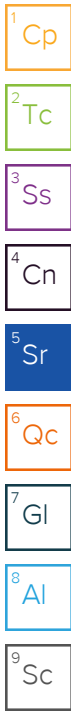
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	152000		3790	10000	10	09/25/2021 21:57	WG1746190
Fluoride	447		64.0	150	1	09/25/2021 21:40	WG1746190
Sulfate	259000		5940	50000	10	09/25/2021 21:57	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 11:04	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 19:31	WG1744451
Arsenic	9.61		0.180	2.00	1	09/23/2021 19:31	WG1744451
Barium	98.9		0.381	2.00	1	09/23/2021 19:31	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 19:31	WG1744451
Boron	4180		96.3	300	10	09/24/2021 11:09	WG1744451
Cadmium	0.329	J	0.150	1.00	1	09/23/2021 19:31	WG1744451
Calcium	80800		93.6	1000	1	09/23/2021 19:31	WG1744451
Chromium	2.48		1.24	2.00	1	09/23/2021 19:31	WG1744451
Cobalt	0.568	J	0.0596	2.00	1	09/23/2021 19:31	WG1744451
Lead	1.03	J	0.849	2.00	1	09/23/2021 19:31	WG1744451
Magnesium	80400		73.5	1000	1	09/23/2021 19:31	WG1744451
Molybdenum	17.7		0.348	5.00	1	09/23/2021 19:31	WG1744451
Potassium	6320		108	2000	1	09/23/2021 19:31	WG1744451
Selenium	8.02		0.300	2.00	1	09/23/2021 19:31	WG1744451
Sodium	43300		376	2000	1	09/23/2021 19:31	WG1744451
Thallium	0.918	J	0.121	2.00	1	09/23/2021 19:31	WG1744451
Lithium	23.0		0.695	2.00	1	09/23/2021 19:31	WG1744451



Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	09/21/2021 16:12	WG1742884

1 Cp

2 Tc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	09/23/2021 01:51	WG1744734
Arsenic,Dissolved	8.77		0.180	2.00	1	09/23/2021 01:51	WG1744734
Barium,Dissolved	89.2		0.381	2.00	1	09/23/2021 01:51	WG1744734
Beryllium,Dissolved	U		0.190	2.00	1	09/23/2021 01:51	WG1744734
Boron,Dissolved	3840		96.3	300	10	09/23/2021 21:40	WG1744734
Cadmium,Dissolved	0.189	J	0.150	1.00	1	09/23/2021 01:51	WG1744734
Calcium,Dissolved	76900		93.6	1000	1	09/23/2021 01:51	WG1744734
Chromium,Dissolved	1.69	J	1.24	2.00	1	09/23/2021 01:51	WG1744734
Cobalt,Dissolved	0.174	J	0.0596	2.00	1	09/23/2021 01:51	WG1744734
Lead,Dissolved	U		0.849	2.00	1	09/23/2021 01:51	WG1744734
Magnesium,Dissolved	80200		73.5	1000	1	09/23/2021 01:51	WG1744734
Molybdenum,Dissolved	18.3		0.348	5.00	1	09/23/2021 01:51	WG1744734
Potassium,Dissolved	6000		108	2000	1	09/23/2021 01:51	WG1744734
Selenium,Dissolved	7.82		0.300	2.00	1	09/23/2021 01:51	WG1744734
Sodium,Dissolved	41500		376	2000	1	09/23/2021 01:51	WG1744734
Thallium,Dissolved	0.822	J	0.121	2.00	1	09/23/2021 01:51	WG1744734
Lithium,Dissolved	22.5		0.695	2.00	1	09/23/2021 01:51	WG1744734

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	586000		10000	1	09/22/2021 17:55	WG1744742

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	392000		8450	20000	1	09/23/2021 16:01	WG1745267
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 16:01	WG1745267

Sample Narrative:

L1405085-22 WG1745267: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

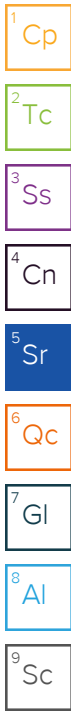
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	76200		379	1000	1	09/25/2021 23:19	WG1746190
Fluoride	190		64.0	150	1	09/25/2021 23:19	WG1746190
Sulfate	67500		594	5000	1	09/25/2021 23:19	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 10:00	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/23/2021 17:49	WG1744451
Arsenic	0.556	J	0.180	2.00	1	09/23/2021 17:49	WG1744451
Barium	48.8		0.381	2.00	1	09/23/2021 17:49	WG1744451
Beryllium	U		0.190	2.00	1	09/23/2021 17:49	WG1744451
Boron	53.0		9.63	30.0	1	09/24/2021 09:26	WG1744451
Cadmium	U		0.150	1.00	1	09/23/2021 17:49	WG1744451
Calcium	125000		93.6	1000	1	09/23/2021 17:49	WG1744451
Chromium	U		1.24	2.00	1	09/23/2021 17:49	WG1744451
Cobalt	1.40	J	0.0596	2.00	1	09/23/2021 17:49	WG1744451
Lead	U		0.849	2.00	1	09/23/2021 17:49	WG1744451
Magnesium	42600	V	73.5	1000	1	09/23/2021 17:49	WG1744451
Molybdenum	3.42	J	0.348	5.00	1	09/23/2021 17:49	WG1744451
Potassium	1600	J	108	2000	1	09/23/2021 17:49	WG1744451
Selenium	U		0.300	2.00	1	09/23/2021 17:49	WG1744451
Sodium	25500		376	2000	1	09/23/2021 17:49	WG1744451
Thallium	U		0.121	2.00	1	09/23/2021 17:49	WG1744451
Lithium	11.8		0.695	2.00	1	09/23/2021 17:49	WG1744451



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	578000		10000	1	09/22/2021 17:55	WG1744742

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	473000		8450	20000	1	09/23/2021 16:11	WG1745267
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 16:11	WG1745267

Sample Narrative:

L1405085-23 WG1745267: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	22500		379	1000	1	09/25/2021 22:13	WG1746190
Fluoride	123	J	64.0	150	1	09/25/2021 22:13	WG1746190
Sulfate	40500		594	5000	1	09/25/2021 22:13	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 11:06	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/24/2021 13:00	WG1744453
Arsenic	1.03	J	0.180	2.00	1	09/24/2021 13:00	WG1744453
Barium	137		0.381	2.00	1	09/24/2021 13:00	WG1744453
Beryllium	U		0.190	2.00	1	09/24/2021 13:00	WG1744453
Boron	106		9.63	30.0	1	09/24/2021 18:01	WG1744453
Cadmium	U		0.150	1.00	1	09/24/2021 13:00	WG1744453
Calcium	136000		93.6	1000	1	09/24/2021 13:00	WG1744453
Chromium	U		1.24	2.00	1	09/24/2021 13:00	WG1744453
Cobalt	4.35		0.0596	2.00	1	09/24/2021 13:00	WG1744453
Lead	1.14	J	0.849	2.00	1	09/24/2021 13:00	WG1744453
Magnesium	42800		73.5	1000	1	09/24/2021 13:00	WG1744453
Molybdenum	2.87	J	0.348	5.00	1	09/24/2021 13:00	WG1744453
Potassium	1840	J	108	2000	1	09/24/2021 13:00	WG1744453
Selenium	1.07	J	0.300	2.00	1	09/24/2021 18:01	WG1744453
Sodium	15300		376	2000	1	09/24/2021 13:00	WG1744453
Thallium	U		0.121	2.00	1	09/24/2021 13:00	WG1744453
Lithium	7.64	B	0.695	2.00	1	09/24/2021 13:00	WG1744453

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	576000		10000	1	09/22/2021 19:46	WG1744744

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	472000		8450	20000	1	09/23/2021 16:14	WG1745267
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 16:14	WG1745267

Sample Narrative:

L1405085-24 WG1745267: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	22800		379	1000	1	09/26/2021 00:08	WG1746190
Fluoride	125	J	64.0	150	1	09/26/2021 00:08	WG1746190
Sulfate	40900		594	5000	1	09/26/2021 00:08	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 11:08	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/24/2021 13:04	WG1744453
Arsenic	0.657	J	0.180	2.00	1	09/24/2021 13:04	WG1744453
Barium	133		0.381	2.00	1	09/24/2021 13:04	WG1744453
Beryllium	U		0.190	2.00	1	09/24/2021 13:04	WG1744453
Boron	104		9.63	30.0	1	09/24/2021 18:05	WG1744453
Cadmium	U		0.150	1.00	1	09/24/2021 13:04	WG1744453
Calcium	137000		93.6	1000	1	09/24/2021 13:04	WG1744453
Chromium	U		1.24	2.00	1	09/24/2021 13:04	WG1744453
Cobalt	2.99		0.0596	2.00	1	09/24/2021 13:04	WG1744453
Lead	U		0.849	2.00	1	09/24/2021 13:04	WG1744453
Magnesium	43100		73.5	1000	1	09/24/2021 13:04	WG1744453
Molybdenum	2.70	J	0.348	5.00	1	09/24/2021 13:04	WG1744453
Potassium	1790	J	108	2000	1	09/24/2021 13:04	WG1744453
Selenium	0.943	J	0.300	2.00	1	09/24/2021 18:05	WG1744453
Sodium	15400		376	2000	1	09/24/2021 13:04	WG1744453
Thallium	U		0.121	2.00	1	09/24/2021 13:04	WG1744453
Lithium	7.51	B	0.695	2.00	1	09/24/2021 13:04	WG1744453



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	591000		13300	1	09/22/2021 19:46	WG1744744

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	382000		8450	20000	1	09/23/2021 16:18	WG1745267
Alkalinity,Carbonate	U		8450	20000	1	09/23/2021 16:18	WG1745267

Sample Narrative:

L1405085-25 WG1745267: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	76200		379	1000	1	09/26/2021 00:41	WG1746190
Fluoride	191		64.0	150	1	09/26/2021 00:41	WG1746190
Sulfate	66400		594	5000	1	09/26/2021 00:41	WG1746190

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	09/24/2021 11:10	WG1742875

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	09/24/2021 13:07	WG1744453
Arsenic	0.475	J	0.180	2.00	1	09/24/2021 13:07	WG1744453
Barium	45.4		0.381	2.00	1	09/24/2021 13:07	WG1744453
Beryllium	U		0.190	2.00	1	09/24/2021 13:07	WG1744453
Boron	48.1		9.63	30.0	1	09/24/2021 18:08	WG1744453
Cadmium	U		0.150	1.00	1	09/24/2021 13:07	WG1744453
Calcium	126000		93.6	1000	1	09/24/2021 13:07	WG1744453
Chromium	5.08		1.24	2.00	1	09/24/2021 13:07	WG1744453
Cobalt	1.41	J	0.0596	2.00	1	09/24/2021 13:07	WG1744453
Lead	1.10	J	0.849	2.00	1	09/24/2021 13:07	WG1744453
Magnesium	43200		73.5	1000	1	09/24/2021 13:07	WG1744453
Molybdenum	3.99	J	0.348	5.00	1	09/24/2021 13:07	WG1744453
Potassium	1590	J	108	2000	1	09/24/2021 13:07	WG1744453
Selenium	U		0.300	2.00	1	09/24/2021 18:08	WG1744453
Sodium	26100		376	2000	1	09/24/2021 13:07	WG1744453
Thallium	U		0.121	2.00	1	09/24/2021 13:07	WG1744453
Lithium	11.5		0.695	2.00	1	09/24/2021 13:07	WG1744453

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.12		0.340	0.623	09/28/2021 12:10	WG1739158
(T) Barium	105			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	104			79.0-136	09/28/2021 12:10	WG1739158

¹Cp

²Tc

³Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.12		0.469	0.928	10/01/2021 20:48	WG1743108

⁴Cn

⁵Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	-0.00230	<u>U</u>	0.129	0.305	09/28/2021 20:48	WG1743108
(T) Barium-133	95.1			30.0-143	09/28/2021 20:48	WG1743108

⁶Qc

⁷Gl

⁸Al

⁹Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.0672	<u>U</u>	0.354	0.679	09/28/2021 12:10	WG1739158
(T) Barium	92.8			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	107			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.555	<u>J</u>	0.654	0.904	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.488		0.300	0.225	09/28/2021 16:57	WG1743108
(T) Barium-133	94.7			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.662		0.319	0.595	09/28/2021 12:10	WG1739158
(T) Barium	106			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	95.4			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.948		0.560	0.851	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.286		0.241	0.256	09/28/2021 16:57	WG1743108
(T) Barium-133	95.6			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.312	J	0.299	0.568	09/28/2021 12:10	WG1739158
(T) Barium	98.1			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	104			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.427	J	0.451	0.778	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.115	J	0.152	0.21	09/28/2021 16:57	WG1743108
(T) Barium-133	97.7			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.182	<u>U</u>	0.282	0.553	09/28/2021 12:10	WG1739158
(T) Barium	95.5			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	106			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.164	<u>U</u>	0.554	0.963	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.164	<u>J</u>	0.272	0.41	09/28/2021 16:57	WG1743108
(T) Barium-133	97.2			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.841		0.307	0.565	09/28/2021 12:10	WG1739158
(T) Barium	106			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	106			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.22		0.561	0.752	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.380		0.254	0.187	09/28/2021 16:57	WG1743108
(T) Barium-133	91.7			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.222	<u>U</u>	0.336	0.642	09/28/2021 12:10	WG1739158
(T) Barium	93.9			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	96.0			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.258	<u>U</u>	0.426	0.828	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0362	<u>U</u>	0.0895	0.186	09/28/2021 16:57	WG1743108
(T) Barium-133	93.7			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.565	J	0.345	0.649	09/28/2021 12:10	WG1739158
(T) Barium	96.2			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	107			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.778	J	0.544	0.875	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.213	J	0.199	0.226	09/28/2021 16:57	WG1743108
(T) Barium-133	95.5			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.200	<u>U</u>	0.318	0.625	09/28/2021 12:10	WG1739158
(T) Barium	99.9			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	108			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.333	<u>J</u>	0.585	0.903	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.333		0.267	0.278	09/28/2021 16:57	WG1743108
(T) Barium-133	91.3			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.02		0.335	0.613	09/28/2021 12:10	WG1739158
(T) Barium	106			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	95.5			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.54		0.654	0.9	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.518		0.319	0.287	09/28/2021 16:57	WG1743108
(T) Barium-133	99.0			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.605	J	0.348	0.652	09/28/2021 12:10	WG1739158
(T) Barium	93.3			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	100			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.06		0.674	0.96	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.451		0.326	0.308	09/28/2021 16:57	WG1743108
(T) Barium-133	90.9			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.25		0.296	0.528	09/28/2021 12:10	WG1739158
(T) Barium	96.2			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	101			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.25		0.496	0.94	09/28/2021 16:57	WG1743108

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	-0.0263	<u>U</u>	0.200	0.412	09/28/2021 16:57	WG1743108
(T) Barium-133	88.7			30.0-143	09/28/2021 16:57	WG1743108

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.673		0.282	0.522	09/28/2021 12:10	WG1739158
(T) Barium	99.8			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	107			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.09		0.558	0.781	09/29/2021 14:28	WG1743109

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.413		0.276	0.259	09/29/2021 14:28	WG1743109
(T) Barium-133	98.0			30.0-143	09/29/2021 14:28	WG1743109

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.651	<u>U</u>	0.313	0.623	09/28/2021 12:10	WG1739158
(T) Barium	104			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	98.1			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.501	<u>J</u>	0.627	0.915	09/29/2021 14:28	WG1743109

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.501		0.314	0.292	09/29/2021 14:28	WG1743109
(T) Barium-133	99.7			30.0-143	09/29/2021 14:28	WG1743109

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.847	<u>U</u>	0.308	0.622	09/28/2021 12:10	WG1739158
(T) Barium	108			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	102			79.0-136	09/28/2021 12:10	WG1739158

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.309	<u>U</u>	0.595	0.97	09/29/2021 14:28	WG1743109

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.309	<u>J</u>	0.287	0.348	09/29/2021 14:28	WG1743109
(T) Barium-133	103			30.0-143	09/29/2021 14:28	WG1743109

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0133	<u>U</u>	0.302	0.582	09/28/2021 12:10	WG1739158
(T) Barium	101			62.0-143	09/28/2021 12:10	WG1739158
(T) Yttrium	106			79.0-136	09/28/2021 12:10	WG1739158

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.263	<u>U</u>	0.537	0.836	09/29/2021 14:28	WG1743109

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.263		0.235	0.254	09/29/2021 14:28	WG1743109
(T) Barium-133	99.9			30.0-143	09/29/2021 14:28	WG1743109

Method Blank (MB)

(MB) R3708153-1 09/22/21 17:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

¹Cp

²Tc

³Ss

L1404460-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1404460-03 09/22/21 17:55 • (DUP) R3708153-3 09/22/21 17:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1630000	1630000	1	0.123		5

⁴Cn

⁵Sr

⁶Qc

L1405871-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1405871-03 09/22/21 17:55 • (DUP) R3708153-4 09/22/21 17:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1260000	1270000	1	0.633		5

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3708153-2 09/22/21 17:55

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	9570000	109	77.4-123	

Method Blank (MB)

(MB) R3708501-1 09/22/21 19:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

¹Cp

²Tc

³Ss

L1405085-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-25 09/22/21 19:46 • (DUP) R3708501-3 09/22/21 19:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	591000	596000	1	0.898		5

⁴Cn

⁵Sr

⁶Qc

L1405274-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1405274-02 09/22/21 19:46 • (DUP) R3708501-4 09/22/21 19:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	800000	816000	1	1.98		5

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3708501-2 09/22/21 19:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	9690000	110	77.4-123	

Method Blank (MB)

(MB) R3708500-1 09/22/21 21:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1404609-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1404609-01 09/22/21 21:08 • (DUP) R3708500-3 09/22/21 21:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	968000	980000	1	1.23		5

4 Cn

5 Sr

6 Qc

L1405085-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-09 09/22/21 21:08 • (DUP) R3708500-4 09/22/21 21:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1020000	1010000	1	0.985		5

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3708500-2 09/22/21 21:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	9650000	110	77.4-123	

Method Blank (MB)

(MB) R3708701-1 09/23/21 13:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1405085-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-12 09/23/21 13:48 • (DUP) R3708701-3 09/23/21 13:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	920000	1040000	1	12.6	J3	5

4 Cn

5 Sr

6 Qc

L1405085-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-17 09/23/21 13:48 • (DUP) R3708701-4 09/23/21 13:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1040000	1130000	1	8.31	J3	5

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3708701-2 09/23/21 13:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	9390000	107	77.4-123	

Method Blank (MB)

(MB) R3708743-1 09/23/21 15:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1405458-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1405458-05 09/23/21 15:43 • (DUP) R3708743-3 09/23/21 15:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	692000	693000	1	0.144		5

4 Cn

5 Sr

L1405458-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1405458-09 09/23/21 15:43 • (DUP) R3708743-4 09/23/21 15:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	680000	692000	1	1.75		5

6 Qc

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R3708743-2 09/23/21 15:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	9610000	109	77.4-123	

9 Sc

Method Blank (MB)

(MB) R3711239-1 09/28/21 12:10

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-228	0.341	↓	0.438
(T) Barium	96.2		
(T) Yttrium	105		

L1405085-26 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-26 09/28/21 12:10 • (DUP) R3711239-5 09/28/21 12:10

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.12	0.971	1	14.4	0.165	↓	20	3
(T) Barium	105	108						
(T) Yttrium	104	106						

Laboratory Control Sample (LCS)

(LCS) R3711239-2 09/28/21 12:10

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.15	103	80.0-120	
(T) Barium			94.5		
(T) Yttrium			101		

L1405133-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405133-04 09/28/21 12:10 • (MS) R3711239-3 09/28/21 12:10 • (MSD) R3711239-4 09/28/21 12:10

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.109	20.2	19.0	121	113	1	70.0-130			6.32		20
(T) Barium		96.0			105	93.0							
(T) Yttrium		102			98.9	102							

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3710087-1 09/28/21 16:57

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-226	0.00952	<u>U</u>	0.0663
(T) Barium-133	103		

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1403564-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1403564-20 09/28/21 16:57 • (DUP) R3710087-5 09/28/21 16:57

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Radium-226	0.360	0.0854	1	123	0.881	<u>U</u>	20	3
(T) Barium-133	99.5	100						

Laboratory Control Sample (LCS)

(LCS) R3710087-2 09/28/21 16:57

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	4.61	91.8	80.0-120	
(T) Barium-133			105		

L1405085-37 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405085-37 09/28/21 16:57 • (MS) R3710087-3 09/28/21 16:57 • (MSD) R3710087-4 09/28/21 16:57

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.1	-0.0263	19.9	18.5	98.8	92.0	1	75.0-125			7.09		20
(T) Barium-133		88.7			103	101							

Method Blank (MB)

(MB) R3710784-1 09/29/21 14:28

Analyte	MB Result pCi/l	MB Qualifier	MB MDA pCi/l
Radium-226	-0.00467	<u>U</u>	0.0557
(T) Barium-133	87.2		

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1405085-38 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-38 09/29/21 14:28 • (DUP) R3710784-5 09/29/21 14:28

Analyte	Original Result pCi/l	DUP Result pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Radium-226	0.413	0.122	1	108	0.925	<u>J</u>	20	3
(T) Barium-133	98.0	97.9						

Laboratory Control Sample (LCS)

(LCS) R3710784-2 09/29/21 14:28

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.05	101	80.0-120	
(T) Barium-133			88.8		

L1405133-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405133-04 09/29/21 14:28 • (MS) R3710784-3 09/29/21 14:28 • (MSD) R3710784-4 09/29/21 14:28

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.1	0.0609	20.0	19.4	99.2	96.2	1	75.0-125			3.10		20
(T) Barium-133		98.1			97.2	94.9							

Method Blank (MB)

(MB) R3708075-2 09/23/21 16:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1405081-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1405081-05 09/23/21 17:17 • (DUP) R3708075-3 09/23/21 17:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	164000	165000	1	0.269		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1405085-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-01 09/23/21 17:51 • (DUP) R3708075-4 09/23/21 17:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	345000	355000	1	3.00		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5



Method Blank (MB)

(MB) R3708066-2 09/23/21 15:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1405085-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-22 09/23/21 16:01 • (DUP) R3708066-3 09/23/21 16:06

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	392000	390000	1	0.475		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1405097-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1405097-04 09/23/21 16:52 • (DUP) R3708066-4 09/23/21 16:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	207000	216000	1	3.97		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3709329-1 09/24/21 13:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	403	↓	379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1405025-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1405025-05 09/24/21 18:32 • (DUP) R3709329-3 09/24/21 18:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	19700	19600	1	0.287		15
Fluoride	1300	1290	1	0.493		15
Sulfate	14500	14500	1	0.248		15

L1405085-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-11 09/25/21 02:29 • (DUP) R3709329-6 09/25/21 02:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	34300	34300	1	0.0805		15
Fluoride	199	201	1	0.948		15
Sulfate	33000	32900	1	0.123		15

Laboratory Control Sample (LCS)

(LCS) R3709329-2 09/24/21 14:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40000	39200	98.1	80.0-120	
Fluoride	8000	8060	101	80.0-120	
Sulfate	40000	39100	97.8	80.0-120	

L1405025-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405025-05 09/24/21 18:32 • (MS) R3709329-4 09/24/21 19:05 • (MSD) R3709329-5 09/24/21 19:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	19700	70900	70800	103	102	1	80.0-120			0.227	15
Fluoride	5000	1300	6590	6640	106	107	1	80.0-120			0.763	15
Sulfate	50000	14500	66600	66400	104	104	1	80.0-120			0.241	15

L1405085-11 Original Sample (OS) • Matrix Spike (MS)

(OS) L1405085-11 09/25/21 02:29 • (MS) R3709329-7 09/25/21 03:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	34300	84700	101	1	80.0-120	
Fluoride	5000	199	5360	103	1	80.0-120	
Sulfate	50000	33000	84500	103	1	80.0-120	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3709326-1 09/25/21 13:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1405085-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1405085-14 09/25/21 18:24 • (DUP) R3709326-3 09/25/21 18:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	24200	24200	1	0.0211		15
Fluoride	153	158	1	3.22		15
Sulfate	47700	47700	1	0.00314		15

L1405312-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1405312-10 09/26/21 04:14 • (DUP) R3709326-8 09/26/21 04:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	341000	338000	10	0.762		15
Fluoride	1110	1130	10	1.31	U	15
Sulfate	7740	7830	10	1.22	U	15

Laboratory Control Sample (LCS)

(LCS) R3709326-2 09/25/21 13:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40000	39400	98.5	80.0-120	
Fluoride	8000	8180	102	80.0-120	
Sulfate	40000	39300	98.2	80.0-120	

L1405085-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405085-22 09/25/21 23:19 • (MS) R3709326-4 09/25/21 23:35 • (MSD) R3709326-5 09/25/21 23:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	76200	124000	124000	94.8	95.8	1	80.0-120	E	E	0.381	15
Fluoride	5000	190	5160	5210	99.5	100	1	80.0-120			0.806	15
Sulfate	50000	67500	117000	117000	98.2	99.3	1	80.0-120	E	E	0.487	15

L1405133-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405133-01 09/26/21 02:36 • (MS) R3709326-6 09/26/21 02:52 • (MSD) R3709326-7 09/26/21 03:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	84100	132000	132000	96.4	95.3	1	80.0-120	E	E	0.385	15
Fluoride	5000	155	5250	5220	102	101	1	80.0-120			0.598	15
Sulfate	50000	94200	143000	143000	97.4	96.9	1	80.0-120	E	E	0.181	15

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3709520-1 09/28/21 04:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Sulfate	U		594	5000

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1405504-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1405504-01 09/28/21 06:26 • (DUP) R3709520-3 09/28/21 06:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	13100	13100	1	0.306		15

L1405504-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1405504-08 09/28/21 09:19 • (DUP) R3709520-6 09/28/21 09:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	9850	9790	1	0.679		15

Laboratory Control Sample (LCS)

(LCS) R3709520-2 09/28/21 04:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Sulfate	40000	40300	101	80.0-120	

L1405504-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405504-03 09/28/21 07:39 • (MS) R3709520-4 09/28/21 07:53 • (MSD) R3709520-5 09/28/21 08:07

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Sulfate	50000	15300	63400	63200	96.1	95.6	1	80.0-120			0.362	15

L1405504-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1405504-08 09/28/21 09:19 • (MS) R3709520-7 09/28/21 09:48

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Sulfate	50000	9850	61800	104	1	80.0-120	

Method Blank (MB)

(MB) R3708376-1 09/24/21 11:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3708376-2 09/24/21 11:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	3.00	3.47	116	80.0-120	

4 Cn

5 Sr

L1404954-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404954-03 09/24/21 11:18 • (MS) R3708376-3 09/24/21 11:20 • (MSD) R3708376-4 09/24/21 11:22

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	3.00	U	3.23	3.26	108	109	1	75.0-125			0.957	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3708375-1 09/24/21 09:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3708375-2 09/24/21 09:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.38	113	80.0-120	

4 Cn

5 Sr

L1405085-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405085-22 09/24/21 10:00 • (MS) R3708375-3 09/24/21 10:02 • (MSD) R3708375-4 09/24/21 10:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	U	3.57	3.42	119	114	1	75.0-125			4.23	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3706960-1 09/21/21 15:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury,Dissolved	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R3706960-2 09/21/21 15:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury,Dissolved	3.00	3.34	111	80.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3706960-3 09/21/21 15:41 • (MSD) R3706960-4 09/21/21 15:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	3.00		2.42	2.34	80.7	78.1	1	75.0-125			3.27	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3708105-1 09/23/21 17:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	U		0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Cadmium	U		0.150	1.00
Calcium	U		93.6	1000
Chromium	U		1.24	2.00
Cobalt	U		0.0596	2.00
Iron	U		28.1	100
Lead	U		0.849	2.00
Magnesium	U		73.5	1000
Molybdenum	U		0.348	5.00
Potassium	U		108	2000
Selenium	U		0.300	2.00
Sodium	460	U	376	2000
Thallium	U		0.121	2.00
Lithium	0.710	U	0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3708280-1 09/24/21 09:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		9.63	30.0

Laboratory Control Sample (LCS)

(LCS) R3708105-2 09/23/21 17:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	47.8	95.6	80.0-120	
Arsenic	50.0	49.8	99.5	80.0-120	
Barium	50.0	48.6	97.2	80.0-120	
Beryllium	50.0	48.5	97.0	80.0-120	
Cadmium	50.0	49.1	98.3	80.0-120	
Calcium	5000	5040	101	80.0-120	
Chromium	50.0	50.2	100	80.0-120	
Cobalt	50.0	51.5	103	80.0-120	
Iron	5000	5060	101	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3708105-2 09/23/21 17:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Lead	50.0	49.4	98.8	80.0-120	
Magnesium	5000	5050	101	80.0-120	
Molybdenum	50.0	47.9	95.7	80.0-120	
Potassium	5000	4970	99.5	80.0-120	
Selenium	50.0	52.0	104	80.0-120	
Sodium	5000	5610	112	80.0-120	
Thallium	50.0	47.7	95.4	80.0-120	
Lithium	50.0	51.6	103	80.0-120	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS)

(LCS) R3708280-2 09/24/21 09:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Boron	500	501	100	80.0-120	

L1405085-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405085-22 09/23/21 17:49 • (MS) R3708105-4 09/23/21 17:55 • (MSD) R3708105-5 09/23/21 17:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony	50.0	U	49.3	49.4	98.6	98.9	1	75.0-125			0.268	20
Arsenic	50.0	0.556	50.2	50.1	99.3	99.0	1	75.0-125			0.251	20
Barium	50.0	48.8	99.1	98.4	101	99.2	1	75.0-125			0.730	20
Beryllium	50.0	U	46.6	46.0	93.1	92.0	1	75.0-125			1.16	20
Cadmium	50.0	U	48.8	48.8	97.7	97.5	1	75.0-125			0.133	20
Calcium	5000	125000	130000	131000	102	124	1	75.0-125			0.866	20
Chromium	50.0	U	49.2	49.7	98.3	99.4	1	75.0-125			1.06	20
Cobalt	50.0	1.40	51.5	51.3	100	99.9	1	75.0-125			0.291	20
Potassium	5000	1600	6510	6560	98.2	99.1	1	75.0-125			0.691	20
Iron	5000	182	5210	5100	101	98.3	1	75.0-125			2.17	20
Lead	50.0	U	47.6	47.3	95.2	94.5	1	75.0-125			0.720	20
Magnesium	5000	42600	45500	46500	57.1	78.0	1	75.0-125	V		2.27	20
Molybdenum	50.0	3.42	53.1	52.7	99.3	98.5	1	75.0-125			0.770	20
Selenium	50.0	U	53.4	52.8	107	106	1	75.0-125			1.15	20
Sodium	5000	25500	29600	29800	81.9	86.0	1	75.0-125			0.688	20
Thallium	50.0	U	46.3	46.3	92.7	92.6	1	75.0-125			0.117	20
Lithium	50.0	11.8	59.0	59.4	94.3	95.1	1	75.0-125			0.661	20

L1405085-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1405085-22 09/24/21 09:26 • (MS) R3708280-4 09/24/21 09:32 • (MSD) R3708280-5 09/24/21 09:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Boron	500	53.0	567	570	103	103	1	75.0-125			0.583	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R3708446-1 09/24/21 12:16

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	U		0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Cadmium	U		0.150	1.00
Calcium	U		93.6	1000
Chromium	U		1.24	2.00
Cobalt	U		0.0596	2.00
Lead	U		0.849	2.00
Magnesium	U		73.5	1000
Molybdenum	U		0.348	5.00
Potassium	U		108	2000
Sodium	U		376	2000
Thallium	U		0.121	2.00
Lithium	0.789	U	0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3708559-6 09/24/21 17:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		9.63	30.0
Selenium	U		0.300	2.00

Laboratory Control Sample (LCS)

(LCS) R3708446-2 09/24/21 12:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	52.7	105	80.0-120	
Arsenic	50.0	50.3	101	80.0-120	
Barium	50.0	48.3	96.6	80.0-120	
Beryllium	50.0	50.3	101	80.0-120	
Cadmium	50.0	53.9	108	80.0-120	
Calcium	5000	5130	103	80.0-120	
Chromium	50.0	53.5	107	80.0-120	
Cobalt	50.0	53.2	106	80.0-120	
Lead	50.0	51.2	102	80.0-120	
Magnesium	5000	5370	107	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3708446-2 09/24/21 12:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Molybdenum	50.0	51.1	102	80.0-120	
Potassium	5000	5120	102	80.0-120	
Sodium	5000	5530	111	80.0-120	
Thallium	50.0	47.6	95.2	80.0-120	
Lithium	50.0	49.4	98.7	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3708559-7 09/24/21 17:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Boron	500	479	95.9	80.0-120	
Selenium	50.0	49.5	98.9	80.0-120	

L1404804-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404804-01 09/24/21 12:23 • (MS) R3708446-4 09/24/21 12:30 • (MSD) R3708446-5 09/24/21 12:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony	50.0	U	55.7	57.8	111	116	1	75.0-125			3.69	20
Arsenic	50.0	0.641	48.3	46.6	95.3	91.8	1	75.0-125			3.61	20
Barium	50.0	295	342	344	94.3	98.0	1	75.0-125			0.546	20
Beryllium	50.0	0.559	50.1	49.8	99.0	98.6	1	75.0-125			0.445	20
Cadmium	50.0	0.358	54.9	54.7	109	109	1	75.0-125			0.435	20
Calcium	5000	618000	624000	608000	115	0.000	1	75.0-125		V	2.53	20
Chromium	50.0	U	50.1	48.7	100	97.4	1	75.0-125			2.85	20
Cobalt	50.0	382	430	414	95.7	63.4	1	75.0-125		V	3.82	20
Potassium	5000	10500	15400	15000	97.8	91.0	1	75.0-125			2.22	20
Lead	50.0	U	51.4	51.1	103	102	1	75.0-125			0.491	20
Magnesium	5000	220000	221000	220000	13.7	0.000	1	75.0-125	V	V	0.521	20
Molybdenum	50.0	0.589	53.8	54.4	106	108	1	75.0-125			1.16	20
Sodium	5000	999000	1000000	990000	90.5	0.000	1	75.0-125	E	V	1.36	20
Thallium	50.0	U	48.1	48.0	96.2	96.0	1	75.0-125			0.187	20
Lithium	50.0		701	701	110	112	1	75.0-125			0.0733	20

L1404804-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1404804-01 09/24/21 17:45 • (MS) R3708559-9 09/24/21 17:52 • (MSD) R3708559-10 09/24/21 17:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Boron	500	780	1190	1230	82.8	90.9	5	75.0-125			3.31	20
Selenium	50.0	U	49.1	50.1	98.1	100	5	75.0-125			2.02	20

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

Method Blank (MB)

(MB) R3707766-1 09/23/21 00:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony,Dissolved	U		1.03	4.00
Arsenic,Dissolved	U		0.180	2.00
Barium,Dissolved	U		0.381	2.00
Beryllium,Dissolved	U		0.190	2.00
Boron,Dissolved	U		9.63	30.0
Cadmium,Dissolved	U		0.150	1.00
Calcium,Dissolved	U		93.6	1000
Chromium,Dissolved	U		1.24	2.00
Cobalt,Dissolved	U		0.0596	2.00
Iron,Dissolved	U		28.1	100
Lead,Dissolved	U		0.849	2.00
Magnesium,Dissolved	U		73.5	1000
Molybdenum,Dissolved	U		0.348	5.00
Potassium,Dissolved	U		108	2000
Selenium,Dissolved	U		0.300	2.00
Sodium,Dissolved	U		376	2000
Thallium,Dissolved	U		0.121	2.00
Lithium,Dissolved	U		0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3707766-2 09/23/21 00:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	50.0	46.4	92.8	80.0-120	
Arsenic,Dissolved	50.0	45.2	90.3	80.0-120	
Barium,Dissolved	50.0	44.8	89.6	80.0-120	
Beryllium,Dissolved	50.0	44.3	88.6	80.0-120	
Boron,Dissolved	500	455	91.0	80.0-120	
Cadmium,Dissolved	50.0	48.8	97.6	80.0-120	
Calcium,Dissolved	5000	4640	92.8	80.0-120	
Chromium,Dissolved	50.0	46.7	93.3	80.0-120	
Cobalt,Dissolved	50.0	47.3	94.6	80.0-120	
Iron,Dissolved	5000	4610	92.1	80.0-120	
Lead,Dissolved	50.0	44.9	89.7	80.0-120	
Magnesium,Dissolved	5000	4640	92.9	80.0-120	
Molybdenum,Dissolved	50.0	47.5	95.1	80.0-120	
Potassium,Dissolved	5000	4480	89.5	80.0-120	
Selenium,Dissolved	50.0	47.8	95.6	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3707766-2 09/23/21 00:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Sodium,Dissolved	5000	4780	95.6	80.0-120	
Thallium,Dissolved	50.0	43.2	86.5	80.0-120	
Lithium,Dissolved	50.0	46.6	93.2	80.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3707766-4 09/23/21 00:55 • (MSD) R3707766-5 09/23/21 00:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony,Dissolved	50.0		48.2	49.6	96.3	99.2	1	75.0-125			2.92	20
Arsenic,Dissolved	50.0		52.4	51.8	98.9	97.8	1	75.0-125			1.06	20
Barium,Dissolved	50.0		455	458	93.3	98.7	1	75.0-125			0.595	20
Beryllium,Dissolved	50.0		46.9	45.2	93.9	90.4	1	75.0-125			3.71	20
Boron,Dissolved	500		637	626	93.6	91.4	1	75.0-125			1.76	20
Cadmium,Dissolved	50.0		49.4	49.5	98.7	99.0	1	75.0-125			0.347	20
Calcium,Dissolved	5000		93100	91900	113	89.0	1	75.0-125			1.30	20
Chromium,Dissolved	50.0		48.1	48.5	96.3	97.1	1	75.0-125			0.825	20
Cobalt,Dissolved	50.0		48.9	48.7	97.7	97.2	1	75.0-125			0.457	20
Potassium,Dissolved	5000		9550	9520	90.4	89.9	1	75.0-125			0.277	20
Iron,Dissolved	5000		4760	4770	95.2	95.4	1	75.0-125			0.300	20
Lead,Dissolved	50.0		44.4	44.6	88.9	89.1	1	75.0-125			0.331	20
Magnesium,Dissolved	5000		14000	13700	98.5	92.7	1	75.0-125			2.10	20
Molybdenum,Dissolved	50.0		51.4	52.1	97.5	98.8	1	75.0-125			1.25	20
Selenium,Dissolved	50.0		50.7	51.8	100	103	1	75.0-125			2.04	20
Sodium,Dissolved	5000		340000	339000	59.9	22.8	1	75.0-125	<u>V</u>	<u>V</u>	0.546	20
Thallium,Dissolved	50.0		42.7	43.7	85.4	87.4	1	75.0-125			2.40	20
Lithium,Dissolved	50.0		63.8	61.2	90.4	85.2	1	75.0-125			4.10	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

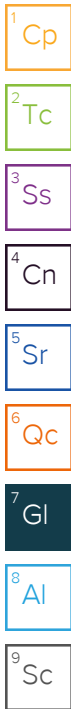
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
U	Below Detectable Limits: Indicates that the analyte was not detected.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

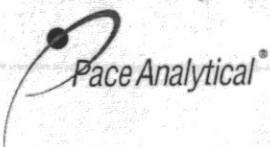
⁸ Al

⁹ Sc

Company Name/Address:
S&ME - Nashville, TN
 862 East Crescentville Road
 Cincinnati, OH 45246

Billing Information:
 Accounts Payable
 658 Grassmere Park Dr, Ste 100
 Nashville, TN 37211

Pres Chk
 Analysis / Container / Preservative
 ALKBI/CA, CI, F, SO4 125mlHDPE-NoPres
 CCR Metals + K, Na, Mg 250mlHDPE-HNO3
 Diss Metals (FF) 250mlHDPE-HNO3
 Dissolved Fe 250mlHDPE NoPres
 RA-226/228COMB 1L-HDPE-Add HNO3
 TDS 250mlHDPE-NoPres
 Total Fe 250mlHDPE-HNO3

Chain of Custody Page 1 of 3


Report to:
Vince Epps
 Project Description:
 Miami Fort Station - North Bend, OH

Email To:
 vepps@smeinc.com;vgallagher@smeinc.com
 City/State Collected:
 North Bend, OH
 Please Circle:
 PT MT CT **ET**

Phone: **513-771-8471**

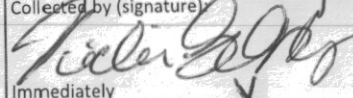
Client Project #
7217-17-003D

Lab Project #
LITENGNTN-MIAMI

Collected by (print):
Victoria Gallagher

Site/Facility ID #
MIAMI (SITE 115)

P.O. #

Collected by (signature):

 Immediately Packed on Ice N Y **X**

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #
 Date Results Needed
 No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	ALKBI/CA, CI, F, SO4 125mlHDPE-NoPres	CCR Metals + K, Na, Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MW-7	Grab	GW		9/15/21	1145	5	1	1		2	1			-01, 28
MW-2	Grab	GW		9/15/21	1835	7	1	1	1	2	1	1		-02, 28
MW-3A	Grab	GW		9/16/21	1310	5	1	1		2	1			-03, 28
MW-4	Grab	GW		9/16/21	0945	5	1	1		2	1			-04, 29
MW-5	Grab	GW		9/16/21	1045	5	1	1		2	1			-05, 30
MW-6	Grab	GW		9/16/21	1145	5	1	1		2	1			-06, 31
MW-1	Grab	GW		9/15/21	1540	5	1	1		2	1			-07, 32
MW-8	Grab	GW		9/15/21	1650	5	1	1		2	1			-08, 33
MW-9	Grab	GW		9/15/21	1750	5	1	1		2	1			-09, 34
MW-10	Grab	GW		9/15/21	1935	5	1	1		2	1			-10, 35

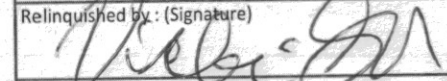
* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks: ***Log rad to same SDG as different dash #'s as EX 10 day TAT***

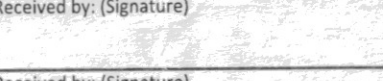
pH _____ Temp _____
 Flow _____ Other _____

Sample Receipt Checklist
 COC Seal Present/Intact: Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume used: Y N
 If Applicable
 VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

Samples returned via:
 UPS FedEx Courier **X**
 Tracking # **5300 4291 6121 / 5300 4291 0544**

Relinquished by: (Signature)


Date: **9/16/21**
 Time: **1500**

Received by: (Signature)


Trip Blank Received: Yes / No
0
 HCL / MeOH
 TBR

Relinquished by: (Signature)

Date:
 Time:

Received by: (Signature)

Temp: **13.60** °C
1.3-1.1-1.2
 Bottles Received: **10x**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:
 Time:

Received for lab by: (Signature)


Date: **9/17/21**
 Time: **14:30**

Hold:
 Condition:
 NCF / **OK**

5300 4291 0524 / 5300 4291 0511

862 East Crescentville Road
Cincinnati, OH 45246

Email To: **vepps@smeinc.com; vgallagher@smeinc.com**

Report to: **Vince Epps**

Project Description: **Miami Fort Station - North Bend, OH** City/State Collected: **North Bend, OH** Please Circle: **ET**

Phone: **513-771-8471** Client Project #: **7217-17-003D** Lab Project #: **LITENGNTN-MIAMI**

Collected by (print): **Victoria Gallagher** Site/Facility ID #: **MIAMI (SITE 115)** P.O. #

Collected by (signature): *Victoria Gallagher* **Rush? (Lab MUST Be Notified)**

Quote # **Date Results Needed** No. of Cntrs

Immediately Packed on Ice N Y X

Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	ALKBI/CA, Cl, F, SO4	125mIHDPE-NoPres	CCR Metals + K, Na, Mg	250mIHDPE-HNO3	Diss Metals (FF)	250mIHDPE-HNO3	Dissolved Fe	250mIHDPE-NoPres	RA-226/228COMB	1L-HDPE-Add HNO3	TDS	250mIHDPE-NoPres	Total Fe	250mIHDPE-HNO3	Remarks	Sample # (lab only)	
MW-11	Grab	GW		9/16/21	1335	5	1	1				2	1									-11,36
MW-12	Grab	GW		9/16/21	1225	5	1	1				2	1									-12,37
MW-13	Grab	GW		9/16/21	1120	5	1	1				2	1									-13,38
MW-14	Grab	GW		9/16/21	1030	3	1	1														-14
MW-15	Grab	GW		9/15/21	1340	3	1	1														-15
MW-16	Grab	GW		9/15/21	1430	3	1	1														-16
4A	Grab	GW		9/16/21	0835	3	1	1														-17
MFS_A1_SOURCE WATER CCR_TOTAL	Grab	GW		9/16/21	0920	5	1	1				2	1									-18,39
MFS_A1_SOURCE WATER CCR DISS	Grab	GW		9/16/21	0920	1			1													-19
MFS_B1_SOURCE WATER CCR_TOTAL	Grab	GW		9/16/21	0940	5	1	1				2	1									-20,40

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *****Log rad to same SDG as different dash #'s as EX 10 day TAT*****

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VOA Zero Headspace:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Samples returned via UPS FedEx Courier Tracking # **5300 4291 0121 / 5300 4291 0544**

Relinquished by: (Signature) *Victoria Gallagher*

Date: **9/16/21** Time: **1500**

Received by: (Signature) _____

Trip Blank Received: **Yes / NO**
0 HCL / MeoH
TBR

Relinquished by: (Signature) _____

Date: _____ Time: _____

Received by: (Signature) _____

Temp: **13.60°C** Bottles Received: **108**
1-3-1-1-2

Relinquished by: (Signature) _____

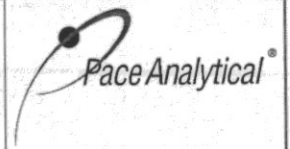
Date: _____ Time: _____

Received for lab by: (Signature) *Victoria Gallagher*

Date: **9/17/21** Time: **14:30**

If preservation required by Login: Date/Time
Hold: _____ Condition: **NCF / OK**

5300 4291 0522 / 5300 4291 0511



12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/gas-standard-terms.pdf>

SDG # **L1405085**

Table #

Acctnum: **LITENGNTN**

Template: **T181344**

Prelogin: **P867720**

PM: **134 - Mark W. Beasley**

PB: *2/8/21*

Shipped Via: **Courier**

Company Name/Address:
S&ME - Nashville, TN
 862 East Crescentville Road
 Cincinnati, OH 45246

Billing Information:
 Accounts Payable
 658 Grassmere Park Dr, Ste 100
 Nashville, TN 37211

Report to:
Vince Epps

Email To:
 vepps@smeinc.com;vgallagher@smeinc.com

Project Description:
 Miami Fort Station - North Bend, OH

City/State Collected: **North Bend, OH**
 Please Circle: PT MT CT **ET**

Phone: **513-771-8471**

Client Project #
7217-17-003D

Lab Project #
LITENGNTN-MIAMI

Collected by (print):
Victoria Gallagher

Site/Facility ID #
MIAMI (SITE 115)

P.O. #

Collected by (signature):
Victoria Gallagher
 Immediately
 Packed on Ice N ___ Y **X**

Rush? (Lab MUST Be Notified)
 ___ Same Day ___ Five Day
 ___ Next Day ___ 5 Day (Rad Only)
 ___ Two Day ___ 10 Day (Rad Only)
 ___ Three Day

Quote #
 Date Results Needed
 No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K, Na, Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3
MFS_B1_SOURCE WATER CCR DISS	Grab	GW		9/16/21	0940	1			1				
MW-17	Grab	GW		9/15/21	1035	3	1	1				1	
MW-19	Grab	GW		9/15/21	1250	3	1	1				1	
9152021 - DUP	Grab	GW				3	1	1				1	
9152021 B - DUP	Grab	GW		9/15/21		3	1	1				1	
091521-A	Grab	GW		9/15/21		3	1	1				1	
SPIKE	Grab	NPW		9/15/21	1035	5	1	1			2	1	
		NPW											
		NPW											
		NPW											

Analysis / Container / Preservative													
Pres Chk	ZZ	ZZ		ZZ		ZZ							

Chain of Custody Page **3** of **3**

 12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # **L1405085**
 Table #
 Acctnum: **LITENGNTN**
 Template: **T181344**
 Prelogin: **P867720**
 PM: **134 - Mark W. Beasley**
 PB: *8/21/21*
 Shipped Via: **Courier**
 Remarks Sample # (lab only)

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks: *****Log rad to same SDG as different dash #'s as EX 10 day TAT*****
 pH _____ Temp _____
 Flow _____ Other _____

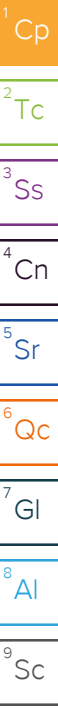
Sample Receipt Checklist
 COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: N
 Bottles arrive intact: N
 Correct bottles used: N
 Sufficient volume sent: N
 If Applicable
 VOA Zero Headspace: N
 Preservation Correct/Checked: N
 RAD Screen <0.5 mR/hr: N

Relinquished by: (Signature) *Victoria Gallagher*
 Date: **9/16/21** Time: **1500**

Received by: (Signature) _____
 Trip Blank Received: Yes / **NO**
 HCL / MeOH TBR
 Temp: **13.6°C** Bottles Received: **108**
1.3-1.5-1.2

If preservation required by Login: Date/Time
 Relinquished by: (Signature) _____
 Date: _____ Time: _____
 Received for lab by: (Signature) *Mark W. Beasley*
 Date: **9/17/21** Time: **14:30**
 Hold: _____ Condition: **NCF / OK**

5300 4291 6522 / 5202 4291 10511



S&ME - Nashville, TN

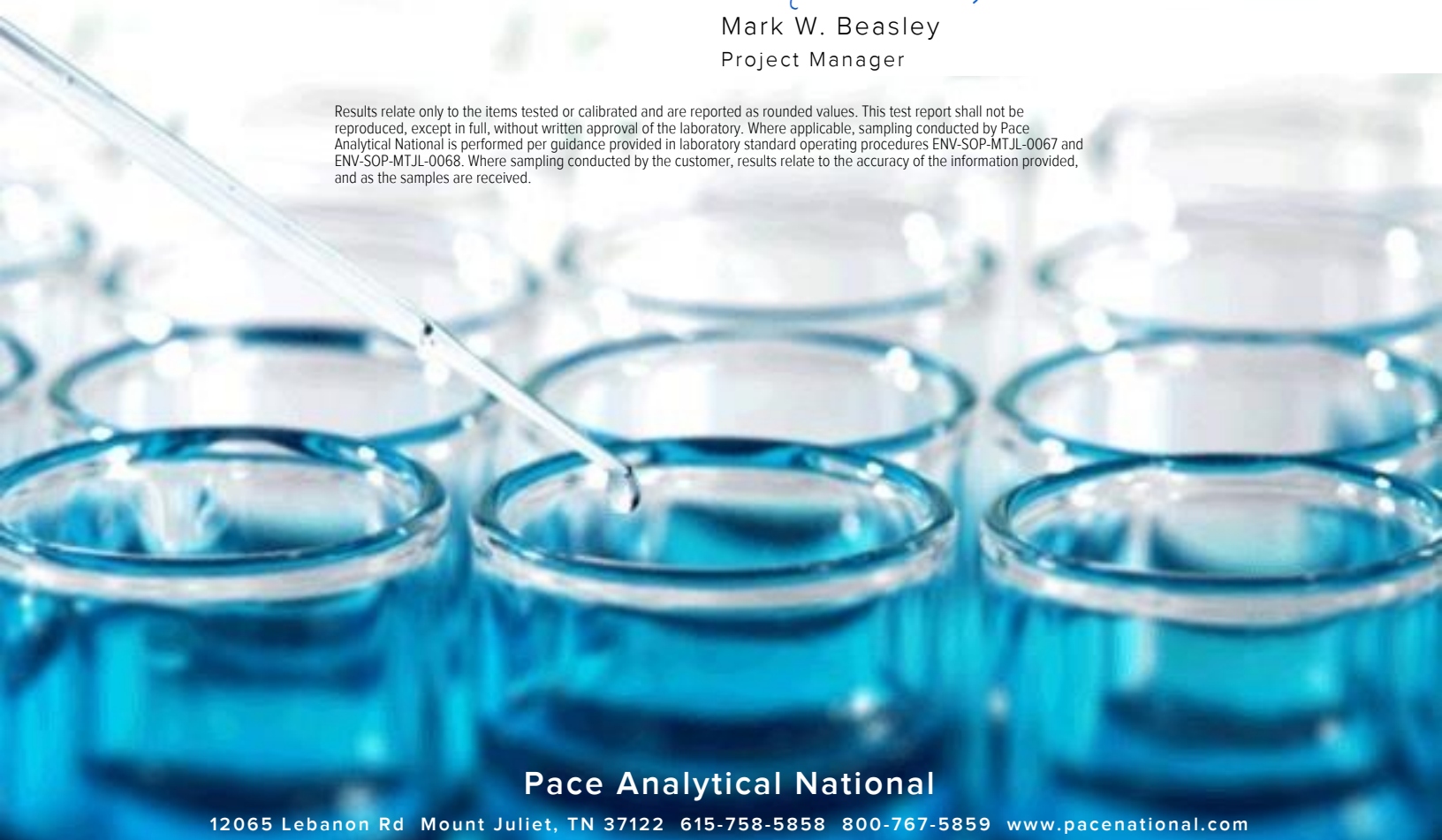
Sample Delivery Group: L1475207
Samples Received: 03/25/2022
Project Number: 7217-17-003D
Description: Miami Fort Station - North Bend, OH
Site: MIAMI (SITE 115)
Report To: Vince Epps
862 East Crescentville Road
Cincinnati, OH 45246

Entire Report Reviewed By:



Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

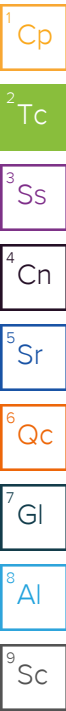


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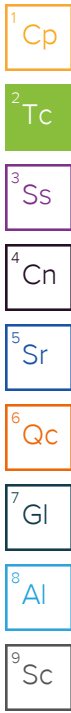
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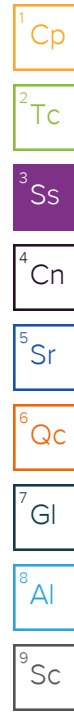


SAMPLE SUMMARY

MW-7 L1475207-01 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 13:35 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840598	1	03/30/22 11:34	03/30/22 14:14	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 05:53	03/27/22 05:53	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 19:56	03/27/22 19:56	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:17	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 02:11	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 11:04	JPD	Mt. Juliet, TN



MW-2 L1475207-02 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 17:45 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 05:56	03/27/22 05:56	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 20:34	03/27/22 20:34	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:19	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838719	1	03/29/22 06:34	03/29/22 22:37	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 02:15	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 11:07	JPD	Mt. Juliet, TN

MW-3A L1475207-03 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 10:35 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1841400	1	03/31/22 14:23	03/31/22 15:41	MEU	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 05:59	03/27/22 05:59	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 20:47	03/27/22 20:47	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:21	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 02:26	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 11:11	JPD	Mt. Juliet, TN

MW-4 L1475207-04 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 20:10 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840543	1	03/30/22 10:22	03/30/22 11:27	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:03	03/27/22 06:03	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 21:00	03/27/22 21:00	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	20	03/27/22 21:13	03/27/22 21:13	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:23	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 02:30	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 11:14	JPD	Mt. Juliet, TN

MW-5 L1475207-05 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 11:25 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1841400	1	03/31/22 14:23	03/31/22 15:41	MEU	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:21	03/27/22 06:21	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 21:26	03/27/22 21:26	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/27/22 22:04	03/27/22 22:04	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:25	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 02:33	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-5 L1475207-05 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 11:25 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1838728	1	03/29/22 22:48	03/30/22 11:48	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838728	100	03/29/22 22:48	03/30/22 11:17	JPD	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-6 L1475207-06 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 12:20 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840888	1	03/30/22 17:26	03/30/22 18:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:24	03/27/22 06:24	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 22:17	03/27/22 22:17	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	10	03/27/22 22:30	03/27/22 22:30	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:27	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 14:32	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	100	03/31/22 08:18	04/01/22 15:08	JPD	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

MW-1 L1475207-07 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 15:45 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:27	03/27/22 06:27	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 22:43	03/27/22 22:43	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/27/22 22:55	03/27/22 22:55	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:29	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 14:35	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 15:12	JPD	Mt. Juliet, TN

9 Sc

MW-8 L1475207-08 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 16:20 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840543	1	03/30/22 10:22	03/30/22 11:27	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:31	03/27/22 06:31	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 23:08	03/27/22 23:08	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/27/22 23:21	03/27/22 23:21	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:31	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 14:38	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	10	03/31/22 08:18	04/01/22 15:16	JPD	Mt. Juliet, TN

MW-9 L1475207-09 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 13:30 Received date/time 03/25/22 09:00

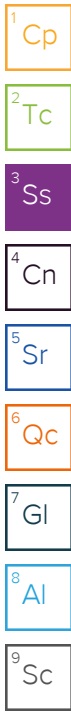
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840888	1	03/30/22 17:26	03/30/22 18:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:34	03/27/22 06:34	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 23:34	03/27/22 23:34	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/27/22 23:47	03/27/22 23:47	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:33	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 14:42	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	10	03/31/22 08:18	04/01/22 15:19	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-10 L1475207-10 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 12:40 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840888	1	03/30/22 17:26	03/30/22 18:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:38	03/27/22 06:38	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/27/22 23:59	03/27/22 23:59	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:35	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:05	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 15:47	JPD	Mt. Juliet, TN



MW-11 L1475207-11 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 11:50 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840888	1	03/30/22 17:26	03/30/22 18:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:42	03/27/22 06:42	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 00:38	03/28/22 00:38	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:40	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:08	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 15:51	JPD	Mt. Juliet, TN

MW-12 L1475207-12 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 13:25 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840888	1	03/30/22 17:26	03/30/22 18:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:46	03/27/22 06:46	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 00:51	03/28/22 00:51	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/28/22 01:04	03/28/22 01:04	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839241	1	03/31/22 09:51	04/01/22 12:42	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:11	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	10	03/31/22 08:18	04/01/22 15:54	JPD	Mt. Juliet, TN

MW-13 L1475207-13 GW

Collected by Victoria Gallagher Collected date/time 03/24/22 09:30 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1841220	1	03/31/22 10:59	03/31/22 13:37	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 06:49	03/27/22 06:49	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 01:16	03/28/22 01:16	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:14	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 14:18	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 14:54	JPD	Mt. Juliet, TN

MW-14 L1475207-14 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 19:00 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 07:04	03/27/22 07:04	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 01:55	03/28/22 01:55	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:20	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:14	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 15:58	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-15 L1475207-15 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 11:40 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840543	1	03/30/22 10:22	03/30/22 11:27	BRG	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 07:08	03/27/22 07:08	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 02:20	03/28/22 02:20	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/28/22 02:33	03/28/22 02:33	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:22	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:18	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 16:02	JPD	Mt. Juliet, TN



MW-16 L1475207-16 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 10:55 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838909	1	03/27/22 07:11	03/27/22 07:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 03:12	03/28/22 03:12	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/28/22 03:24	03/28/22 03:24	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:24	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:21	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 16:05	JPD	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR_TOTAL L1475207-17 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 16:30 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838910	1	03/27/22 07:51	03/27/22 07:51	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	10	03/28/22 03:37	03/28/22 03:37	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	100	03/28/22 03:50	03/28/22 03:50	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:26	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:24	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	200	03/31/22 08:18	04/01/22 16:09	JPD	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR DISS L1475207-18 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 16:30 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1839250	1	03/30/22 09:43	03/31/22 10:41	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838719	1	03/29/22 06:34	03/29/22 20:54	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838719	50	03/29/22 06:34	03/29/22 22:45	LD	Mt. Juliet, TN

MFS_B1_SOURCE WATER CCR_TOTAL L1475207-19 GW

Collected by Victoria Gallagher Collected date/time 03/23/22 16:45 Received date/time 03/25/22 09:00

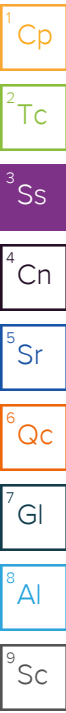
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838910	1	03/27/22 07:56	03/27/22 07:56	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 04:03	03/28/22 04:03	KEG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	5	03/28/22 04:16	03/28/22 04:16	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:28	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:27	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	10	03/31/22 08:18	04/01/22 16:13	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MFS_B1_SOURCE WATER CCR DISS L1475207-20 GW

Collected by Victoria Gallagher
 Collected date/time 03/23/22 16:45
 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1839250	1	03/30/22 09:43	03/31/22 10:43	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838719	1	03/29/22 06:34	03/29/22 20:58	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838719	500	03/29/22 06:34	03/29/22 22:49	LD	Mt. Juliet, TN



MW-17 L1475207-21 GW

Collected by Victoria Gallagher
 Collected date/time 03/23/22 14:55
 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838910	1	03/27/22 08:00	03/27/22 08:00	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 04:29	03/28/22 04:29	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:30	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:31	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 16:17	JPD	Mt. Juliet, TN

MW-19 L1475207-22 GW

Collected by Victoria Gallagher
 Collected date/time 03/23/22 12:45
 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838910	1	03/27/22 08:03	03/27/22 08:03	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838551	1	03/28/22 04:41	03/28/22 04:41	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:32	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 17:34	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 16:20	JPD	Mt. Juliet, TN

DUP-01032422 L1475207-23 GW

Collected by Victoria Gallagher
 Collected date/time 03/23/22 00:00
 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840598	1	03/30/22 11:34	03/30/22 14:14	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838910	1	03/27/22 08:06	03/27/22 08:06	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838552	1	03/26/22 10:52	03/26/22 10:52	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:38	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 18:18	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 16:55	JPD	Mt. Juliet, TN

DUP-02032422 L1475207-24 GW

Collected by Victoria Gallagher
 Collected date/time 03/23/22 00:00
 Received date/time 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1840672	1	03/30/22 13:08	03/30/22 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1838910	1	03/27/22 08:10	03/27/22 08:10	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1838552	1	03/26/22 11:46	03/26/22 11:46	KEG	Mt. Juliet, TN
Mercury by Method 7470A	WG1839242	1	03/30/22 12:09	03/31/22 13:40	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	03/31/22 18:21	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1838729	1	03/31/22 08:18	04/01/22 16:59	JPD	Mt. Juliet, TN

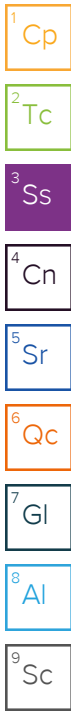
SAMPLE SUMMARY

MW-7 L1475207-26 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN



MW-2 L1475207-27 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-3A L1475207-28 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-4 L1475207-29 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-5 L1475207-30 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-6 L1475207-31 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

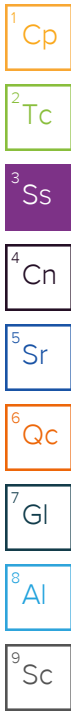
SAMPLE SUMMARY

MW-1 L1475207-32 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN



MW-8 L1475207-33 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-9 L1475207-34 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1839285	1	03/28/22 11:24	03/31/22 12:35	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-10 L1475207-35 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-11 L1475207-36 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MW-12 L1475207-37 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-13 L1475207-38 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-14 L1475207-39 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

MW-15 L1475207-40 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MW-16 L1475207-41 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR_TOTAL L1475207-42 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1840705	1	03/31/22 12:54	04/04/22 13:49	RGT	Mt. Juliet, TN

MFS_B1_SOURCE WATER CCR_TOTAL L1475207-43 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1839262	1	03/28/22 12:26	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1839262	1	03/28/22 12:26	03/30/22 08:01	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-17 L1475207-44 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1839262	1	03/28/22 12:26	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1839262	1	03/28/22 12:26	03/30/22 08:01	RGT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

MW-19 L1475207-45 Non-Potable Water

Collected by
Collected date/time
Received date/time

03/23/22 13:35 03/25/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1840194	1	03/30/22 10:24	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1839262	1	03/28/22 12:26	04/04/22 12:05	JMR	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1839262	1	03/28/22 12:26	03/30/22 08:01	RGT	Mt. Juliet, TN

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	466000		10000	1	03/30/2022 14:14	WG1840598

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	381000		8450	20000	1	03/27/2022 05:53	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 05:53	WG1838909

Sample Narrative:

L1475207-01 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

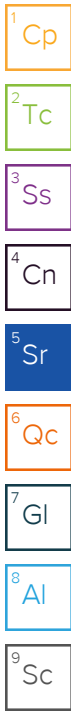
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	5090		379	1000	1	03/27/2022 19:56	WG1838551
Fluoride	78.6	J	64.0	150	1	03/27/2022 19:56	WG1838551
Sulfate	37600		594	5000	1	03/27/2022 19:56	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:17	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/30/2022 02:11	WG1838728
Arsenic	0.308	B J	0.180	2.00	1	03/30/2022 02:11	WG1838728
Barium	93.8		0.381	2.00	1	03/30/2022 02:11	WG1838728
Beryllium	U		0.190	2.00	1	03/30/2022 02:11	WG1838728
Boron	73.2		9.63	30.0	1	03/30/2022 11:04	WG1838728
Cadmium	U		0.150	1.00	1	03/30/2022 02:11	WG1838728
Calcium	108000		93.6	1000	1	03/30/2022 02:11	WG1838728
Chromium	U		1.24	2.00	1	03/30/2022 02:11	WG1838728
Cobalt	U		0.0596	2.00	1	03/30/2022 02:11	WG1838728
Lead	U		0.849	2.00	1	03/30/2022 02:11	WG1838728
Magnesium	34100		73.5	1000	1	03/30/2022 02:11	WG1838728
Molybdenum	0.714	J	0.348	5.00	1	03/30/2022 02:11	WG1838728
Potassium	1170	J	108	2000	1	03/30/2022 02:11	WG1838728
Selenium	2.02	B	0.300	2.00	1	03/30/2022 02:11	WG1838728
Sodium	4070		376	2000	1	03/30/2022 02:11	WG1838728
Thallium	U		0.121	2.00	1	03/30/2022 02:11	WG1838728
Lithium	4.65		0.695	2.00	1	03/30/2022 11:04	WG1838728



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	655000		13300	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	572000		8450	20000	1	03/27/2022 05:56	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 05:56	WG1838909

Sample Narrative:

L1475207-02 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

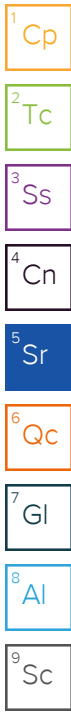
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	36500		379	1000	1	03/27/2022 20:34	WG1838551
Fluoride	102	J	64.0	150	1	03/27/2022 20:34	WG1838551
Sulfate	60100		594	5000	1	03/27/2022 20:34	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:19	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/30/2022 02:15	WG1838728
Arsenic	25.6		0.180	2.00	1	03/30/2022 02:15	WG1838728
Barium	448		0.381	2.00	1	03/30/2022 02:15	WG1838728
Beryllium	U		0.190	2.00	1	03/30/2022 02:15	WG1838728
Boron	956		9.63	30.0	1	03/30/2022 11:07	WG1838728
Cadmium	0.193	J	0.150	1.00	1	03/30/2022 02:15	WG1838728
Calcium	136000		93.6	1000	1	03/30/2022 02:15	WG1838728
Chromium	U		1.24	2.00	1	03/30/2022 02:15	WG1838728
Cobalt	0.351	J	0.0596	2.00	1	03/30/2022 02:15	WG1838728
Iron	43000		28.1	100	1	03/30/2022 02:15	WG1838728
Iron,Dissolved	U		28.1	100	1	03/29/2022 22:37	WG1838719
Lead	U		0.849	2.00	1	03/30/2022 02:15	WG1838728
Magnesium	59600		73.5	1000	1	03/30/2022 02:15	WG1838728
Molybdenum	0.370	J	0.348	5.00	1	03/30/2022 02:15	WG1838728
Potassium	930	J	108	2000	1	03/30/2022 02:15	WG1838728
Selenium	0.955	B J	0.300	2.00	1	03/30/2022 02:15	WG1838728
Sodium	17100		376	2000	1	03/30/2022 02:15	WG1838728
Thallium	U		0.121	2.00	1	03/30/2022 02:15	WG1838728
Lithium	1.25	J	0.695	2.00	1	03/30/2022 11:07	WG1838728



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	287000		10000	1	03/31/2022 15:41	WG1841400

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	222000		8450	20000	1	03/27/2022 05:59	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 05:59	WG1838909

Sample Narrative:

L1475207-03 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	24200		379	1000	1	03/27/2022 20:47	WG1838551
Fluoride	150	J	64.0	150	1	03/27/2022 20:47	WG1838551
Sulfate	4240	J	594	5000	1	03/27/2022 20:47	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:21	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/30/2022 02:26	WG1838728
Arsenic	11.9		0.180	2.00	1	03/30/2022 02:26	WG1838728
Barium	152		0.381	2.00	1	03/30/2022 02:26	WG1838728
Beryllium	U		0.190	2.00	1	03/30/2022 02:26	WG1838728
Boron	67.3		9.63	30.0	1	03/30/2022 11:11	WG1838728
Cadmium	U		0.150	1.00	1	03/30/2022 02:26	WG1838728
Calcium	54200		93.6	1000	1	03/30/2022 02:26	WG1838728
Chromium	U		1.24	2.00	1	03/30/2022 02:26	WG1838728
Cobalt	0.0998	J	0.0596	2.00	1	03/30/2022 02:26	WG1838728
Lead	U		0.849	2.00	1	03/30/2022 02:26	WG1838728
Magnesium	14900		73.5	1000	1	03/30/2022 02:26	WG1838728
Molybdenum	0.598	J	0.348	5.00	1	03/30/2022 02:26	WG1838728
Potassium	2200		108	2000	1	03/30/2022 02:26	WG1838728
Selenium	0.730	B J	0.300	2.00	1	03/30/2022 02:26	WG1838728
Sodium	18600		376	2000	1	03/30/2022 02:26	WG1838728
Thallium	U		0.121	2.00	1	03/30/2022 02:26	WG1838728
Lithium	1.54	J	0.695	2.00	1	03/30/2022 11:11	WG1838728



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1600000		20000	1	03/30/2022 11:27	WG1840543

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	123000		8450	20000	1	03/27/2022 06:03	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:03	WG1838909

Sample Narrative:

L1475207-04 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

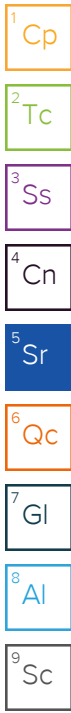
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	21600		379	1000	1	03/27/2022 21:00	WG1838551
Fluoride	96.0	J	64.0	150	1	03/27/2022 21:00	WG1838551
Sulfate	1010000		11900	100000	20	03/27/2022 21:13	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:23	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/30/2022 02:30	WG1838728
Arsenic	1.23	B J	0.180	2.00	1	03/30/2022 02:30	WG1838728
Barium	19.1		0.381	2.00	1	03/30/2022 02:30	WG1838728
Beryllium	U		0.190	2.00	1	03/30/2022 02:30	WG1838728
Boron	476		9.63	30.0	1	03/30/2022 11:14	WG1838728
Cadmium	0.980	J	0.150	1.00	1	03/30/2022 02:30	WG1838728
Calcium	281000		93.6	1000	1	03/30/2022 02:30	WG1838728
Chromium	4.18		1.24	2.00	1	03/30/2022 02:30	WG1838728
Cobalt	13.0		0.0596	2.00	1	03/30/2022 02:30	WG1838728
Lead	U		0.849	2.00	1	03/30/2022 02:30	WG1838728
Magnesium	89700		73.5	1000	1	03/30/2022 02:30	WG1838728
Molybdenum	0.679	J	0.348	5.00	1	03/30/2022 02:30	WG1838728
Potassium	896	J	108	2000	1	03/30/2022 02:30	WG1838728
Selenium	1.05	B J	0.300	2.00	1	03/30/2022 02:30	WG1838728
Sodium	24200		376	2000	1	03/30/2022 02:30	WG1838728
Thallium	U		0.121	2.00	1	03/30/2022 02:30	WG1838728
Lithium	5.57		0.695	2.00	1	03/30/2022 11:14	WG1838728



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1830000		25000	1	03/31/2022 15:41	WG1841400

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	291000		8450	20000	1	03/27/2022 06:21	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:21	WG1838909

Sample Narrative:

L1475207-05 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

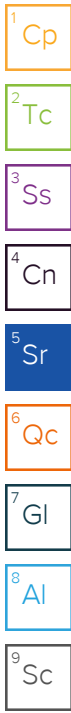
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	406000		1900	5000	5	03/27/2022 22:04	WG1838551
Fluoride	U		64.0	150	1	03/27/2022 21:26	WG1838551
Sulfate	413000		2970	25000	5	03/27/2022 22:04	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:25	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/30/2022 02:33	WG1838728
Arsenic	2.13	<u>B</u>	0.180	2.00	1	03/30/2022 02:33	WG1838728
Barium	87.6		0.381	2.00	1	03/30/2022 02:33	WG1838728
Beryllium	0.243	<u>J</u>	0.190	2.00	1	03/30/2022 02:33	WG1838728
Boron	21100		963	3000	100	03/30/2022 11:17	WG1838728
Cadmium	0.414	<u>J</u>	0.150	1.00	1	03/30/2022 02:33	WG1838728
Calcium	339000		93.6	1000	1	03/30/2022 02:33	WG1838728
Chromium	2.88		1.24	2.00	1	03/30/2022 02:33	WG1838728
Cobalt	1.98	<u>J</u>	0.0596	2.00	1	03/30/2022 02:33	WG1838728
Lead	3.22		0.849	2.00	1	03/30/2022 02:33	WG1838728
Magnesium	56000		73.5	1000	1	03/30/2022 02:33	WG1838728
Molybdenum	16.0		0.348	5.00	1	03/30/2022 02:33	WG1838728
Potassium	7100		108	2000	1	03/30/2022 02:33	WG1838728
Selenium	1.06	<u>B J</u>	0.300	2.00	1	03/30/2022 02:33	WG1838728
Sodium	69900		376	2000	1	03/30/2022 02:33	WG1838728
Thallium	0.673	<u>J</u>	0.121	2.00	1	03/30/2022 02:33	WG1838728
Lithium	12.4		0.695	2.00	1	03/30/2022 11:48	WG1838728



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1420000		50000	1	03/30/2022 18:00	WG1840888

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	502000		8450	20000	1	03/27/2022 06:24	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:24	WG1838909

Sample Narrative:

L1475207-06 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

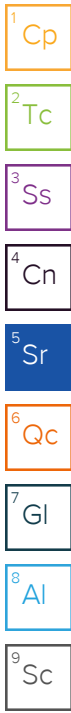
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	564000		3790	10000	10	03/27/2022 22:30	WG1838551
Fluoride	547		64.0	150	1	03/27/2022 22:17	WG1838551
Sulfate	330000		5940	50000	10	03/27/2022 22:30	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:27	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 14:32	WG1838729
Arsenic	14.7		0.180	2.00	1	03/31/2022 14:32	WG1838729
Barium	159		0.381	2.00	1	03/31/2022 14:32	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 14:32	WG1838729
Boron	13400		963	3000	100	04/01/2022 15:08	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 14:32	WG1838729
Calcium	148000		93.6	1000	1	03/31/2022 14:32	WG1838729
Chromium	2.26		1.24	2.00	1	03/31/2022 14:32	WG1838729
Cobalt	7.66		0.0596	2.00	1	03/31/2022 14:32	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 14:32	WG1838729
Magnesium	236000		73.5	1000	1	03/31/2022 14:32	WG1838729
Molybdenum	167		0.348	5.00	1	03/31/2022 14:32	WG1838729
Potassium	6100		108	2000	1	03/31/2022 14:32	WG1838729
Selenium	0.358	J	0.300	2.00	1	03/31/2022 14:32	WG1838729
Sodium	66100		376	2000	1	03/31/2022 14:32	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 14:32	WG1838729
Lithium	13.4		0.695	2.00	1	03/31/2022 14:32	WG1838729



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	775000		13300	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	219000		8450	20000	1	03/27/2022 06:27	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:27	WG1838909

Sample Narrative:

L1475207-07 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

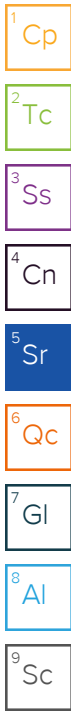
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	43700		379	1000	1	03/27/2022 22:43	WG1838551
Fluoride	366		64.0	150	1	03/27/2022 22:43	WG1838551
Sulfate	359000		2970	25000	5	03/27/2022 22:55	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:29	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 14:35	WG1838729
Arsenic	0.240	<u>J</u>	0.180	2.00	1	03/31/2022 14:35	WG1838729
Barium	45.6		0.381	2.00	1	03/31/2022 14:35	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 14:35	WG1838729
Boron	772		9.63	30.0	1	04/01/2022 15:12	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 14:35	WG1838729
Calcium	159000		93.6	1000	1	03/31/2022 14:35	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 14:35	WG1838729
Cobalt	0.103	<u>B J</u>	0.0596	2.00	1	03/31/2022 14:35	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 14:35	WG1838729
Magnesium	30000		73.5	1000	1	03/31/2022 14:35	WG1838729
Molybdenum	45.0		0.348	5.00	1	03/31/2022 14:35	WG1838729
Potassium	7440		108	2000	1	03/31/2022 14:35	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 14:35	WG1838729
Sodium	35300		376	2000	1	03/31/2022 14:35	WG1838729
Thallium	0.192	<u>B J</u>	0.121	2.00	1	03/31/2022 14:35	WG1838729
Lithium	33.2		0.695	2.00	1	03/31/2022 14:35	WG1838729



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	817000		13300	1	03/30/2022 11:27	WG1840543

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	207000		8450	20000	1	03/27/2022 06:31	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:31	WG1838909

Sample Narrative:

L1475207-08 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	44800		379	1000	1	03/27/2022 23:08	WG1838551
Fluoride	183		64.0	150	1	03/27/2022 23:08	WG1838551
Sulfate	366000		2970	25000	5	03/27/2022 23:21	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:31	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 14:38	WG1838729
Arsenic	0.254	J	0.180	2.00	1	03/31/2022 14:38	WG1838729
Barium	39.3		0.381	2.00	1	03/31/2022 14:38	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 14:38	WG1838729
Boron	2910		96.3	300	10	04/01/2022 15:16	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 14:38	WG1838729
Calcium	149000		93.6	1000	1	03/31/2022 14:38	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 14:38	WG1838729
Cobalt	0.147	B J	0.0596	2.00	1	03/31/2022 14:38	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 14:38	WG1838729
Magnesium	39800		73.5	1000	1	03/31/2022 14:38	WG1838729
Molybdenum	7.37		0.348	5.00	1	03/31/2022 14:38	WG1838729
Potassium	4810		108	2000	1	03/31/2022 14:38	WG1838729
Selenium	1.33	J	0.300	2.00	1	03/31/2022 14:38	WG1838729
Sodium	32100		376	2000	1	03/31/2022 14:38	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 14:38	WG1838729
Lithium	18.9		0.695	2.00	1	03/31/2022 14:38	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	841000		13300	1	03/30/2022 18:00	WG1840888

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	206000		8450	20000	1	03/27/2022 06:34	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:34	WG1838909

Sample Narrative:

L1475207-09 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	73000		379	1000	1	03/27/2022 23:34	WG1838551
Fluoride	352		64.0	150	1	03/27/2022 23:34	WG1838551
Sulfate	396000		2970	25000	5	03/27/2022 23:47	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:33	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 14:42	WG1838729
Arsenic	0.352	J	0.180	2.00	1	03/31/2022 14:42	WG1838729
Barium	76.4		0.381	2.00	1	03/31/2022 14:42	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 14:42	WG1838729
Boron	2860		96.3	300	10	04/01/2022 15:19	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 14:42	WG1838729
Calcium	164000		93.6	1000	1	03/31/2022 14:42	WG1838729
Chromium	1.65	J	1.24	2.00	1	03/31/2022 14:42	WG1838729
Cobalt	0.240	B J	0.0596	2.00	1	03/31/2022 14:42	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 14:42	WG1838729
Magnesium	41100		73.5	1000	1	03/31/2022 14:42	WG1838729
Molybdenum	56.4		0.348	5.00	1	03/31/2022 14:42	WG1838729
Potassium	6090		108	2000	1	03/31/2022 14:42	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 14:42	WG1838729
Sodium	35500		376	2000	1	03/31/2022 14:42	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 14:42	WG1838729
Lithium	11.2		0.695	2.00	1	03/31/2022 14:42	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Dissolved Solids	312000		10000	1	03/30/2022 18:00	WG1840888

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Alkalinity,Bicarbonate	229000		8450	20000	1	03/27/2022 06:38	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:38	WG1838909

Sample Narrative:

L1475207-10 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

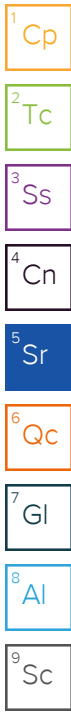
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Chloride	42900		379	1000	1	03/27/2022 23:59	WG1838551
Fluoride	221		64.0	150	1	03/27/2022 23:59	WG1838551
Sulfate	23200		594	5000	1	03/27/2022 23:59	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Mercury	U		0.100	0.200	1	04/01/2022 12:35	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Antimony	U		1.03	4.00	1	03/31/2022 17:05	WG1838729
Arsenic	16.1		0.180	2.00	1	03/31/2022 17:05	WG1838729
Barium	146		0.381	2.00	1	03/31/2022 17:05	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:05	WG1838729
Boron	68.1		9.63	30.0	1	04/01/2022 15:47	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 17:05	WG1838729
Calcium	58500		93.6	1000	1	03/31/2022 17:05	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:05	WG1838729
Cobalt	0.0957	<u>B J</u>	0.0596	2.00	1	03/31/2022 17:05	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:05	WG1838729
Magnesium	21800		73.5	1000	1	03/31/2022 17:05	WG1838729
Molybdenum	4.43	<u>J</u>	0.348	5.00	1	03/31/2022 17:05	WG1838729
Potassium	3390		108	2000	1	03/31/2022 17:05	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:05	WG1838729
Sodium	28400		376	2000	1	03/31/2022 17:05	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:05	WG1838729
Lithium	2.28		0.695	2.00	1	03/31/2022 17:05	WG1838729



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	240000		10000	1	03/30/2022 18:00	WG1840888

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	159000		8450	20000	1	03/27/2022 06:42	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:42	WG1838909

Sample Narrative:

L1475207-11 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	33500		379	1000	1	03/28/2022 00:38	WG1838551
Fluoride	178		64.0	150	1	03/28/2022 00:38	WG1838551
Sulfate	31800		594	5000	1	03/28/2022 00:38	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	04/01/2022 12:40	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:08	WG1838729
Arsenic	12.2		0.180	2.00	1	03/31/2022 17:08	WG1838729
Barium	195		0.381	2.00	1	03/31/2022 17:08	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:08	WG1838729
Boron	64.2		9.63	30.0	1	04/01/2022 15:51	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 17:08	WG1838729
Calcium	47200		93.6	1000	1	03/31/2022 17:08	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:08	WG1838729
Cobalt	0.677	<u>B J</u>	0.0596	2.00	1	03/31/2022 17:08	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:08	WG1838729
Magnesium	15100		73.5	1000	1	03/31/2022 17:08	WG1838729
Molybdenum	4.45	<u>J</u>	0.348	5.00	1	03/31/2022 17:08	WG1838729
Potassium	2820		108	2000	1	03/31/2022 17:08	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:08	WG1838729
Sodium	23000		376	2000	1	03/31/2022 17:08	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:08	WG1838729
Lithium	3.15		0.695	2.00	1	03/31/2022 17:08	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	876000		20000	1	03/30/2022 18:00	WG1840888

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	69100		8450	20000	1	03/27/2022 06:46	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:46	WG1838909

Sample Narrative:

L1475207-12 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	203000		1900	5000	5	03/28/2022 01:04	WG1838551
Fluoride	U		64.0	150	1	03/28/2022 00:51	WG1838551
Sulfate	411000		2970	25000	5	03/28/2022 01:04	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	3.77		0.100	0.200	1	04/01/2022 12:42	WG1839241

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:11	WG1838729
Arsenic	0.290	J	0.180	2.00	1	03/31/2022 17:11	WG1838729
Barium	15.1		0.381	2.00	1	03/31/2022 17:11	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:11	WG1838729
Boron	5280		96.3	300	10	04/01/2022 15:54	WG1838729
Cadmium	1.34		0.150	1.00	1	03/31/2022 17:11	WG1838729
Calcium	159000		93.6	1000	1	03/31/2022 17:11	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:11	WG1838729
Cobalt	2.95		0.0596	2.00	1	03/31/2022 17:11	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:11	WG1838729
Magnesium	53900		73.5	1000	1	03/31/2022 17:11	WG1838729
Molybdenum	U		0.348	5.00	1	03/31/2022 17:11	WG1838729
Potassium	759	J	108	2000	1	03/31/2022 17:11	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:11	WG1838729
Sodium	44200		376	2000	1	03/31/2022 17:11	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:11	WG1838729
Lithium	4.02		0.695	2.00	1	03/31/2022 17:11	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	250000		10000	1	03/31/2022 13:37	WG1841220

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	125000		8450	20000	1	03/27/2022 06:49	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 06:49	WG1838909

Sample Narrative:

L1475207-13 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

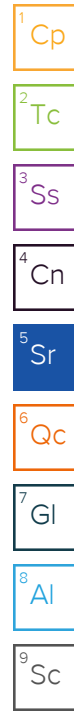
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28900		379	1000	1	03/28/2022 01:16	WG1838551
Fluoride	149	J	64.0	150	1	03/28/2022 01:16	WG1838551
Sulfate	54300		594	5000	1	03/28/2022 01:16	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:14	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 14:18	WG1838729
Arsenic	16.5	O1	0.180	2.00	1	03/31/2022 14:18	WG1838729
Barium	189	O1	0.381	2.00	1	03/31/2022 14:18	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 14:18	WG1838729
Boron	73.5		9.63	30.0	1	04/01/2022 14:54	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 14:18	WG1838729
Calcium	43900	O1	93.6	1000	1	03/31/2022 14:18	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 14:18	WG1838729
Cobalt	0.398	B J	0.0596	2.00	1	03/31/2022 14:18	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 14:18	WG1838729
Magnesium	13500	J6	73.5	1000	1	03/31/2022 14:18	WG1838729
Molybdenum	10.3		0.348	5.00	1	03/31/2022 14:18	WG1838729
Potassium	2380		108	2000	1	03/31/2022 14:18	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 14:18	WG1838729
Sodium	23000	O1	376	2000	1	03/31/2022 14:18	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 14:18	WG1838729
Lithium	5.36		0.695	2.00	1	03/31/2022 14:18	WG1838729



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	229000		10000	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	113000		8450	20000	1	03/27/2022 07:04	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 07:04	WG1838909

Sample Narrative:

L1475207-14 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	29500		379	1000	1	03/28/2022 01:55	WG1838551
Fluoride	123	J	64.0	150	1	03/28/2022 01:55	WG1838551
Sulfate	47700		594	5000	1	03/28/2022 01:55	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:20	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:14	WG1838729
Arsenic	0.787	J	0.180	2.00	1	03/31/2022 17:14	WG1838729
Barium	41.3		0.381	2.00	1	03/31/2022 17:14	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:14	WG1838729
Boron	80.9		9.63	30.0	1	04/01/2022 15:58	WG1838729
Cadmium	0.158	J	0.150	1.00	1	03/31/2022 17:14	WG1838729
Calcium	42100		93.6	1000	1	03/31/2022 17:14	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:14	WG1838729
Cobalt	0.553	B J	0.0596	2.00	1	03/31/2022 17:14	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:14	WG1838729
Magnesium	11900		73.5	1000	1	03/31/2022 17:14	WG1838729
Molybdenum	5.48		0.348	5.00	1	03/31/2022 17:14	WG1838729
Potassium	2490		108	2000	1	03/31/2022 17:14	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:14	WG1838729
Sodium	22800		376	2000	1	03/31/2022 17:14	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:14	WG1838729
Lithium	4.35		0.695	2.00	1	03/31/2022 17:14	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	675000		13300	1	03/30/2022 11:27	WG1840543

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	320000		8450	20000	1	03/27/2022 07:08	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 07:08	WG1838909

Sample Narrative:

L1475207-15 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	182000		1900	5000	5	03/28/2022 02:33	WG1838551
Fluoride	214		64.0	150	1	03/28/2022 02:20	WG1838551
Sulfate	58500		594	5000	1	03/28/2022 02:20	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:22	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:18	WG1838729
Arsenic	0.975	J	0.180	2.00	1	03/31/2022 17:18	WG1838729
Barium	77.9		0.381	2.00	1	03/31/2022 17:18	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:18	WG1838729
Boron	366		9.63	30.0	1	04/01/2022 16:02	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 17:18	WG1838729
Calcium	124000		93.6	1000	1	03/31/2022 17:18	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:18	WG1838729
Cobalt	2.84		0.0596	2.00	1	03/31/2022 17:18	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:18	WG1838729
Magnesium	37700		73.5	1000	1	03/31/2022 17:18	WG1838729
Molybdenum	24.0		0.348	5.00	1	03/31/2022 17:18	WG1838729
Potassium	3150		108	2000	1	03/31/2022 17:18	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:18	WG1838729
Sodium	61400		376	2000	1	03/31/2022 17:18	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:18	WG1838729
Lithium	7.69		0.695	2.00	1	03/31/2022 17:18	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	942000		20000	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	445000		8450	20000	1	03/27/2022 07:11	WG1838909
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 07:11	WG1838909

Sample Narrative:

L1475207-16 WG1838909: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

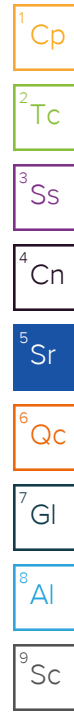
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	77700		379	1000	1	03/28/2022 03:12	WG1838551
Fluoride	77.5	J	64.0	150	1	03/28/2022 03:12	WG1838551
Sulfate	144000		2970	25000	5	03/28/2022 03:24	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:24	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:21	WG1838729
Arsenic	0.618	J	0.180	2.00	1	03/31/2022 17:21	WG1838729
Barium	92.7		0.381	2.00	1	03/31/2022 17:21	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:21	WG1838729
Boron	88.8		9.63	30.0	1	04/01/2022 16:05	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 17:21	WG1838729
Calcium	187000		93.6	1000	1	03/31/2022 17:21	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:21	WG1838729
Cobalt	1.67	J	0.0596	2.00	1	03/31/2022 17:21	WG1838729
Lead	0.873	J	0.849	2.00	1	03/31/2022 17:21	WG1838729
Magnesium	63500		73.5	1000	1	03/31/2022 17:21	WG1838729
Molybdenum	0.738	J	0.348	5.00	1	03/31/2022 17:21	WG1838729
Potassium	4180		108	2000	1	03/31/2022 17:21	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:21	WG1838729
Sodium	50300		376	2000	1	03/31/2022 17:21	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:21	WG1838729
Lithium	13.0		0.695	2.00	1	03/31/2022 17:21	WG1838729



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	3080000		100000	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	24300		8450	20000	1	03/27/2022 07:51	WG1838910
Alkalinity,Carbonate	270000		8450	20000	1	03/27/2022 07:51	WG1838910

Sample Narrative:

L1475207-17 WG1838910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

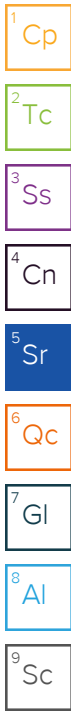
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1760000		37900	100000	100	03/28/2022 03:50	WG1838551
Fluoride	5000		640	1500	10	03/28/2022 03:37	WG1838551
Sulfate	1510000		59400	500000	100	03/28/2022 03:50	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:26	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:24	WG1838729
Arsenic	2.80		0.180	2.00	1	03/31/2022 17:24	WG1838729
Barium	71.4		0.381	2.00	1	03/31/2022 17:24	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:24	WG1838729
Boron	80500		1930	6000	200	04/01/2022 16:09	WG1838729
Cadmium	0.163	J	0.150	1.00	1	03/31/2022 17:24	WG1838729
Calcium	352000		93.6	1000	1	03/31/2022 17:24	WG1838729
Chromium	5.63		1.24	2.00	1	03/31/2022 17:24	WG1838729
Cobalt	2.20		0.0596	2.00	1	03/31/2022 17:24	WG1838729
Lead	0.977	J	0.849	2.00	1	03/31/2022 17:24	WG1838729
Magnesium	725000		73.5	1000	1	03/31/2022 17:24	WG1838729
Molybdenum	19.2		0.348	5.00	1	03/31/2022 17:24	WG1838729
Potassium	15500		108	2000	1	03/31/2022 17:24	WG1838729
Selenium	80.8		0.300	2.00	1	03/31/2022 17:24	WG1838729
Sodium	71500		376	2000	1	03/31/2022 17:24	WG1838729
Thallium	1.26	B J	0.121	2.00	1	03/31/2022 17:24	WG1838729
Lithium	137		0.695	2.00	1	03/31/2022 17:24	WG1838729



Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	03/31/2022 10:41	WG1839250

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	03/29/2022 20:54	WG1838719
Arsenic,Dissolved	6.34		0.180	2.00	1	03/29/2022 20:54	WG1838719
Barium,Dissolved	62.9		0.381	2.00	1	03/29/2022 20:54	WG1838719
Beryllium,Dissolved	U		0.190	2.00	1	03/29/2022 20:54	WG1838719
Boron,Dissolved	6160		482	1500	50	03/29/2022 22:45	WG1838719
Cadmium,Dissolved	U		0.150	1.00	1	03/29/2022 20:54	WG1838719
Calcium,Dissolved	76300		93.6	1000	1	03/29/2022 20:54	WG1838719
Chromium,Dissolved	U		1.24	2.00	1	03/29/2022 20:54	WG1838719
Cobalt,Dissolved	0.301	<u>J</u>	0.0596	2.00	1	03/29/2022 20:54	WG1838719
Lead,Dissolved	U		0.849	2.00	1	03/29/2022 20:54	WG1838719
Magnesium,Dissolved	72300		73.5	1000	1	03/29/2022 20:54	WG1838719
Molybdenum,Dissolved	10.6		0.348	5.00	1	03/29/2022 20:54	WG1838719
Potassium,Dissolved	4330		108	2000	1	03/29/2022 20:54	WG1838719
Selenium,Dissolved	6.73		0.300	2.00	1	03/29/2022 20:54	WG1838719
Sodium,Dissolved	32500		376	2000	1	03/29/2022 20:54	WG1838719
Thallium,Dissolved	0.466	<u>B J</u>	0.121	2.00	1	03/29/2022 20:54	WG1838719
Lithium,Dissolved	17.8		0.695	2.00	1	03/29/2022 20:54	WG1838719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	759000		13300	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	105000		8450	20000	1	03/27/2022 07:56	WG1838910
Alkalinity,Carbonate	12800	J	8450	20000	1	03/27/2022 07:56	WG1838910

Sample Narrative:

L1475207-19 WG1838910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	162000		1900	5000	5	03/28/2022 04:16	WG1838551
Fluoride	542		64.0	150	1	03/28/2022 04:03	WG1838551
Sulfate	202000		2970	25000	5	03/28/2022 04:16	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:28	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:27	WG1838729
Arsenic	8.47		0.180	2.00	1	03/31/2022 17:27	WG1838729
Barium	76.7		0.381	2.00	1	03/31/2022 17:27	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:27	WG1838729
Boron	6230		96.3	300	10	04/01/2022 16:13	WG1838729
Cadmium	0.219	J	0.150	1.00	1	03/31/2022 17:27	WG1838729
Calcium	74300		93.6	1000	1	03/31/2022 17:27	WG1838729
Chromium	11.3		1.24	2.00	1	03/31/2022 17:27	WG1838729
Cobalt	1.23	B J	0.0596	2.00	1	03/31/2022 17:27	WG1838729
Lead	2.07		0.849	2.00	1	03/31/2022 17:27	WG1838729
Magnesium	67200		73.5	1000	1	03/31/2022 17:27	WG1838729
Molybdenum	11.0		0.348	5.00	1	03/31/2022 17:27	WG1838729
Potassium	4520		108	2000	1	03/31/2022 17:27	WG1838729
Selenium	7.15		0.300	2.00	1	03/31/2022 17:27	WG1838729
Sodium	32800		376	2000	1	03/31/2022 17:27	WG1838729
Thallium	0.474	B J	0.121	2.00	1	03/31/2022 17:27	WG1838729
Lithium	20.8		0.695	2.00	1	03/31/2022 17:27	WG1838729



Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	03/31/2022 10:43	WG1839250

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	03/29/2022 20:58	WG1838719
Arsenic,Dissolved	2.47		0.180	2.00	1	03/29/2022 20:58	WG1838719
Barium,Dissolved	63.5		0.381	2.00	1	03/29/2022 20:58	WG1838719
Beryllium,Dissolved	U		0.190	2.00	1	03/29/2022 20:58	WG1838719
Boron,Dissolved	79900		4820	15000	500	03/29/2022 22:49	WG1838719
Cadmium,Dissolved	U		0.150	1.00	1	03/29/2022 20:58	WG1838719
Calcium,Dissolved	336000		93.6	1000	1	03/29/2022 20:58	WG1838719
Chromium,Dissolved	4.28		1.24	2.00	1	03/29/2022 20:58	WG1838719
Cobalt,Dissolved	1.77	<u>J</u>	0.0596	2.00	1	03/29/2022 20:58	WG1838719
Lead,Dissolved	U		0.849	2.00	1	03/29/2022 20:58	WG1838719
Magnesium,Dissolved	749000		73.5	1000	1	03/29/2022 20:58	WG1838719
Molybdenum,Dissolved	18.5		0.348	5.00	1	03/29/2022 20:58	WG1838719
Potassium,Dissolved	14700		108	2000	1	03/29/2022 20:58	WG1838719
Selenium,Dissolved	78.8		0.300	2.00	1	03/29/2022 20:58	WG1838719
Sodium,Dissolved	67000		376	2000	1	03/29/2022 20:58	WG1838719
Thallium,Dissolved	1.38	<u>B J</u>	0.121	2.00	1	03/29/2022 20:58	WG1838719
Lithium,Dissolved	123		0.695	2.00	1	03/29/2022 20:58	WG1838719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	596000		10000	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	375000		8450	20000	1	03/27/2022 08:00	WG1838910
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 08:00	WG1838910

Sample Narrative:

L1475207-21 WG1838910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	74100		379	1000	1	03/28/2022 04:29	WG1838551
Fluoride	159		64.0	150	1	03/28/2022 04:29	WG1838551
Sulfate	72100		594	5000	1	03/28/2022 04:29	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:30	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:31	WG1838729
Arsenic	0.474	<u>J</u>	0.180	2.00	1	03/31/2022 17:31	WG1838729
Barium	50.9		0.381	2.00	1	03/31/2022 17:31	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:31	WG1838729
Boron	75.5		9.63	30.0	1	04/01/2022 16:17	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 17:31	WG1838729
Calcium	126000		93.6	1000	1	03/31/2022 17:31	WG1838729
Chromium	2.00		1.24	2.00	1	03/31/2022 17:31	WG1838729
Cobalt	1.23	<u>B J</u>	0.0596	2.00	1	03/31/2022 17:31	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:31	WG1838729
Magnesium	41300		73.5	1000	1	03/31/2022 17:31	WG1838729
Molybdenum	3.07	<u>J</u>	0.348	5.00	1	03/31/2022 17:31	WG1838729
Potassium	1570	<u>J</u>	108	2000	1	03/31/2022 17:31	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 17:31	WG1838729
Sodium	20400		376	2000	1	03/31/2022 17:31	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:31	WG1838729
Lithium	11.0		0.695	2.00	1	03/31/2022 17:31	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	583000		10000	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	473000		8450	20000	1	03/27/2022 08:03	WG1838910
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 08:03	WG1838910

Sample Narrative:

L1475207-22 WG1838910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	31300		379	1000	1	03/28/2022 04:41	WG1838551
Fluoride	94.8	J	64.0	150	1	03/28/2022 04:41	WG1838551
Sulfate	39600		594	5000	1	03/28/2022 04:41	WG1838551

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:32	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 17:34	WG1838729
Arsenic	0.226	J	0.180	2.00	1	03/31/2022 17:34	WG1838729
Barium	132		0.381	2.00	1	03/31/2022 17:34	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 17:34	WG1838729
Boron	121		9.63	30.0	1	04/01/2022 16:20	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 17:34	WG1838729
Calcium	132000		93.6	1000	1	03/31/2022 17:34	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 17:34	WG1838729
Cobalt	0.731	B J	0.0596	2.00	1	03/31/2022 17:34	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 17:34	WG1838729
Magnesium	39300		73.5	1000	1	03/31/2022 17:34	WG1838729
Molybdenum	3.00	J	0.348	5.00	1	03/31/2022 17:34	WG1838729
Potassium	1750	J	108	2000	1	03/31/2022 17:34	WG1838729
Selenium	0.383	J	0.300	2.00	1	03/31/2022 17:34	WG1838729
Sodium	16300		376	2000	1	03/31/2022 17:34	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 17:34	WG1838729
Lithium	6.84		0.695	2.00	1	03/31/2022 17:34	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	279000		10000	1	03/30/2022 14:14	WG1840598

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	222000		8450	20000	1	03/27/2022 08:06	WG1838910
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 08:06	WG1838910

Sample Narrative:

L1475207-23 WG1838910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	24800		379	1000	1	03/26/2022 10:52	WG1838552
Fluoride	147	J	64.0	150	1	03/26/2022 10:52	WG1838552
Sulfate	4830	J	594	5000	1	03/26/2022 10:52	WG1838552

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:38	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 18:18	WG1838729
Arsenic	12.1		0.180	2.00	1	03/31/2022 18:18	WG1838729
Barium	150		0.381	2.00	1	03/31/2022 18:18	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 18:18	WG1838729
Boron	90.0		9.63	30.0	1	04/01/2022 16:55	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 18:18	WG1838729
Calcium	55600		93.6	1000	1	03/31/2022 18:18	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 18:18	WG1838729
Cobalt	0.113	B J	0.0596	2.00	1	03/31/2022 18:18	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 18:18	WG1838729
Magnesium	15800		73.5	1000	1	03/31/2022 18:18	WG1838729
Molybdenum	0.624	J	0.348	5.00	1	03/31/2022 18:18	WG1838729
Potassium	2220		108	2000	1	03/31/2022 18:18	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 18:18	WG1838729
Sodium	21400		376	2000	1	04/01/2022 16:55	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 18:18	WG1838729
Lithium	1.44	J	0.695	2.00	1	03/31/2022 18:18	WG1838729

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	249000		10000	1	03/30/2022 16:34	WG1840672

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	160000		8450	20000	1	03/27/2022 08:10	WG1838910
Alkalinity,Carbonate	U		8450	20000	1	03/27/2022 08:10	WG1838910

Sample Narrative:

L1475207-24 WG1838910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

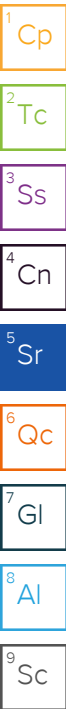
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	34400		379	1000	1	03/26/2022 11:46	WG1838552
Fluoride	168		64.0	150	1	03/26/2022 11:46	WG1838552
Sulfate	33500		594	5000	1	03/26/2022 11:46	WG1838552

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	03/31/2022 13:40	WG1839242

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/31/2022 18:21	WG1838729
Arsenic	12.5		0.180	2.00	1	03/31/2022 18:21	WG1838729
Barium	200		0.381	2.00	1	03/31/2022 18:21	WG1838729
Beryllium	U		0.190	2.00	1	03/31/2022 18:21	WG1838729
Boron	79.1		9.63	30.0	1	04/01/2022 16:59	WG1838729
Cadmium	U		0.150	1.00	1	03/31/2022 18:21	WG1838729
Calcium	46700		93.6	1000	1	03/31/2022 18:21	WG1838729
Chromium	U		1.24	2.00	1	03/31/2022 18:21	WG1838729
Cobalt	0.674	<u>B J</u>	0.0596	2.00	1	03/31/2022 18:21	WG1838729
Lead	U		0.849	2.00	1	03/31/2022 18:21	WG1838729
Magnesium	14600		73.5	1000	1	03/31/2022 18:21	WG1838729
Molybdenum	4.33	<u>J</u>	0.348	5.00	1	03/31/2022 18:21	WG1838729
Potassium	2790		108	2000	1	03/31/2022 18:21	WG1838729
Selenium	U		0.300	2.00	1	03/31/2022 18:21	WG1838729
Sodium	24700		376	2000	1	04/01/2022 16:59	WG1838729
Thallium	U		0.121	2.00	1	03/31/2022 18:21	WG1838729
Lithium	3.08		0.695	2.00	1	03/31/2022 18:21	WG1838729



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.779		0.385	0.722	03/31/2022 12:35	WG1839285
(T) Barium	102			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	101			79.0-136	03/31/2022 12:35	WG1839285

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.951		0.444	0.786	04/04/2022 13:49	WG1840705

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.172	J	0.221	0.310	04/04/2022 13:49	WG1840705
(T) Barium-133	93.4			30.0-143	04/04/2022 13:49	WG1840705

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.604		0.308	0.573	03/31/2022 12:35	WG1839285
(T) Barium	98.2			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	96.1			79.0-136	03/31/2022 12:35	WG1839285

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.14		0.451	0.645	04/04/2022 13:49	WG1840705

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.537		0.330	0.297	04/04/2022 13:49	WG1840705
(T) Barium-133	95.5			30.0-143	04/04/2022 13:49	WG1840705

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.808		0.280	0.513	03/31/2022 12:35	WG1839285
(T) Barium	105			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	95.8			79.0-136	03/31/2022 12:35	WG1839285

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.21		0.402	0.561	04/04/2022 13:49	WG1840705

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.406		0.289	0.226	04/04/2022 13:49	WG1840705
(T) Barium-133	94.1			30.0-143	04/04/2022 13:49	WG1840705

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.25		0.326	0.586	03/31/2022 12:35	WG1839285
(T) Barium	90.4			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	108			79.0-136	03/31/2022 12:35	WG1839285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.40		0.380	0.644	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.158	J	0.196	0.267	04/04/2022 13:49	WG1840705
(T) Barium-133	95.5			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.760		0.325	0.601	03/31/2022 12:35	WG1839285
(T) Barium	84.5			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	99.5			79.0-136	03/31/2022 12:35	WG1839285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.840		0.370	0.673	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0793	<u>U</u>	0.177	0.303	04/04/2022 13:49	WG1840705
(T) Barium-133	91.5			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.189	<u>U</u>	0.388	0.756	03/31/2022 12:35	WG1839285
(T) Barium	93.8			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	111			79.0-136	03/31/2022 12:35	WG1839285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.000	<u>U</u>	0.390	0.784	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	-0.00718	<u>U</u>	0.0364	0.209	04/04/2022 13:49	WG1840705
(T) Barium-133	93.3			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.477	<u>U</u>	0.487	0.955	03/31/2022 12:35	WG1839285
(T) Barium	83.4			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	94.9			79.0-136	03/31/2022 12:35	WG1839285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0859	<u>U</u>	0.508	0.983	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0859	<u>U</u>	0.145	0.231	04/04/2022 13:49	WG1840705
(T) Barium-133	96.4			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.579	J	0.321	0.601	03/31/2022 12:35	WG1839285
(T) Barium	92.2			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	94.2			79.0-136	03/31/2022 12:35	WG1839285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.812		0.375	0.626	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.233		0.193	0.174	04/04/2022 13:49	WG1840705
(T) Barium-133	99.2			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.289	<u>U</u>	0.346	0.659	03/31/2022 12:35	WG1839285
(T) Barium	82.5			62.0-143	03/31/2022 12:35	WG1839285
(T) Yttrium	97.3			79.0-136	03/31/2022 12:35	WG1839285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.346	<u>J</u>	0.377	0.715	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0571	<u>U</u>	0.149	0.277	04/04/2022 13:49	WG1840705
(T) Barium-133	97.4			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.850		0.419	0.757	04/04/2022 12:05	WG1840194
(T) Barium	103			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	95.0			79.0-136	04/04/2022 12:05	WG1840194

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.38		0.510	0.790	04/04/2022 13:49	WG1840705

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.532		0.291	0.226	04/04/2022 13:49	WG1840705
(T) Barium-133	97.9			30.0-143	04/04/2022 13:49	WG1840705

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.692		0.297	0.535	04/04/2022 12:05	WG1840194
(T) Barium	97.8			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	101			79.0-136	04/04/2022 12:05	WG1840194

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.01		0.379	0.580	04/04/2022 13:49	WG1840705

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.313		0.236	0.223	04/04/2022 13:49	WG1840705
(T) Barium-133	99.4			30.0-143	04/04/2022 13:49	WG1840705

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.592	J	0.331	0.602	04/04/2022 12:05	WG1840194
(T) Barium	84.0			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	98.1			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.658		0.356	0.644	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0658	U	0.130	0.228	04/04/2022 13:49	WG1840705
(T) Barium-133	99.8			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.585		0.321	0.582	04/04/2022 12:05	WG1840194
(T) Barium	94.2			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	102			79.0-136	04/04/2022 12:05	WG1840194

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.953		0.431	0.648	04/04/2022 13:49	WG1840705

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.369		0.287	0.286	04/04/2022 13:49	WG1840705
(T) Barium-133	97.2			30.0-143	04/04/2022 13:49	WG1840705

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.148	<u>U</u>	0.322	0.608	04/04/2022 12:05	WG1840194
(T) Barium	96.0			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	95.7			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0336	<u>U</u>	0.339	0.653	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0336	<u>U</u>	0.107	0.237	04/04/2022 13:49	WG1840705
(T) Barium-133	103			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.740		0.296	0.531	04/04/2022 12:05	WG1840194
(T) Barium	97.1			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	94.5			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.895		0.359	0.604	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.155	J	0.203	0.288	04/04/2022 13:49	WG1840705
(T) Barium-133	102			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.42		0.318	0.547	04/04/2022 12:05	WG1840194
(T) Barium	87.8			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	101			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.58		0.386	0.631	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.162	J	0.219	0.315	04/04/2022 13:49	WG1840705
(T) Barium-133	97.8			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.904		0.320	0.569	04/04/2022 12:05	WG1840194
(T) Barium	95.3			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	96.1			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.42		0.433	0.604	04/04/2022 13:49	WG1840705

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.519		0.292	0.202	04/04/2022 13:49	WG1840705
(T) Barium-133	98.9			30.0-143	04/04/2022 13:49	WG1840705

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.573	J	0.319	0.580	04/04/2022 12:05	WG1840194
(T) Barium	83.2			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	100			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.686		0.371	0.654	04/04/2022 12:05	WG1839262

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.113	U	0.190	0.303	03/30/2022 08:01	WG1839262
(T) Barium-133	95.0			30.0-143	03/30/2022 08:01	WG1839262

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.253	<u>U</u>	0.349	0.665	04/04/2022 12:05	WG1840194
(T) Barium	93.0			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	94.6			79.0-136	04/04/2022 12:05	WG1840194

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.286	<u>J</u>	0.420	0.705	04/04/2022 12:05	WG1839262

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.286		0.233	0.234	03/30/2022 08:01	WG1839262
(T) Barium-133	99.4			30.0-143	03/30/2022 08:01	WG1839262

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.296	J	0.281	0.518	04/04/2022 12:05	WG1840194
(T) Barium	102			62.0-143	04/04/2022 12:05	WG1840194
(T) Yttrium	102			79.0-136	04/04/2022 12:05	WG1840194

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.668		0.386	0.579	04/04/2022 12:05	WG1839262

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.372		0.264	0.259	03/30/2022 08:01	WG1839262
(T) Barium-133	98.1			30.0-143	03/30/2022 08:01	WG1839262

Method Blank (MB)

(MB) R3776316-1 03/30/22 11:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1476004-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1476004-03 03/30/22 11:27 • (DUP) R3776316-3 03/30/22 11:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	864000	876000	1	1.38		5

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3776316-2 03/30/22 11:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8520000	96.8	77.4-123	

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3776296-1 03/30/22 14:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1475417-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1475417-06 03/30/22 14:14 • (DUP) R3776296-3 03/30/22 14:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	486000	490000	1	0.820		5

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3776296-2 03/30/22 14:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8550000	97.2	77.4-123	

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3776299-1 03/30/22 16:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

¹Cp

²Tc

³Ss

L1474903-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1474903-03 03/30/22 16:34 • (DUP) R3776299-3 03/30/22 16:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	719000	731000	1	1.66		5

⁴Cn

⁵Sr

L1474936-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1474936-01 03/30/22 16:34 • (DUP) R3776299-4 03/30/22 16:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	872000	910000	1	4.26		5

⁶Qc

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3776299-2 03/30/22 16:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8490000	96.5	77.4-123	

⁹Sc

Method Blank (MB)

(MB) R3776297-1 03/30/22 18:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1475120-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1475120-02 03/30/22 18:00 • (DUP) R3776297-3 03/30/22 18:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	573000	603000	1	4.99		5

4 Cn

5 Sr

6 Qc

L1475207-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-09 03/30/22 18:00 • (DUP) R3776297-4 03/30/22 18:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	841000	869000	1	3.27		5

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3776297-2 03/30/22 18:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8300000	94.3	77.4-123	

Method Blank (MB)

(MB) R3777199-1 03/31/22 13:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1475822-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1475822-02 03/31/22 13:37 • (DUP) R3777199-3 03/31/22 13:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	571000	573000	1	0.465		5

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3777199-2 03/31/22 13:37

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8450000	96.0	77.4-123	

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3777052-1 03/31/22 15:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

¹Cp

²Tc

³Ss

L1475120-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1475120-03 03/31/22 15:41 • (DUP) R3777052-3 03/31/22 15:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	836000	844000	1	0.952		5

⁴Cn

⁵Sr

L1475417-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1475417-03 03/31/22 15:41 • (DUP) R3777052-4 03/31/22 15:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	623000	632000	1	1.49		5

⁶Qc

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3777052-2 03/31/22 15:41

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8610000	97.8	77.4-123	

⁹Sc

Method Blank (MB)

(MB) R3776707-1 03/31/22 12:35

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	-0.0298	<u>U</u>	0.232	0.452
(T) Barium	103		103	
(T) Yttrium	95.5		95.5	

L1475207-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-29 03/31/22 12:35 • (DUP) R3776707-5 03/31/22 12:35

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.25	0.326	0.586	1.05	0.853	0.586	1	16.9	0.212	<u>J</u>	20	3
(T) Barium	90.4			98.7	98.7							
(T) Yttrium	108			103	103							

Laboratory Control Sample (LCS)

(LCS) R3776707-2 03/31/22 12:35

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.94	119	80.0-120	
(T) Barium			107		
(T) Yttrium			100		

L1475207-28 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-28 03/31/22 12:35 • (MS) R3776707-3 03/31/22 12:35 • (MSD) R3776707-4 03/31/22 12:35

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.808	19.7	18.1	113	103	1	70.0-130			8.53		20
(T) Barium		105			104	99.6							
(T) Yttrium		95.8			96.9	106							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3777819-1 04/04/22 12:05

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	-0.141	<u>U</u>	0.246	0.464
(T) Barium	97.7		97.7	
(T) Yttrium	97.5		97.5	

L1475207-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-39 04/04/22 12:05 • (DUP) R3777819-5 04/04/22 12:05

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-0.148	0.322	0.608	0.891	0.879	0.608	1	200	1.11	<u>J</u>	20	3
(T) Barium	96.0			99.5	99.5							
(T) Yttrium	95.7			94.9	94.9							

Laboratory Control Sample (LCS)

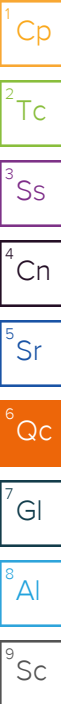
(LCS) R3777819-2 04/04/22 12:05

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.80	116	80.0-120	
(T) Barium			102		
(T) Yttrium			97.1		

L1475207-38 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-38 04/04/22 12:05 • (MS) R3777819-3 04/04/22 12:05 • (MSD) R3777819-4 04/04/22 12:05

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.585	20.6	19.5	120	113	1	70.0-130			5.89		20
(T) Barium		94.2			100	101							
(T) Yttrium		102			93.4	101							



Method Blank (MB)

(MB) R3776749-1 03/30/22 08:01

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.0198	<u>U</u>	0.0441	0.0753
(T) Barium-133	97.0		97.0	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1475207-43 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-43 03/30/22 08:01 • (DUP) R3776749-5 03/30/22 08:01

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	0.113	0.190	0.303	0.0933	0.189	0.303	1	18.7	0.0719	<u>U</u>	20	3
(T) Barium-133	95.0			100	100							

Laboratory Control Sample (LCS)

(LCS) R3776749-2 03/30/22 08:01

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	4.38	87.3	80.0-120	
(T) Barium-133			95.2		

L1475377-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475377-06 03/30/22 08:01 • (MS) R3776749-3 03/30/22 08:01 • (MSD) R3776749-4 03/30/22 08:01

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.1	-0.0632	20.1	17.5	99.9	87.2	1	75.0-125			13.6		20
(T) Barium-133		98.6			101	95.4							

Method Blank (MB)

(MB) R3778295-1 04/04/22 13:49

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-226	0.00108	<u>U</u>	0.0293	0.0687
(T) Barium-133	96.4		96.4	

L1475291-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1475291-20 04/04/22 13:49 • (DUP) R3778295-5 04/04/22 13:49

Analyte	Original Result	Original Uncertainty	Original MDA	DUP Result	DUP Uncertainty	DUP MDA	Dilution	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	+ / -	pCi/l		%			%	
Radium-226	-0.0183	0.0536	0.219	-0.00642	0.0325	0.219	1	0.000	0.190	<u>U</u>	20	3
(T) Barium-133	104			94.4	94.4							

Laboratory Control Sample (LCS)

(LCS) R3778295-2 04/04/22 13:49

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.02	4.84	96.5	80.0-120	
(T) Barium-133			96.7		

L1475207-38 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-38 04/04/22 13:49 • (MS) R3778295-3 04/04/22 13:49 • (MSD) R3778295-4 04/04/22 13:49

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.369	20.4	19.2	100	94.0	1	75.0-125			6.22		20
(T) Barium-133		97.2			99.8	94.4							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3774414-2 03/27/22 05:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1475087-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1475087-05 03/27/22 05:33 • (DUP) R3774414-3 03/27/22 05:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Alkalinity,Bicarbonate	292000	294000	1	0.502		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1475207-13 Original Sample (OS) • Duplicate (DUP)

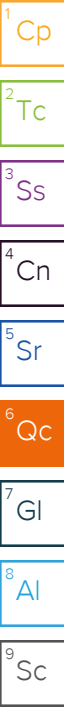
(OS) L1475207-13 03/27/22 06:49 • (DUP) R3774414-4 03/27/22 07:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Alkalinity,Bicarbonate	125000	126000	1	0.159		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5



Method Blank (MB)

(MB) R3774411-2 03/27/22 07:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1475235-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1475235-01 03/27/22 07:44 • (DUP) R3774411-3 03/27/22 07:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	579000	574000	1	0.743		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1475235-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1475235-04 03/27/22 09:18 • (DUP) R3774411-4 03/27/22 09:21

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	305000	302000	1	0.735		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3774681-1 03/27/22 17:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1475207-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-01 03/27/22 19:56 • (DUP) R3774681-3 03/27/22 20:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	5090	5090	1	0.0432		15
Fluoride	78.6	83.0	1	5.45	J	15
Sulfate	37600	37900	1	0.957		15

L1475207-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-14 03/28/22 01:55 • (DUP) R3774681-7 03/28/22 02:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	29500	30300	1	2.50		15
Fluoride	123	136	1	10.0	J	15
Sulfate	47700	48900	1	2.60		15

Laboratory Control Sample (LCS)

(LCS) R3774681-2 03/27/22 17:56

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40000	40400	101	80.0-120	
Fluoride	8000	7910	98.8	80.0-120	
Sulfate	40000	41200	103	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1475207-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1475207-01 03/27/22 19:56 • (MS) R3774681-4 03/27/22 20:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	5090	55600	101	1	80.0-120	
Fluoride	5000	78.6	5050	99.4	1	80.0-120	
Sulfate	50000	37600	86200	97.3	1	80.0-120	

L1475207-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-13 03/28/22 01:16 • (MS) R3774681-5 03/28/22 01:29 • (MSD) R3774681-6 03/28/22 01:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	28900	77900	81300	98.1	105	1	80.0-120			4.24	15
Fluoride	5000	149	5170	5430	100	106	1	80.0-120			4.91	15
Sulfate	50000	54300	102000	107000	95.5	105	1	80.0-120	<u>E</u>	<u>E</u>	4.41	15

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3774536-1 03/26/22 09:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1475207-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1475207-23 03/26/22 10:52 • (DUP) R3774536-3 03/26/22 11:06

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	24800	24200	1	2.31		15
Fluoride	147	147	1	0.340	U	15
Sulfate	4830	4640	1	3.84	U	15

L1475270-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1475270-01 03/26/22 16:01 • (DUP) R3774536-6 03/26/22 16:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	8380	8380	1	0.0477		15
Fluoride	U	U	1	0.000		15
Sulfate	644	U	1	200	P1	15

Laboratory Control Sample (LCS)

(LCS) R3774536-2 03/26/22 09:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39500	98.9	80.0-120	
Fluoride	8000	8130	102	80.0-120	
Sulfate	40000	40900	102	80.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1475207-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-23 03/26/22 10:52 • (MS) R3774536-4 03/26/22 11:19 • (MSD) R3774536-5 03/26/22 11:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	24800	74100	74300	98.7	99.1	1	80.0-120			0.309	15
Fluoride	5000	147	5370	5400	105	105	1	80.0-120			0.520	15
Sulfate	50000	4830	56300	56600	103	103	1	80.0-120			0.502	15

L1475270-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1475270-01 03/26/22 16:01 • (MS) R3774536-7 03/26/22 16:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	8380	57800	98.9	1	80.0-120	
Fluoride	5000	U	5100	102	1	80.0-120	
Sulfate	50000	644	49300	97.4	1	80.0-120	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3776586-1 04/01/22 11:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3776586-2 04/01/22 11:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	3.00	3.37	112	80.0-120	

4 Cn

5 Sr

L1475145-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475145-01 04/01/22 11:53 • (MS) R3776586-3 04/01/22 11:55 • (MSD) R3776586-4 04/01/22 11:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	3.00	U	3.55	3.47	118	116	1	75.0-125			2.24	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3776192-1 03/31/22 13:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3776192-2 03/31/22 13:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	3.00	3.00	100	80.0-120	

4 Cn

5 Sr

L1475207-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-13 03/31/22 13:14 • (MS) R3776192-3 03/31/22 13:16 • (MSD) R3776192-4 03/31/22 13:18

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	3.00	U	2.76	2.75	92.0	91.6	1	75.0-125			0.392	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3776184-1 03/31/22 10:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury,Dissolved	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3776184-2 03/31/22 10:11

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury,Dissolved	3.00	2.87	95.6	80.0-120	

4 Cn

5 Sr

L1474981-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1474981-12 03/31/22 10:15 • (MS) R3776184-3 03/31/22 10:17 • (MSD) R3776184-4 03/31/22 10:19

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury,Dissolved	3.00	U	2.20	2.10	73.3	70.0	1	75.0-125	<u>J6</u>	<u>J6</u>	4.49	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3775379-1 03/29/22 20:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Antimony,Dissolved	U		1.03	4.00
Arsenic,Dissolved	U		0.180	2.00
Barium,Dissolved	U		0.381	2.00
Beryllium,Dissolved	U		0.190	2.00
Cadmium,Dissolved	U		0.150	1.00
Calcium,Dissolved	U		93.6	1000
Chromium,Dissolved	U		1.24	2.00
Cobalt,Dissolved	U		0.0596	2.00
Iron,Dissolved	U		28.1	100
Lead,Dissolved	U		0.849	2.00
Magnesium,Dissolved	U		73.5	1000
Molybdenum,Dissolved	U		0.348	5.00
Potassium,Dissolved	U		108	2000
Selenium,Dissolved	U		0.300	2.00
Sodium,Dissolved	U		376	2000
Thallium,Dissolved	0.186	U	0.121	2.00
Lithium,Dissolved	U		0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3775388-1 03/29/22 22:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Boron,Dissolved	U		9.63	30.0

Laboratory Control Sample (LCS)

(LCS) R3775379-2 03/29/22 20:35

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Antimony,Dissolved	50.0	48.5	96.9	80.0-120	
Arsenic,Dissolved	50.0	48.2	96.4	80.0-120	
Barium,Dissolved	50.0	45.6	91.3	80.0-120	
Beryllium,Dissolved	50.0	46.9	93.8	80.0-120	
Cadmium,Dissolved	50.0	50.7	101	80.0-120	
Calcium,Dissolved	5000	4870	97.3	80.0-120	
Chromium,Dissolved	50.0	50.2	100	80.0-120	
Cobalt,Dissolved	50.0	50.1	100	80.0-120	
Iron,Dissolved	5000	5410	108	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3775379-2 03/29/22 20:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Lead,Dissolved	50.0	48.7	97.3	80.0-120	
Magnesium,Dissolved	5000	4960	99.2	80.0-120	
Molybdenum,Dissolved	50.0	49.3	98.5	80.0-120	
Potassium,Dissolved	5000	4850	97.0	80.0-120	
Selenium,Dissolved	50.0	49.3	98.6	80.0-120	
Sodium,Dissolved	5000	4660	93.2	80.0-120	
Thallium,Dissolved	50.0	47.2	94.4	80.0-120	
Lithium,Dissolved	50.0	46.2	92.4	80.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

Laboratory Control Sample (LCS)

(LCS) R3775388-2 03/29/22 22:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Boron,Dissolved	500	490	98.1	80.0-120	

⁷ Gl

⁸ Al

L1475221-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475221-01 03/29/22 20:39 • (MS) R3775379-4 03/29/22 20:46 • (MSD) R3775379-5 03/29/22 20:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony,Dissolved	50.0	U	50.2	52.3	100	105	1	75.0-125			4.01	20
Arsenic,Dissolved	50.0	0.181	49.4	48.6	98.4	96.8	1	75.0-125			1.70	20
Barium,Dissolved	50.0	65.0	108	112	85.0	94.9	1	75.0-125			4.50	20
Beryllium,Dissolved	50.0	U	47.3	46.5	94.6	93.1	1	75.0-125			1.59	20
Cadmium,Dissolved	50.0	U	52.7	52.3	105	105	1	75.0-125			0.848	20
Calcium,Dissolved	5000	161000	168000	163000	129	41.1	1	75.0-125	V	V	2.65	20
Chromium,Dissolved	50.0	U	50.2	50.2	100	100	1	75.0-125			0.107	20
Cobalt,Dissolved	50.0	U	50.7	49.8	101	99.5	1	75.0-125			1.91	20
Iron,Dissolved	5000	U	5330	5270	107	105	1	75.0-125			1.03	20
Lead,Dissolved	50.0	U	50.0	48.8	99.9	97.6	1	75.0-125			2.38	20
Magnesium,Dissolved	5000	21600	26000	26100	86.8	89.8	1	75.0-125			0.568	20
Molybdenum,Dissolved	50.0	U	49.1	49.4	98.3	98.9	1	75.0-125			0.600	20
Potassium,Dissolved	5000	1910	6670	6630	95.2	94.6	1	75.0-125			0.486	20
Selenium,Dissolved	50.0	0.497	49.6	49.5	98.2	98.1	1	75.0-125			0.153	20
Sodium,Dissolved	5000	20200	25400	25100	104	97.4	1	75.0-125			1.27	20
Thallium,Dissolved	50.0	U	48.5	47.4	97.1	94.7	1	75.0-125			2.48	20
Lithium,Dissolved	50.0	7.20	52.6	53.1	90.7	91.7	1	75.0-125			0.943	20

⁹ Sc

L1475221-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475221-01 03/29/22 22:30 • (MS) R3775388-4 03/29/22 22:38 • (MSD) R3775388-5 03/29/22 22:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Boron,Dissolved	500	51.2	545	544	98.7	98.5	1	75.0-125			0.194	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3775530-1 03/30/22 00:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	0.240	U	0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Boron	U		9.63	30.0
Cadmium	U		0.150	1.00
Calcium	U		93.6	1000
Chromium	U		1.24	2.00
Cobalt	U		0.0596	2.00
Iron	U		28.1	100
Lead	U		0.849	2.00
Magnesium	U		73.5	1000
Molybdenum	U		0.348	5.00
Potassium	U		108	2000
Selenium	0.852	U	0.300	2.00
Sodium	U		376	2000
Thallium	U		0.121	2.00
Lithium	U		0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3775530-2 03/30/22 01:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	47.2	94.5	80.0-120	
Arsenic	50.0	46.7	93.3	80.0-120	
Barium	50.0	45.9	91.8	80.0-120	
Beryllium	50.0	46.7	93.5	80.0-120	
Boron	500	474	94.7	80.0-120	
Cadmium	50.0	49.6	99.3	80.0-120	
Calcium	5000	4710	94.2	80.0-120	
Chromium	50.0	49.2	98.4	80.0-120	
Cobalt	50.0	49.3	98.6	80.0-120	
Iron	5000	5020	100	80.0-120	
Lead	50.0	47.5	94.9	80.0-120	
Magnesium	5000	4640	92.7	80.0-120	
Molybdenum	50.0	46.4	92.9	80.0-120	
Potassium	5000	4470	89.4	80.0-120	
Selenium	50.0	45.6	91.2	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3775530-2 03/30/22 01:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Sodium	5000	4670	93.5	80.0-120	
Thallium	50.0	46.1	92.1	80.0-120	
Lithium	50.0	45.5	90.9	80.0-120	

L1475034-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475034-06 03/30/22 01:04 • (MS) R3775530-4 03/30/22 01:12 • (MSD) R3775530-5 03/30/22 01:15

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony	50.0	U	48.2	48.2	96.5	96.4	1	75.0-125			0.0470	20
Arsenic	50.0	0.466	45.8	47.1	90.6	93.2	1	75.0-125			2.82	20
Barium	50.0	64.3	112	113	95.2	97.6	1	75.0-125			1.06	20
Beryllium	50.0	U	47.0	47.8	93.9	95.6	1	75.0-125			1.72	20
Boron	500	24.0	499	515	94.9	98.2	1	75.0-125			3.25	20
Cadmium	50.0	0.178	49.3	50.3	98.3	100	1	75.0-125			1.98	20
Calcium	5000	1670	6280	6350	92.2	93.7	1	75.0-125			1.25	20
Chromium	50.0	U	48.3	48.4	96.6	96.9	1	75.0-125			0.261	20
Cobalt	50.0	1.58	49.7	50.3	96.2	97.5	1	75.0-125			1.27	20
Iron	5000	871	5930	5950	101	102	1	75.0-125			0.333	20
Lead	50.0	U	48.0	49.2	96.0	98.3	1	75.0-125			2.41	20
Magnesium	5000	888	5530	5580	92.9	93.8	1	75.0-125			0.858	20
Molybdenum	50.0	U	46.9	46.8	93.7	93.5	1	75.0-125			0.239	20
Potassium	5000	1300	5770	5850	89.4	91.0	1	75.0-125			1.40	20
Selenium	50.0	0.989	48.4	46.5	94.8	90.9	1	75.0-125			4.08	20
Sodium	5000	10400	15200	15400	94.1	98.1	1	75.0-125			1.33	20
Thallium	50.0	U	46.7	47.5	93.4	94.9	1	75.0-125			1.62	20
Lithium	50.0	U	46.8	47.6	90.9	92.6	1	75.0-125			1.80	20

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3776219-1 03/31/22 14:11

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	1.15		1.03	4.00
Arsenic	U		0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Cadmium	U		0.150	1.00
Calcium	U		93.6	1000
Chromium	U		1.24	2.00
Cobalt	0.146	U	0.0596	2.00
Lead	U		0.849	2.00
Magnesium	U		73.5	1000
Molybdenum	U		0.348	5.00
Potassium	U		108	2000
Selenium	U		0.300	2.00
Sodium	U		376	2000
Thallium	0.168	U	0.121	2.00
Lithium	U		0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3776702-1 04/01/22 14:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron	U		9.63	30.0

Laboratory Control Sample (LCS)

(LCS) R3776219-2 03/31/22 14:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	48.7	97.5	80.0-120	
Arsenic	50.0	48.7	97.3	80.0-120	
Barium	50.0	47.6	95.2	80.0-120	
Beryllium	50.0	52.2	104	80.0-120	
Cadmium	50.0	51.3	103	80.0-120	
Calcium	5000	4940	98.8	80.0-120	
Chromium	50.0	51.9	104	80.0-120	
Cobalt	50.0	51.3	103	80.0-120	
Lead	50.0	49.4	98.9	80.0-120	
Magnesium	5000	4770	95.3	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3776219-2 03/31/22 14:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Molybdenum	50.0	50.1	100	80.0-120	
Potassium	5000	4840	96.8	80.0-120	
Selenium	50.0	51.4	103	80.0-120	
Sodium	5000	5140	103	80.0-120	
Thallium	50.0	47.9	95.8	80.0-120	
Lithium	50.0	53.0	106	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3776702-2 04/01/22 14:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Boron	500	524	105	80.0-120	

L1475207-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-13 03/31/22 14:18 • (MS) R3776219-4 03/31/22 14:25 • (MSD) R3776219-6 03/31/22 14:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony	50.0	U	49.6	49.4	99.3	98.9	1	75.0-125			0.410	20
Arsenic	50.0	16.5	64.0	64.8	94.9	96.5	1	75.0-125			1.24	20
Barium	50.0	189	228	233	78.2	87.7	1	75.0-125			2.06	20
Beryllium	50.0	U	53.0	51.4	106	103	1	75.0-125			2.90	20
Cadmium	50.0	U	51.8	51.6	104	103	1	75.0-125			0.541	20
Calcium	5000	43900	48300	48100	86.7	82.7	1	75.0-125			0.415	20
Chromium	50.0	U	49.8	50.6	99.6	101	1	75.0-125			1.46	20
Cobalt	50.0	0.398	49.8	50.4	98.9	99.9	1	75.0-125			1.09	20
Lead	50.0	U	50.6	49.8	101	99.6	1	75.0-125			1.61	20
Magnesium	5000	13500	17600	17300	81.9	74.9	1	75.0-125		J6	2.00	20
Molybdenum	50.0	10.3	60.3	59.8	100	99.0	1	75.0-125			0.867	20
Potassium	5000	2380	7070	7170	93.9	95.9	1	75.0-125			1.39	20
Selenium	50.0	U	50.3	50.4	101	101	1	75.0-125			0.311	20
Sodium	5000	23000	27300	27300	86.8	85.9	1	75.0-125			0.168	20
Thallium	50.0	U	48.6	48.3	97.1	96.5	1	75.0-125			0.639	20
Lithium	50.0	5.36	58.0	56.9	105	103	1	75.0-125			1.88	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1475207-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1475207-13 04/01/22 14:54 • (MS) R3776702-4 04/01/22 15:01 • (MSD) R3776702-5 04/01/22 15:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Boron	500	73.5	597	604	105	106	1	75.0-125			1.11	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

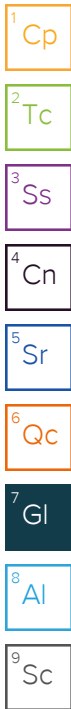
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
U	Below Detectable Limits: Indicates that the analyte was not detected.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: **S&ME - Nashville, TN**
 862 East Crescentville Road
 Cincinnati, OH 45246

Billing Information:
 Accounts Payable
 658 Grassmere Park Dr, Ste 100
 Nashville, TN 37211

Report to: **Vince Epps**

Project Description: **Miami Fort Station - North Bend, OH**

City/State Collected: **North Bend, OH**

Please Circle: **PT**

Email To: **vepps@smeinc.com; vgallagher@smeinc.com**

Client Project #: **7217-17-003D**

Lab Project #: **LITENGNTN-MIAMI**

Site/Facility ID #: **MIAMI (SITE 115)**

P.O. #

Quote #

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Date Results Needed

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW-7		GW		3/23/22	1335	5	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres
MW-2		GW		3/23/22	1745	7	CCR Metals + K, Na, Mg 250mlHDPE-HNO3
MW-3A		GW		3/24/22	1035	5	Diss Metals (FF) 250mlHDPE-HNO3
MW-4		GW		3/23/22	2010	5	Dissolved Fe 250mlHDPE NoPres
MW-5		GW		3/24/22	1125	5	RA-226/228COMB 1L-HDPE-Add HNO3
MW-6		GW		3/24/22	1220	5	TDS 250mlHDPE-NoPres
MW-1		GW		3/23/22	1545	5	Total Fe 250mlHDPE-HNO3
MW-8		GW		3/23/22	1620	5	
MW-9		GW		3/24/22	1330	5	
MW-10		GW		3/24/22	1240	5	

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW-7		GW		3/23/22	1335	5	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres
MW-2		GW		3/23/22	1745	7	CCR Metals + K, Na, Mg 250mlHDPE-HNO3
MW-3A		GW		3/24/22	1035	5	Diss Metals (FF) 250mlHDPE-HNO3
MW-4		GW		3/23/22	2010	5	Dissolved Fe 250mlHDPE NoPres
MW-5		GW		3/24/22	1125	5	RA-226/228COMB 1L-HDPE-Add HNO3
MW-6		GW		3/24/22	1220	5	TDS 250mlHDPE-NoPres
MW-1		GW		3/23/22	1545	5	Total Fe 250mlHDPE-HNO3
MW-8		GW		3/23/22	1620	5	
MW-9		GW		3/24/22	1330	5	
MW-10		GW		3/24/22	1240	5	

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks: ***Log rad to same SDG as different dash #'s as EX 10 day TAT***

pH _____ Temp _____
 Flow _____ Other _____

Samples returned via:
 UPS FedEx Courier

Tracking #

Sample Receipt Checklist

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

If Applicable

VOA Zero Headspace: Y N

Preservation Correct/Checked: Y N

RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature) **Victoria Gallagher** Date: **3/24/22** Time: **1600**

Received by: (Signature) _____ Trip Blank Received: Yes/No
 HCL/MeOH
 TBR

Temp: _____ °C Bottles Received: **115**

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) **[Signature]** Date: **3/25/22** Time: **0900**

Hold: _____ Condition: **NCF OK**

Chain of Custody Page ___ of ___

Pace
 PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG # **U475207**
A060

Table

Acctnum: **LITENGNTN**

Template: **T181344**

Prelogin: **P908921**

PM: **134 - Mark W. Beasley**

PB: **BF 2/28/22**

Shipped Via: **Courier**

Remarks | Sample # (lab only)

Company Name/Address: **S&ME - Nashville, TN**
 862 East Crescentville Road
 Cincinnati, OH 45246

Billing Information:
 Accounts Payable
 658 Grassmere Park Dr, Ste 100
 Nashville, TN 37211

Report to: **Vince Epps**
 Email To: **vepps@smeinc.com; vgallagher@smeinc.com**

Project Description: **Miami Fort Station - North Bend, OH**
 City/State Collected: **North Bend, OH**
 Please Circle: **PT** MT CT ET

Phone: **513-771-8471**
 Client Project #: **7217-17-003D**
 Lab Project #: **LITENGNTN-MIAMI**

Chain of Custody Page of

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 PEOPLE ADVANCING SCIENCE

MT JULIET, TN
 12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Collected by (print): **Victoria Gallagher**
 Collected by (signature): *Victoria Gallagher*
 Rush? (Lab MUST Be Notified)
 ___ Same Day ___ Five Day
 ___ Next Day ___ 5 Day (Rad Only)
 ___ Two Day ___ 10 Day (Rad Only)
 ___ Three Day
 Immediately
 Packed on Ice N ___ Y **X**

Site/Facility ID #: **MIAMI (SITE 115)**
 P.O. #
 Quote #
 Date Results Needed
 No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Pres	Chk	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K, Na, Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MW-11		GW		3/24/22	1150	5	1	1				2	1			-11,30
MW-12		GW		3/24/22	1325	5	1	1				2	1			-12,37
MW-13		GW		3/24/22	0930	5	1	1				2	1			-13,38
MW-14		GW		3/23/22	1900	5	1	1				2	1			-14,39
MW-15		GW		3/23/22	1140	5	1	1				2	1			-15,40
MW-16		GW		3/23/22	1055	5	1	1				2	1			-16,41
4A		GW														
MFS_A1_SOURCE WATER CCR_TOTAL		GW		3/23/22	1630	5	1	1				2	1			-17,42
MFS_A1_SOURCE WATER CCR DISS		GW		3/23/22	1630	1			1							-18'
MFS_B1_SOURCE WATER CCR_TOTAL		GW		3/23/22	1645	5	1	1				2	1			-19,43

SDG # **U475207**
 Table #
 Acctnum: **LITENGNTN**
 Template: **T181344**
 Prelogin: **P908921**
 PM: **134 - Mark W. Beasley**
 PB: **BF 2/28/22**
 Shipped Via: **Courier**

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks: *****Log rad to same SDG as different dash #'s as EX 10 day TAT*****

pH _____ Temp _____
 Flow _____ Other _____


Samples returned via:
 ___ UPS ___ FedEx **X** Courier _____ Tracking # _____

Relinquished by: (Signature) *Victoria Gallagher* Date: **3/24/22** Time: **1600**
 Received by: (Signature) _____ Trip Blank Received: Yes No
 HCL/MeoH TBR

Relinquished by: (Signature) _____ Date: _____ Time: _____
 Received by: (Signature) _____ Temp: _____ °C Bottles Received: **115**
 If preservation required by Login: Date/Time

Relinquished by: (Signature) _____ Date: _____ Time: _____
 Received for lab by: (Signature) *[Signature]* Date: **3/24/22** Time: **0900**
 Hold: _____ Condition: **NCF / OK**

Sample Receipt Checklist
 COC Seal Present/Intact: Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 If Applicable
 VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

Company Name/Address: S&ME - Nashville, TN 862 East Crescentville Road Cincinnati, OH 45246		Billing Information: Accounts Payable 658 Grassmere Park Dr, Ste 100 Nashville, TN 37211		Analysis / Container / Preservative		Chain of Custody Page <u> </u> of <u> </u>	
Report to: Vince Epps		Email To: vepps@smeinc.com;vgallagher@smeinc.com		Pres Chk		 PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf	

Project Description: Miami Fort Station - North Bend, OH		City/State Collected: North Bend, OH	Please Circle: PT MT CT ET	
---	--	--	--------------------------------------	--

Phone: 513-771-8471	Client Project # 7217-17-003D	Lab Project # LITENGNTN-MIAMI
Collected by (print): <i>Victoria Gallagher</i>	Site/Facility ID # MIAMI (SITE 115)	P.O. #

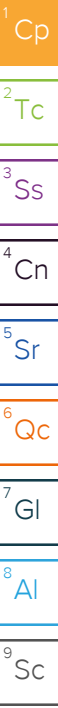
Collected by (signature): <i>Victoria Gallagher</i>	Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day	Quote #	Date Results Needed	No. of Cntrs
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>				

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K,Na,Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MFS_B1_SOURCE WATER CCR DISS		GW		3/23/22	1645	1			1						-20
MW-17		GW		3/23/22	1455	5	1	1			2	1			-21, 45
MW-19		GW		3/23/22	1245	5	1	1			2	1			-22, 46
DUP-01032422		GW		3/23/22	0930	3	1	1				1			-23
DUP-02032422		GW		3/23/22	0930	3	1	1				1			-24
SPIKE MATRIX		GW			0930	5	1	1			2	1			-13, 38
		NPW													
		NPW													
		NPW													
		NPW													

* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other	Remarks:***Log rad to same SDG as different dash #'s as EX 10 day TAT***	pH _____ Temp _____ Flow _____ Other _____	Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input checked="" type="checkbox"/> Courier	Tracking #	Trip Blank Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> HCT/MeOH TBR	Temp: _____ °C Bottles Received: 115
Relinquished by: (Signature) <i>Victoria Gallagher</i>	Date: 3/24/22	Time: 1600	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>
			Date: 3/23/22 Time: 1600
			Hold: Condition: OK

11475207

<u>Tracking Numbers</u>		<u>Temperature</u>
S67 5375 5852		5.0+0.5.0 A7B4
S67/ 5375 8922		2.9+0.29 DE A2
S671 5375- 5966		2.2+0.22 DE A2
S671 5375 5955		1.0+0.1.0 DE A2
S671 5375 5977		1.9+0.1.9 DE A2



S&ME - Nashville, TN

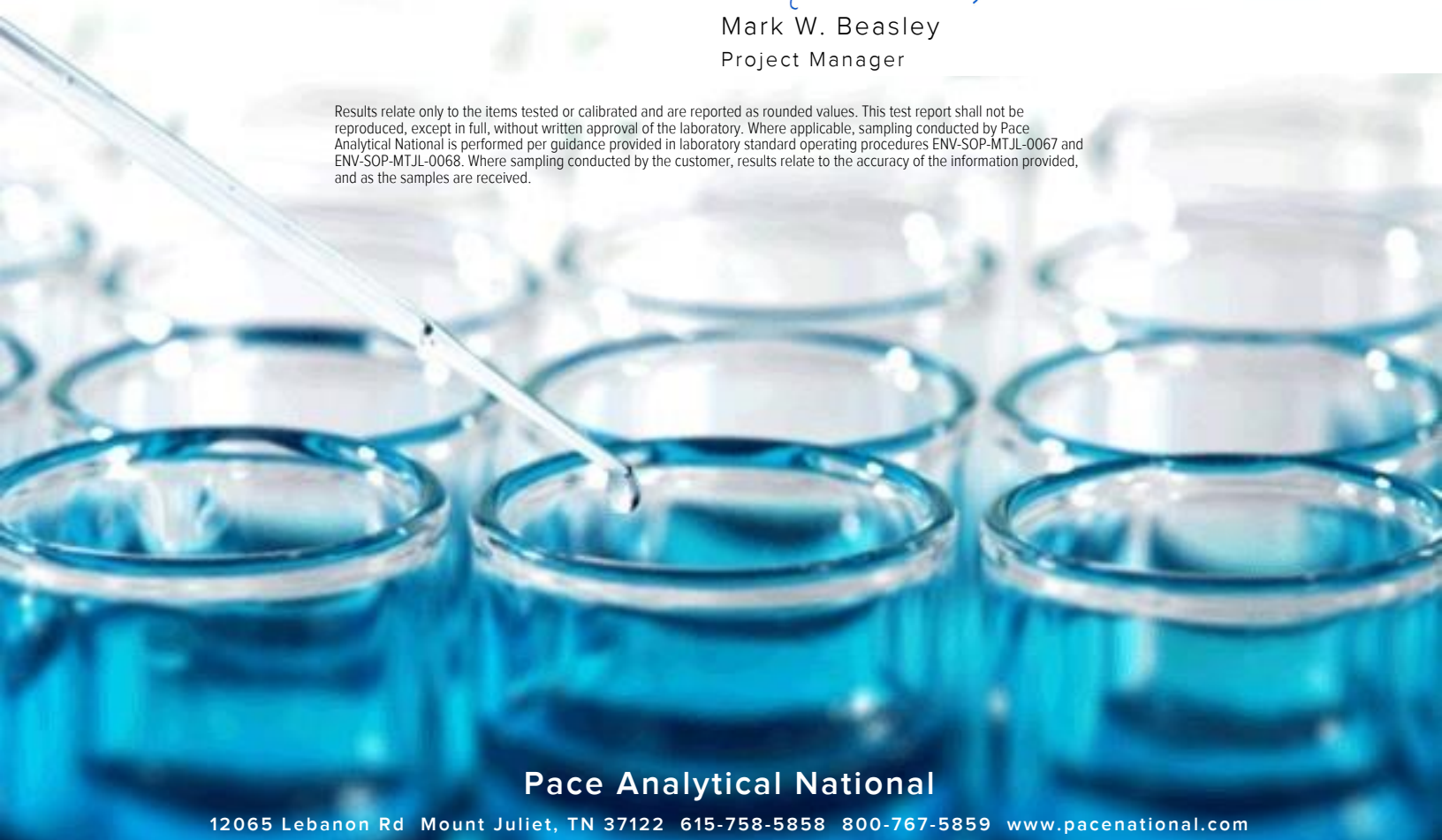
Sample Delivery Group: L1538932
Samples Received: 09/23/2022
Project Number: 7217-17-003D
Description: Miami Fort Station - North Bend, OH
Site: MIAMI (SITE 115)
Report To: Vince Epps
862 East Crescentville Road
Cincinnati, OH 45246

Entire Report Reviewed By:



Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

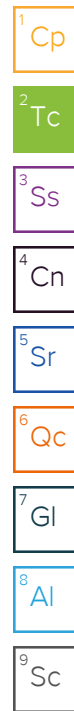








Pace Analytical National

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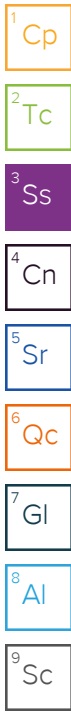
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SAMPLE SUMMARY

MW-11 L1538932-01 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 13:10 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 14:41	10/01/22 14:41	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 18:58	09/27/22 18:58	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933906	1	10/06/22 10:57	10/07/22 08:49	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:18	LD	Mt. Juliet, TN



MW-12 L1538932-02 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 09:55 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934748	1	09/29/22 18:07	09/29/22 23:31	DTM	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 14:45	10/01/22 14:45	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 19:39	09/27/22 19:39	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	5	09/27/22 19:52	09/27/22 19:52	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933906	1	10/06/22 10:57	10/07/22 08:51	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:28	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	100	10/06/22 10:26	10/07/22 10:46	JPD	Mt. Juliet, TN

MW-13 L1538932-03 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 11:10 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934748	1	09/29/22 18:07	09/29/22 23:31	DTM	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 14:48	10/01/22 14:48	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 20:06	09/27/22 20:06	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933906	1	10/06/22 10:57	10/07/22 08:53	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:31	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/07/22 10:49	JPD	Mt. Juliet, TN

MW-14 L1538932-04 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 13:30 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 14:53	10/01/22 14:53	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 20:46	09/27/22 20:46	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933906	1	10/06/22 10:57	10/07/22 08:56	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:34	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/07/22 10:53	JPD	Mt. Juliet, TN

MW-15 L1538932-05 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 11:25 Received date/time 09/23/22 09:00

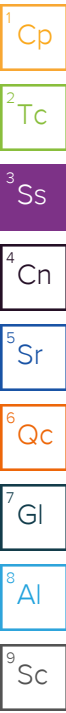
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 14:57	10/01/22 14:57	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 21:00	09/27/22 21:00	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	5	09/27/22 21:13	09/27/22 21:13	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:15	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:37	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	5	10/06/22 10:26	10/07/22 10:56	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-16 L1538932-06 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 10:50 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:01	10/01/22 15:01	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 21:27	09/27/22 21:27	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:17	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:41	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/07/22 10:59	JPD	Mt. Juliet, TN



4A L1538932-07 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 11:40 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:13	10/01/22 15:13	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 21:40	09/27/22 21:40	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:19	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:44	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	5	10/06/22 10:26	10/07/22 11:02	JPD	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR_TOTAL L1538932-08 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 18:15 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:17	10/01/22 15:17	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 21:54	09/27/22 21:54	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	10	09/27/22 22:07	09/27/22 22:07	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:21	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:47	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	500	10/06/22 10:26	10/07/22 11:06	JPD	Mt. Juliet, TN

MFS_A1_SOURCE WATER CCR DISS L1538932-09 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 18:15 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1933913	1	09/30/22 10:23	10/02/22 09:21	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935081	1	10/06/22 08:55	10/06/22 15:33	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935081	500	10/06/22 08:55	10/06/22 18:29	LD	Mt. Juliet, TN

MFS_B1_SOURCE WATER CCR_TOTAL L1538932-10 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 13:30 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:21	10/01/22 15:21	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 22:21	09/27/22 22:21	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1934083	10	09/29/22 04:18	09/29/22 04:18	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:23	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:51	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	100	10/06/22 10:26	10/07/22 11:09	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-7 L1538932-11 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 13:55 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:26	10/01/22 15:26	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 22:34	09/27/22 22:34	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:09	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 18:55	LD	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

MW-2 L1538932-12 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 10:55 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:34	10/01/22 15:34	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/27/22 23:51	09/27/22 23:51	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:25	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935081	1	10/06/22 08:55	10/06/22 16:21	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:54	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	10	10/06/22 10:26	10/07/22 11:12	JPD	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-3A L1538932-13 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 14:00 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:37	10/01/22 15:37	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 00:04	09/28/22 00:04	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:31	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 19:57	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	5	10/06/22 10:26	10/07/22 11:15	JPD	Mt. Juliet, TN

MW-4 L1538932-14 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 12:30 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:41	10/01/22 15:41	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 00:17	09/28/22 00:17	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1934083	10	09/29/22 04:34	09/29/22 04:34	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:33	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 20:11	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	5	10/06/22 10:26	10/07/22 11:34	JPD	Mt. Juliet, TN

MW-5 L1538932-15 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 18:10 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933829	1	09/28/22 13:21	09/28/22 17:02	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:44	10/01/22 15:44	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 00:30	09/28/22 00:30	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	10	09/28/22 00:43	09/28/22 00:43	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:35	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 20:15	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	500	10/06/22 10:26	10/07/22 11:38	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-6 L1538932-16 GW

Collected by Victoria Gallagher Collected date/time 09/21/22 16:55 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933829	1	09/28/22 13:21	09/28/22 17:02	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 15:56	10/01/22 15:56	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 00:56	09/28/22 00:56	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	10	09/28/22 01:08	09/28/22 01:08	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:36	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 20:18	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	100	10/06/22 10:26	10/07/22 11:41	JPD	Mt. Juliet, TN



MW-1 L1538932-17 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 09:05 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 16:00	10/01/22 16:00	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 01:21	09/28/22 01:21	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1934083	10	09/29/22 05:22	09/29/22 05:22	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:38	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	1	10/06/22 10:26	10/06/22 20:21	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1935146	10	10/06/22 10:26	10/07/22 11:44	JPD	Mt. Juliet, TN

MW-8 L1538932-18 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 14:15 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934276	1	09/29/22 11:05	09/29/22 15:30	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 16:04	10/01/22 16:04	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 02:00	09/28/22 02:00	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1934083	10	09/29/22 05:38	09/29/22 05:38	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:40	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:16	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	5	10/10/22 10:25	10/10/22 17:23	LD	Mt. Juliet, TN

MW-9 L1538932-19 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 09:20 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934748	1	09/29/22 18:07	09/29/22 23:31	DTM	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 16:08	10/01/22 16:08	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 02:13	09/28/22 02:13	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1934083	10	09/29/22 05:54	09/29/22 05:54	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:42	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:20	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	20	10/10/22 10:25	10/10/22 17:27	LD	Mt. Juliet, TN

MW-10 L1538932-20 GW

Collected by Victoria Gallagher Collected date/time 09/22/22 12:25 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1934748	1	09/29/22 18:07	09/29/22 23:31	DTM	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935652	1	10/01/22 16:12	10/01/22 16:12	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931585	1	09/28/22 02:26	09/28/22 02:26	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:44	SRT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-10 L1538932-20 GW

Collected by Victoria Gallagher
 Collected date/time 09/22/22 12:25
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:23	LD	Mt. Juliet, TN

1 Cp

2 Tc

MFS_B1_SOURCE WATER CCR DISS L1538932-21 GW

Collected by Victoria Gallagher
 Collected date/time 09/22/22 13:30
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1933913	1	09/30/22 10:23	10/02/22 09:24	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1938431	1	10/13/22 09:28	10/13/22 14:15	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1938431	100	10/13/22 09:28	10/14/22 00:33	JPD	Mt. Juliet, TN

3 Ss

4 Cn

5 Sr

6 Qc

MW-17 L1538932-22 GW

Collected by Victoria Gallagher
 Collected date/time 09/21/22 12:45
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933829	1	09/28/22 13:21	09/28/22 17:02	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935654	1	10/02/22 07:25	10/02/22 07:25	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931589	1	09/26/22 15:45	09/26/22 15:45	LBR	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:46	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:26	LD	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MW-19 L1538932-23 GW

Collected by Victoria Gallagher
 Collected date/time 09/21/22 15:20
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935654	1	10/02/22 07:29	10/02/22 07:29	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931589	1	09/26/22 16:33	09/26/22 16:33	LBR	Mt. Juliet, TN
Mercury by Method 7470A	WG1933908	1	10/04/22 07:36	10/05/22 10:48	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:29	LD	Mt. Juliet, TN

09212022-DUP L1538932-24 GW

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933611	1	09/28/22 12:16	09/28/22 16:40	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935654	1	10/02/22 07:34	10/02/22 07:34	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931589	1	09/26/22 16:49	09/26/22 16:49	LBR	Mt. Juliet, TN
Mercury by Method 7470A	WG1933909	1	10/07/22 08:34	10/09/22 12:48	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:33	LD	Mt. Juliet, TN

09212022-DUPA L1538932-25 GW

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1933829	1	09/28/22 13:21	09/28/22 17:02	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG1935654	1	10/02/22 07:38	10/02/22 07:38	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1931589	1	09/26/22 17:37	09/26/22 17:37	LBR	Mt. Juliet, TN
Mercury by Method 7470A	WG1933909	1	10/07/22 08:34	10/09/22 12:51	ABL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1940041	1	10/10/22 10:25	10/10/22 16:36	LD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-11 L1538932-27 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/22/22 13:10 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-12 L1538932-28 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/22/22 09:55 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

MW-13 L1538932-29 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/22/22 11:10 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MFS_A1_SOURCE WATER CCR_TOTAL L1538932-30 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/21/22 18:15 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

MFS_B1_SOURCE WATER CCR_TOTAL L1538932-31 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/22/22 13:30 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

MW-7 L1538932-32 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/21/22 00:00 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932364	1	09/30/22 12:08	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-2 L1538932-33 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-3A L1538932-34 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

MW-4 L1538932-35 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

MW-5 L1538932-36 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

MW-6 L1538932-37 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932357	1	09/30/22 09:57	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 12:33	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

MW-1 L1538932-38 Non-Potable Water

Collected by Victoria Gallagher
 Collected date/time 09/21/22 00:00
 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932364	1	09/30/22 12:08	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-8 L1538932-39 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/21/22 00:00 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932364	1	09/30/22 12:08	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

MW-9 L1538932-40 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/21/22 00:00 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932364	1	09/30/22 12:08	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

⁵Sr

⁶Qc

⁷Gl

MW-10 L1538932-41 Non-Potable Water

Collected by Victoria Gallagher Collected date/time 09/21/22 00:00 Received date/time 09/23/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG1932364	1	09/30/22 12:08	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG1933252	1	10/03/22 16:36	10/05/22 15:44	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG1933252	1	10/03/22 16:36	10/04/22 15:45	RGT	Mt. Juliet, TN

⁸Al

⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	294000		10000	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	187000		8450	20000	1	10/01/2022 14:41	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 14:41	WG1935652

Sample Narrative:

L1538932-01 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

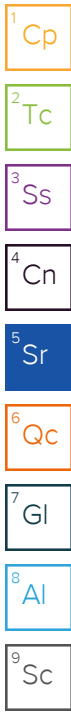
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	43000		379	1000	1	09/27/2022 18:58	WG1931585
Fluoride	150	J	64.0	150	1	09/27/2022 18:58	WG1931585
Sulfate	33900		594	5000	1	09/27/2022 18:58	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/07/2022 08:49	WG1933906

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:18	WG1935146
Arsenic	9.08		0.180	2.00	1	10/06/2022 19:18	WG1935146
Barium	212		0.381	2.00	1	10/06/2022 19:18	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:18	WG1935146
Boron	55.6		9.63	30.0	1	10/06/2022 19:18	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:18	WG1935146
Calcium	53900		93.6	1000	1	10/06/2022 19:18	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:18	WG1935146
Cobalt	0.586	J	0.0596	2.00	1	10/06/2022 19:18	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:18	WG1935146
Magnesium	17600		73.5	1000	1	10/06/2022 19:18	WG1935146
Molybdenum	3.77	J	0.348	5.00	1	10/06/2022 19:18	WG1935146
Potassium	2890		108	2000	1	10/06/2022 19:18	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:18	WG1935146
Sodium	25800		376	2000	1	10/06/2022 19:18	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:18	WG1935146
Lithium	3.30		0.695	2.00	1	10/06/2022 19:18	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	964000	<u>J3</u>	20000	1	09/29/2022 23:31	WG1934748

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	74300		8450	20000	1	10/01/2022 14:45	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 14:45	WG1935652

Sample Narrative:

L1538932-02 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

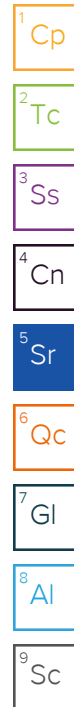
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	221000		1900	5000	5	09/27/2022 19:52	WG1931585
Fluoride	66.4	<u>J</u>	64.0	150	1	09/27/2022 19:39	WG1931585
Sulfate	374000		2970	25000	5	09/27/2022 19:52	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	1.47		0.100	0.200	1	10/07/2022 08:51	WG1933906

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:28	WG1935146
Arsenic	0.342	<u>B J</u>	0.180	2.00	1	10/06/2022 19:28	WG1935146
Barium	14.6		0.381	2.00	1	10/06/2022 19:28	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:28	WG1935146
Boron	5760		963	3000	100	10/07/2022 10:46	WG1935146
Cadmium	1.24		0.150	1.00	1	10/06/2022 19:28	WG1935146
Calcium	170000		93.6	1000	1	10/06/2022 19:28	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:28	WG1935146
Cobalt	3.00		0.0596	2.00	1	10/06/2022 19:28	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:28	WG1935146
Magnesium	53600		73.5	1000	1	10/06/2022 19:28	WG1935146
Molybdenum	U		0.348	5.00	1	10/06/2022 19:28	WG1935146
Potassium	613	<u>J</u>	108	2000	1	10/06/2022 19:28	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:28	WG1935146
Sodium	43500		376	2000	1	10/06/2022 19:28	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:28	WG1935146
Lithium	3.79		0.695	2.00	1	10/06/2022 19:28	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	245000		10000	1	09/29/2022 23:31	WG1934748

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	116000		8450	20000	1	10/01/2022 14:48	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 14:48	WG1935652

Sample Narrative:

L1538932-03 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

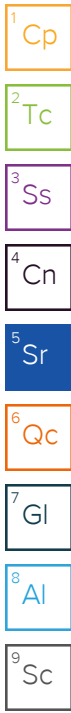
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28900		379	1000	1	09/27/2022 20:06	WG1931585
Fluoride	158		64.0	150	1	09/27/2022 20:06	WG1931585
Sulfate	49000		594	5000	1	09/27/2022 20:06	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/07/2022 08:53	WG1933906

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:31	WG1935146
Arsenic	17.3		0.180	2.00	1	10/06/2022 19:31	WG1935146
Barium	171		0.381	2.00	1	10/06/2022 19:31	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:31	WG1935146
Boron	56.7		9.63	30.0	1	10/07/2022 10:49	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:31	WG1935146
Calcium	40400		93.6	1000	1	10/06/2022 19:31	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:31	WG1935146
Cobalt	0.572	J	0.0596	2.00	1	10/06/2022 19:31	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:31	WG1935146
Magnesium	12300		73.5	1000	1	10/06/2022 19:31	WG1935146
Molybdenum	11.0		0.348	5.00	1	10/06/2022 19:31	WG1935146
Potassium	2110		108	2000	1	10/06/2022 19:31	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:31	WG1935146
Sodium	22600		376	2000	1	10/06/2022 19:31	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:31	WG1935146
Lithium	5.31		0.695	2.00	1	10/06/2022 19:31	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	208000		10000	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	118000		8450	20000	1	10/01/2022 14:53	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 14:53	WG1935652

Sample Narrative:

L1538932-04 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

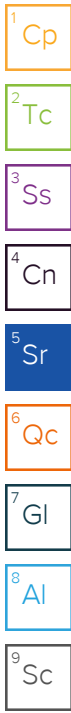
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	27200		379	1000	1	09/27/2022 20:46	WG1931585
Fluoride	100	J	64.0	150	1	09/27/2022 20:46	WG1931585
Sulfate	52200		594	5000	1	09/27/2022 20:46	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/07/2022 08:56	WG1933906

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:34	WG1935146
Arsenic	0.893	B J	0.180	2.00	1	10/06/2022 19:34	WG1935146
Barium	40.5		0.381	2.00	1	10/06/2022 19:34	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:34	WG1935146
Boron	58.1		9.63	30.0	1	10/07/2022 10:53	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:34	WG1935146
Calcium	42600		93.6	1000	1	10/06/2022 19:34	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:34	WG1935146
Cobalt	0.520	J	0.0596	2.00	1	10/06/2022 19:34	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:34	WG1935146
Magnesium	11800		73.5	1000	1	10/06/2022 19:34	WG1935146
Molybdenum	5.62		0.348	5.00	1	10/06/2022 19:34	WG1935146
Potassium	2330		108	2000	1	10/06/2022 19:34	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:34	WG1935146
Sodium	22500		376	2000	1	10/06/2022 19:34	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:34	WG1935146
Lithium	4.15		0.695	2.00	1	10/06/2022 19:34	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	752000		20000	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	331000		8450	20000	1	10/01/2022 14:57	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 14:57	WG1935652

Sample Narrative:

L1538932-05 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	214000		1900	5000	5	09/27/2022 21:13	WG1931585
Fluoride	149	J	64.0	150	1	09/27/2022 21:00	WG1931585
Sulfate	34200		594	5000	1	09/27/2022 21:00	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:15	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:37	WG1935146
Arsenic	0.731	B J	0.180	2.00	1	10/06/2022 19:37	WG1935146
Barium	83.1		0.381	2.00	1	10/06/2022 19:37	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:37	WG1935146
Boron	342		48.2	150	5	10/07/2022 10:56	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:37	WG1935146
Calcium	136000		93.6	1000	1	10/06/2022 19:37	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:37	WG1935146
Cobalt	2.41		0.0596	2.00	1	10/06/2022 19:37	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:37	WG1935146
Magnesium	39700		73.5	1000	1	10/06/2022 19:37	WG1935146
Molybdenum	22.4		0.348	5.00	1	10/06/2022 19:37	WG1935146
Potassium	3020		108	2000	1	10/06/2022 19:37	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:37	WG1935146
Sodium	67700		376	2000	1	10/06/2022 19:37	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:37	WG1935146
Lithium	7.45		0.695	2.00	1	10/06/2022 19:37	WG1935146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	958000		20000	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	439000		8450	20000	1	10/01/2022 15:01	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:01	WG1935652

Sample Narrative:

L1538932-06 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

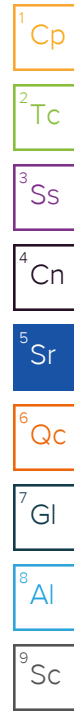
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	103000		379	1000	1	09/27/2022 21:27	WG1931585
Fluoride	114	J	64.0	150	1	09/27/2022 21:27	WG1931585
Sulfate	198000		594	5000	1	09/27/2022 21:27	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:17	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:41	WG1935146
Arsenic	0.244	B J	0.180	2.00	1	10/06/2022 19:41	WG1935146
Barium	76.2		0.381	2.00	1	10/06/2022 19:41	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:41	WG1935146
Boron	73.2		9.63	30.0	1	10/07/2022 10:59	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:41	WG1935146
Calcium	183000		93.6	1000	1	10/06/2022 19:41	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:41	WG1935146
Cobalt	0.554	J	0.0596	2.00	1	10/06/2022 19:41	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:41	WG1935146
Magnesium	60400		73.5	1000	1	10/06/2022 19:41	WG1935146
Molybdenum	0.350	J	0.348	5.00	1	10/06/2022 19:41	WG1935146
Potassium	3530		108	2000	1	10/06/2022 19:41	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:41	WG1935146
Sodium	47800		376	2000	1	10/06/2022 19:41	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:41	WG1935146
Lithium	11.6		0.695	2.00	1	10/06/2022 19:41	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1060000		25000	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	463000		8450	20000	1	10/01/2022 15:13	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:13	WG1935652

Sample Narrative:

L1538932-07 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	157000		379	1000	1	09/27/2022 21:40	WG1931585
Fluoride	396		64.0	150	1	09/27/2022 21:40	WG1931585
Sulfate	140000		594	5000	1	09/27/2022 21:40	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:19	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:44	WG1935146
Arsenic	0.598	B J	0.180	2.00	1	10/06/2022 19:44	WG1935146
Barium	80.7		0.381	2.00	1	10/06/2022 19:44	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:44	WG1935146
Boron	343		48.2	150	5	10/07/2022 11:02	WG1935146
Cadmium	0.163	J	0.150	1.00	1	10/06/2022 19:44	WG1935146
Calcium	140000		93.6	1000	1	10/06/2022 19:44	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:44	WG1935146
Cobalt	1.28	J	0.0596	2.00	1	10/06/2022 19:44	WG1935146
Lead	7.61		0.849	2.00	1	10/06/2022 19:44	WG1935146
Magnesium	48300		73.5	1000	1	10/06/2022 19:44	WG1935146
Molybdenum	46.1		0.348	5.00	1	10/06/2022 19:44	WG1935146
Potassium	8120		108	2000	1	10/06/2022 19:44	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:44	WG1935146
Sodium	68300		376	2000	1	10/06/2022 19:44	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:44	WG1935146
Lithium	12.8		0.695	2.00	1	10/06/2022 19:44	WG1935146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	4060000		100000	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	163000		8450	20000	1	10/01/2022 15:17	WG1935652
Alkalinity,Carbonate	151000		8450	20000	1	10/01/2022 15:17	WG1935652

Sample Narrative:

L1538932-08 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

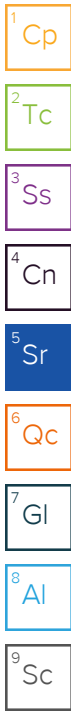
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1180000		3790	10000	10	09/27/2022 22:07	WG1931585
Fluoride	1590		64.0	150	1	09/27/2022 21:54	WG1931585
Sulfate	1430000		5940	50000	10	09/27/2022 22:07	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:21	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:47	WG1935146
Arsenic	4.58		0.180	2.00	1	10/06/2022 19:47	WG1935146
Barium	98.5		0.381	2.00	1	10/06/2022 19:47	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:47	WG1935146
Boron	48100		4820	15000	500	10/07/2022 11:06	WG1935146
Cadmium	0.398	J	0.150	1.00	1	10/06/2022 19:47	WG1935146
Calcium	236000		93.6	1000	1	10/06/2022 19:47	WG1935146
Chromium	3.99		1.24	2.00	1	10/06/2022 19:47	WG1935146
Cobalt	6.64		0.0596	2.00	1	10/06/2022 19:47	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:47	WG1935146
Magnesium	599000		73.5	1000	1	10/06/2022 19:47	WG1935146
Molybdenum	23.9		0.348	5.00	1	10/06/2022 19:47	WG1935146
Potassium	15200		108	2000	1	10/06/2022 19:47	WG1935146
Selenium	56.8		0.300	2.00	1	10/06/2022 19:47	WG1935146
Sodium	89400		376	2000	1	10/06/2022 19:47	WG1935146
Thallium	1.45	J	0.121	2.00	1	10/06/2022 19:47	WG1935146
Lithium	77.5		0.695	2.00	1	10/06/2022 19:47	WG1935146



Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	10/02/2022 09:21	WG1933913

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	10/06/2022 15:33	WG1935081
Arsenic,Dissolved	3.98		0.180	2.00	1	10/06/2022 15:33	WG1935081
Barium,Dissolved	104		0.381	2.00	1	10/06/2022 15:33	WG1935081
Beryllium,Dissolved	U		0.190	2.00	1	10/06/2022 15:33	WG1935081
Boron,Dissolved	57000		4820	15000	500	10/06/2022 18:29	WG1935081
Cadmium,Dissolved	0.340	J	0.150	1.00	1	10/06/2022 15:33	WG1935081
Calcium,Dissolved	244000		93.6	1000	1	10/06/2022 15:33	WG1935081
Chromium,Dissolved	2.35		1.24	2.00	1	10/06/2022 15:33	WG1935081
Cobalt,Dissolved	6.00		0.0596	2.00	1	10/06/2022 15:33	WG1935081
Lead,Dissolved	U		0.849	2.00	1	10/06/2022 15:33	WG1935081
Magnesium,Dissolved	661000		73.5	1000	1	10/06/2022 15:33	WG1935081
Molybdenum,Dissolved	25.2		0.348	5.00	1	10/06/2022 15:33	WG1935081
Potassium,Dissolved	16300		108	2000	1	10/06/2022 15:33	WG1935081
Selenium,Dissolved	61.0		0.300	2.00	1	10/06/2022 15:33	WG1935081
Sodium,Dissolved	94500		376	2000	1	10/06/2022 15:33	WG1935081
Thallium,Dissolved	1.43	J	0.121	2.00	1	10/06/2022 15:33	WG1935081
Lithium,Dissolved	76.7		0.695	2.00	1	10/06/2022 15:33	WG1935081

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	792000		20000	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	146000		8450	20000	1	10/01/2022 15:21	WG1935652
Alkalinity,Carbonate	14300	J	8450	20000	1	10/01/2022 15:21	WG1935652

Sample Narrative:

L1538932-10 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	168000		379	1000	1	09/27/2022 22:21	WG1931585
Fluoride	463		64.0	150	1	09/27/2022 22:21	WG1931585
Sulfate	325000		5940	50000	10	09/29/2022 04:18	WG1934083

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:23	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:51	WG1935146
Arsenic	8.18		0.180	2.00	1	10/06/2022 19:51	WG1935146
Barium	109		0.381	2.00	1	10/06/2022 19:51	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:51	WG1935146
Boron	5810		963	3000	100	10/07/2022 11:09	WG1935146
Cadmium	0.391	J	0.150	1.00	1	10/06/2022 19:51	WG1935146
Calcium	87000		93.6	1000	1	10/06/2022 19:51	WG1935146
Chromium	2.41		1.24	2.00	1	10/06/2022 19:51	WG1935146
Cobalt	0.580	J	0.0596	2.00	1	10/06/2022 19:51	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:51	WG1935146
Magnesium	89100		73.5	1000	1	10/06/2022 19:51	WG1935146
Molybdenum	19.0		0.348	5.00	1	10/06/2022 19:51	WG1935146
Potassium	6760		108	2000	1	10/06/2022 19:51	WG1935146
Selenium	8.33		0.300	2.00	1	10/06/2022 19:51	WG1935146
Sodium	51300		376	2000	1	10/06/2022 19:51	WG1935146
Thallium	0.638	J	0.121	2.00	1	10/06/2022 19:51	WG1935146
Lithium	22.5		0.695	2.00	1	10/06/2022 19:51	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	491000		10000	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	368000		8450	20000	1	10/01/2022 15:26	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:26	WG1935652

Sample Narrative:

L1538932-11 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

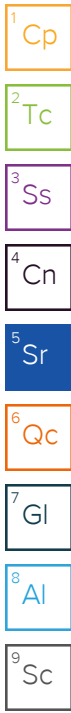
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	4060		379	1000	1	09/27/2022 22:34	WG1931585
Fluoride	122	J	64.0	150	1	09/27/2022 22:34	WG1931585
Sulfate	46500		594	5000	1	09/27/2022 22:34	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:09	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 18:55	WG1935146
Arsenic	0.245	B J	0.180	2.00	1	10/06/2022 18:55	WG1935146
Barium	91.9		0.381	2.00	1	10/06/2022 18:55	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 18:55	WG1935146
Boron	84.1		9.63	30.0	1	10/06/2022 18:55	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 18:55	WG1935146
Calcium	108000		93.6	1000	1	10/06/2022 18:55	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 18:55	WG1935146
Cobalt	0.123	J	0.0596	2.00	1	10/06/2022 18:55	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 18:55	WG1935146
Magnesium	34100		73.5	1000	1	10/06/2022 18:55	WG1935146
Molybdenum	0.592	J	0.348	5.00	1	10/06/2022 18:55	WG1935146
Potassium	1180	J	108	2000	1	10/06/2022 18:55	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 18:55	WG1935146
Sodium	4130		376	2000	1	10/06/2022 18:55	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 18:55	WG1935146
Lithium	4.55		0.695	2.00	1	10/06/2022 18:55	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	643000		13300	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	601000		8450	20000	1	10/01/2022 15:34	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:34	WG1935652

Sample Narrative:

L1538932-12 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

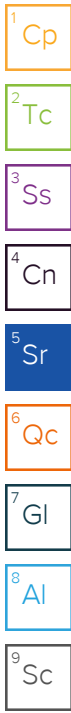
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	33200		379	1000	1	09/27/2022 23:51	WG1931585
Fluoride	109	J	64.0	150	1	09/27/2022 23:51	WG1931585
Sulfate	23800		594	5000	1	09/27/2022 23:51	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:25	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:54	WG1935146
Arsenic	33.8		0.180	2.00	1	10/06/2022 19:54	WG1935146
Barium	479		0.381	2.00	1	10/06/2022 19:54	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:54	WG1935146
Boron	564		96.3	300	10	10/07/2022 11:12	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:54	WG1935146
Calcium	143000		93.6	1000	1	10/06/2022 19:54	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:54	WG1935146
Cobalt	0.487	J	0.0596	2.00	1	10/06/2022 19:54	WG1935146
Iron	48700		28.1	100	1	10/06/2022 19:54	WG1935146
Iron,Dissolved	U		28.1	100	1	10/06/2022 16:21	WG1935081
Lead	U		0.849	2.00	1	10/06/2022 19:54	WG1935146
Magnesium	61200		73.5	1000	1	10/06/2022 19:54	WG1935146
Molybdenum	U		0.348	5.00	1	10/06/2022 19:54	WG1935146
Potassium	849	J	108	2000	1	10/06/2022 19:54	WG1935146
Selenium	0.347	J	0.300	2.00	1	10/06/2022 19:54	WG1935146
Sodium	18000		376	2000	1	10/06/2022 19:54	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:54	WG1935146
Lithium	1.25	J	0.695	2.00	1	10/06/2022 19:54	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	250000		10000	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	202000		8450	20000	1	10/01/2022 15:37	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:37	WG1935652

Sample Narrative:

L1538932-13 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

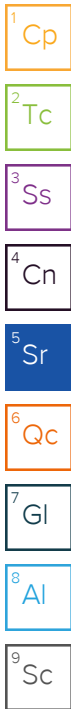
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23700		379	1000	1	09/28/2022 00:04	WG1931585
Fluoride	121	J	64.0	150	1	09/28/2022 00:04	WG1931585
Sulfate	4520	J	594	5000	1	09/28/2022 00:04	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:31	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 19:57	WG1935146
Arsenic	11.0		0.180	2.00	1	10/06/2022 19:57	WG1935146
Barium	128		0.381	2.00	1	10/06/2022 19:57	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 19:57	WG1935146
Boron	59.8	J	48.2	150	5	10/07/2022 11:15	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 19:57	WG1935146
Calcium	50300		93.6	1000	1	10/06/2022 19:57	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 19:57	WG1935146
Cobalt	0.0655	J	0.0596	2.00	1	10/06/2022 19:57	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 19:57	WG1935146
Magnesium	14100		73.5	1000	1	10/06/2022 19:57	WG1935146
Molybdenum	0.597	J	0.348	5.00	1	10/06/2022 19:57	WG1935146
Potassium	1920	J	108	2000	1	10/06/2022 19:57	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 19:57	WG1935146
Sodium	19200		376	2000	1	10/06/2022 19:57	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 19:57	WG1935146
Lithium	1.34	J	0.695	2.00	1	10/06/2022 19:57	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	819000		13300	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	177000		8450	20000	1	10/01/2022 15:41	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:41	WG1935652

Sample Narrative:

L1538932-14 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

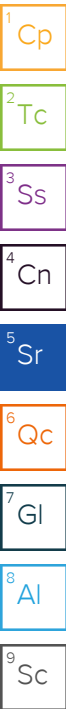
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23500		379	1000	1	09/28/2022 00:17	WG1931585
Fluoride	208		64.0	150	1	09/28/2022 00:17	WG1931585
Sulfate	473000		5940	50000	10	09/29/2022 04:34	WG1934083

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:33	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 20:11	WG1935146
Arsenic	1.33	B J	0.180	2.00	1	10/06/2022 20:11	WG1935146
Barium	12.8		0.381	2.00	1	10/06/2022 20:11	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 20:11	WG1935146
Boron	248		48.2	150	5	10/07/2022 11:34	WG1935146
Cadmium	0.440	J	0.150	1.00	1	10/06/2022 20:11	WG1935146
Calcium	160000		93.6	1000	1	10/06/2022 20:11	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 20:11	WG1935146
Cobalt	6.19		0.0596	2.00	1	10/06/2022 20:11	WG1935146
Lead	1.21	J	0.849	2.00	1	10/06/2022 20:11	WG1935146
Magnesium	47100		73.5	1000	1	10/06/2022 20:11	WG1935146
Molybdenum	0.925	J	0.348	5.00	1	10/06/2022 20:11	WG1935146
Potassium	939	J	108	2000	1	10/06/2022 20:11	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 20:11	WG1935146
Sodium	21700		376	2000	1	10/06/2022 20:11	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 20:11	WG1935146
Lithium	4.24		0.695	2.00	1	10/06/2022 20:11	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	2250000		50000	1	09/28/2022 17:02	WG1933829

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	272000		8450	20000	1	10/01/2022 15:44	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:44	WG1935652

Sample Narrative:

L1538932-15 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

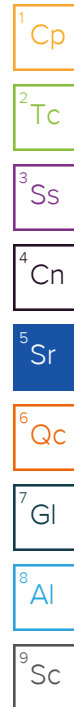
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	580000		3790	10000	10	09/28/2022 00:43	WG1931585
Fluoride	U		64.0	150	1	09/28/2022 00:30	WG1931585
Sulfate	532000		5940	50000	10	09/28/2022 00:43	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:35	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 20:15	WG1935146
Arsenic	0.600	<u>B J</u>	0.180	2.00	1	10/06/2022 20:15	WG1935146
Barium	86.8		0.381	2.00	1	10/06/2022 20:15	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 20:15	WG1935146
Boron	26600		4820	15000	500	10/07/2022 11:38	WG1935146
Cadmium	0.226	<u>J</u>	0.150	1.00	1	10/06/2022 20:15	WG1935146
Calcium	437000		93.6	1000	1	10/06/2022 20:15	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 20:15	WG1935146
Cobalt	0.349	<u>J</u>	0.0596	2.00	1	10/06/2022 20:15	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 20:15	WG1935146
Magnesium	81400		73.5	1000	1	10/06/2022 20:15	WG1935146
Molybdenum	17.2		0.348	5.00	1	10/06/2022 20:15	WG1935146
Potassium	6740		108	2000	1	10/06/2022 20:15	WG1935146
Selenium	0.882	<u>J</u>	0.300	2.00	1	10/06/2022 20:15	WG1935146
Sodium	79400		376	2000	1	10/06/2022 20:15	WG1935146
Thallium	0.191	<u>J</u>	0.121	2.00	1	10/06/2022 20:15	WG1935146
Lithium	11.4		0.695	2.00	1	10/06/2022 20:15	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1580000		50000	1	09/28/2022 17:02	WG1933829

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	623000		8450	20000	1	10/01/2022 15:56	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 15:56	WG1935652

Sample Narrative:

L1538932-16 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

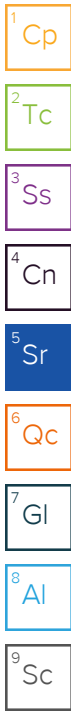
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	493000		3790	10000	10	09/28/2022 01:08	WG1931585
Fluoride	591		64.0	150	1	09/28/2022 00:56	WG1931585
Sulfate	169000		594	5000	1	09/28/2022 00:56	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:36	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 20:18	WG1935146
Arsenic	17.8		0.180	2.00	1	10/06/2022 20:18	WG1935146
Barium	562		0.381	2.00	1	10/06/2022 20:18	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 20:18	WG1935146
Boron	10200		963	3000	100	10/07/2022 11:41	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 20:18	WG1935146
Calcium	146000		93.6	1000	1	10/06/2022 20:18	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 20:18	WG1935146
Cobalt	6.89		0.0596	2.00	1	10/06/2022 20:18	WG1935146
Lead	2.59		0.849	2.00	1	10/06/2022 20:18	WG1935146
Magnesium	227000		73.5	1000	1	10/06/2022 20:18	WG1935146
Molybdenum	159		0.348	5.00	1	10/06/2022 20:18	WG1935146
Potassium	5410		108	2000	1	10/06/2022 20:18	WG1935146
Selenium	0.341	J	0.300	2.00	1	10/06/2022 20:18	WG1935146
Sodium	63300		376	2000	1	10/06/2022 20:18	WG1935146
Thallium	U		0.121	2.00	1	10/06/2022 20:18	WG1935146
Lithium	12.7		0.695	2.00	1	10/06/2022 20:18	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	600000		13300	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	192000		8450	20000	1	10/01/2022 16:00	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 16:00	WG1935652

Sample Narrative:

L1538932-17 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

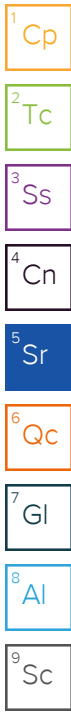
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	40400		379	1000	1	09/28/2022 01:21	WG1931585
Fluoride	416		64.0	150	1	09/28/2022 01:21	WG1931585
Sulfate	323000		5940	50000	10	09/29/2022 05:22	WG1934083

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:38	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/06/2022 20:21	WG1935146
Arsenic	0.398	B J	0.180	2.00	1	10/06/2022 20:21	WG1935146
Barium	39.7		0.381	2.00	1	10/06/2022 20:21	WG1935146
Beryllium	U		0.190	2.00	1	10/06/2022 20:21	WG1935146
Boron	653		96.3	300	10	10/07/2022 11:44	WG1935146
Cadmium	U		0.150	1.00	1	10/06/2022 20:21	WG1935146
Calcium	149000		93.6	1000	1	10/06/2022 20:21	WG1935146
Chromium	U		1.24	2.00	1	10/06/2022 20:21	WG1935146
Cobalt	0.257	J	0.0596	2.00	1	10/06/2022 20:21	WG1935146
Lead	U		0.849	2.00	1	10/06/2022 20:21	WG1935146
Magnesium	26600		73.5	1000	1	10/06/2022 20:21	WG1935146
Molybdenum	62.9		0.348	5.00	1	10/06/2022 20:21	WG1935146
Potassium	7810		108	2000	1	10/06/2022 20:21	WG1935146
Selenium	U		0.300	2.00	1	10/06/2022 20:21	WG1935146
Sodium	33200		376	2000	1	10/06/2022 20:21	WG1935146
Thallium	0.225	J	0.121	2.00	1	10/06/2022 20:21	WG1935146
Lithium	37.1		0.695	2.00	1	10/06/2022 20:21	WG1935146



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	696000		13300	1	09/29/2022 15:30	WG1934276

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	209000		8450	20000	1	10/01/2022 16:04	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 16:04	WG1935652

Sample Narrative:

L1538932-18 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	40800		379	1000	1	09/28/2022 02:00	WG1931585
Fluoride	229		64.0	150	1	09/28/2022 02:00	WG1931585
Sulfate	319000		5940	50000	10	09/29/2022 05:38	WG1934083

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:40	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:16	WG1940041
Arsenic	0.339	J	0.180	2.00	1	10/10/2022 16:16	WG1940041
Barium	45.6		0.381	2.00	1	10/10/2022 16:16	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:16	WG1940041
Boron	992		48.2	150	5	10/10/2022 17:23	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:16	WG1940041
Calcium	139000		93.6	1000	1	10/10/2022 16:16	WG1940041
Chromium	U		1.24	2.00	1	10/10/2022 16:16	WG1940041
Cobalt	U		0.0596	2.00	1	10/10/2022 16:16	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:16	WG1940041
Magnesium	34800		73.5	1000	1	10/10/2022 16:16	WG1940041
Molybdenum	8.24		0.348	5.00	1	10/10/2022 16:16	WG1940041
Potassium	6560		108	2000	1	10/10/2022 16:16	WG1940041
Selenium	1.10	J	0.300	2.00	1	10/10/2022 16:16	WG1940041
Sodium	32300		376	2000	1	10/10/2022 16:16	WG1940041
Thallium	U		0.121	2.00	1	10/10/2022 16:16	WG1940041
Lithium	14.1		0.695	2.00	1	10/10/2022 16:16	WG1940041



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	909000		13300	1	09/29/2022 23:31	WG1934748

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	209000		8450	20000	1	10/01/2022 16:08	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 16:08	WG1935652

Sample Narrative:

L1538932-19 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	76000		379	1000	1	09/28/2022 02:13	WG1931585
Fluoride	332		64.0	150	1	09/28/2022 02:13	WG1931585
Sulfate	423000		5940	50000	10	09/29/2022 05:54	WG1934083

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:42	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:20	WG1940041
Arsenic	0.368	J	0.180	2.00	1	10/10/2022 16:20	WG1940041
Barium	81.6		0.381	2.00	1	10/10/2022 16:20	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:20	WG1940041
Boron	3180		193	600	20	10/10/2022 17:27	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:20	WG1940041
Calcium	177000		93.6	1000	1	10/10/2022 16:20	WG1940041
Chromium	U		1.24	2.00	1	10/10/2022 16:20	WG1940041
Cobalt	0.215	J	0.0596	2.00	1	10/10/2022 16:20	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:20	WG1940041
Magnesium	42500		73.5	1000	1	10/10/2022 16:20	WG1940041
Molybdenum	48.4		0.348	5.00	1	10/10/2022 16:20	WG1940041
Potassium	6160		108	2000	1	10/10/2022 16:20	WG1940041
Selenium	U		0.300	2.00	1	10/10/2022 16:20	WG1940041
Sodium	37000		376	2000	1	10/10/2022 16:20	WG1940041
Thallium	U		0.121	2.00	1	10/10/2022 16:20	WG1940041
Lithium	8.62		0.695	2.00	1	10/10/2022 16:20	WG1940041

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	285000		10000	1	09/29/2022 23:31	WG1934748

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	200000		8450	20000	1	10/01/2022 16:12	WG1935652
Alkalinity,Carbonate	U		8450	20000	1	10/01/2022 16:12	WG1935652

Sample Narrative:

L1538932-20 WG1935652: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

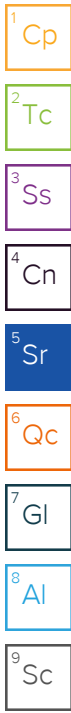
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	32400		379	1000	1	09/28/2022 02:26	WG1931585
Fluoride	222		64.0	150	1	09/28/2022 02:26	WG1931585
Sulfate	15000		594	5000	1	09/28/2022 02:26	WG1931585

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:44	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:23	WG1940041
Arsenic	16.4		0.180	2.00	1	10/10/2022 16:23	WG1940041
Barium	153		0.381	2.00	1	10/10/2022 16:23	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:23	WG1940041
Boron	108		9.63	30.0	1	10/10/2022 16:23	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:23	WG1940041
Calcium	53200		93.6	1000	1	10/10/2022 16:23	WG1940041
Chromium	U		1.24	2.00	1	10/10/2022 16:23	WG1940041
Cobalt	0.329	J	0.0596	2.00	1	10/10/2022 16:23	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:23	WG1940041
Magnesium	18700		73.5	1000	1	10/10/2022 16:23	WG1940041
Molybdenum	5.03		0.348	5.00	1	10/10/2022 16:23	WG1940041
Potassium	3330		108	2000	1	10/10/2022 16:23	WG1940041
Selenium	U		0.300	2.00	1	10/10/2022 16:23	WG1940041
Sodium	20400		376	2000	1	10/10/2022 16:23	WG1940041
Thallium	U		0.121	2.00	1	10/10/2022 16:23	WG1940041
Lithium	1.81	J	0.695	2.00	1	10/10/2022 16:23	WG1940041



Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	10/02/2022 09:24	WG1933913

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	10/13/2022 14:15	WG1938431
Arsenic,Dissolved	7.19		0.180	2.00	1	10/13/2022 14:15	WG1938431
Barium,Dissolved	106		0.381	2.00	1	10/13/2022 14:15	WG1938431
Beryllium,Dissolved	U		0.190	2.00	1	10/13/2022 14:15	WG1938431
Boron,Dissolved	6220		963	3000	100	10/14/2022 00:33	WG1938431
Cadmium,Dissolved	0.216	J	0.150	1.00	1	10/13/2022 14:15	WG1938431
Calcium,Dissolved	85800		93.6	1000	1	10/13/2022 14:15	WG1938431
Chromium,Dissolved	1.63	B J	1.24	2.00	1	10/13/2022 14:15	WG1938431
Cobalt,Dissolved	0.328	B J	0.0596	2.00	1	10/13/2022 14:15	WG1938431
Lead,Dissolved	U		0.849	2.00	1	10/13/2022 14:15	WG1938431
Magnesium,Dissolved	89700		73.5	1000	1	10/13/2022 14:15	WG1938431
Molybdenum,Dissolved	19.7		0.348	5.00	1	10/13/2022 14:15	WG1938431
Potassium,Dissolved	6500		108	2000	1	10/13/2022 14:15	WG1938431
Selenium,Dissolved	8.86		0.300	2.00	1	10/13/2022 14:15	WG1938431
Sodium,Dissolved	50300		376	2000	1	10/13/2022 14:15	WG1938431
Thallium,Dissolved	0.606	J	0.121	2.00	1	10/13/2022 14:15	WG1938431
Lithium,Dissolved	U		69.5	200	100	10/14/2022 00:33	WG1938431

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	620000		13300	1	09/28/2022 17:02	WG1933829

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	378000		8450	20000	1	10/02/2022 07:25	WG1935654
Alkalinity,Carbonate	U		8450	20000	1	10/02/2022 07:25	WG1935654

Sample Narrative:

L1538932-22 WG1935654: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

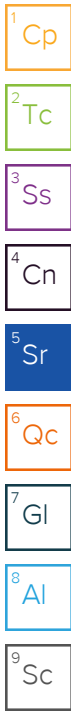
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	80200		379	1000	1	09/26/2022 15:45	WG1931589
Fluoride	202		64.0	150	1	09/26/2022 15:45	WG1931589
Sulfate	79900		594	5000	1	09/26/2022 15:45	WG1931589

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:46	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:26	WG1940041
Arsenic	0.404	J	0.180	2.00	1	10/10/2022 16:26	WG1940041
Barium	53.1		0.381	2.00	1	10/10/2022 16:26	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:26	WG1940041
Boron	65.1		9.63	30.0	1	10/10/2022 16:26	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:26	WG1940041
Calcium	133000		93.6	1000	1	10/10/2022 16:26	WG1940041
Chromium	U		1.24	2.00	1	10/10/2022 16:26	WG1940041
Cobalt	1.58	J	0.0596	2.00	1	10/10/2022 16:26	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:26	WG1940041
Magnesium	43800		73.5	1000	1	10/10/2022 16:26	WG1940041
Molybdenum	3.05	J	0.348	5.00	1	10/10/2022 16:26	WG1940041
Potassium	1570	J	108	2000	1	10/10/2022 16:26	WG1940041
Selenium	U		0.300	2.00	1	10/10/2022 16:26	WG1940041
Sodium	18800		376	2000	1	10/10/2022 16:26	WG1940041
Thallium	U		0.121	2.00	1	10/10/2022 16:26	WG1940041
Lithium	9.25		0.695	2.00	1	10/10/2022 16:26	WG1940041



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	576000		13300	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	463000		8450	20000	1	10/02/2022 07:29	WG1935654
Alkalinity,Carbonate	U		8450	20000	1	10/02/2022 07:29	WG1935654

Sample Narrative:

L1538932-23 WG1935654: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

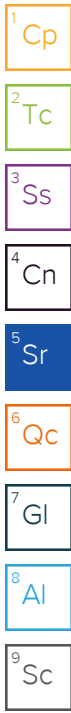
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	37000		379	1000	1	09/26/2022 16:33	WG1931589
Fluoride	135	J	64.0	150	1	09/26/2022 16:33	WG1931589
Sulfate	41000		594	5000	1	09/26/2022 16:33	WG1931589

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/05/2022 10:48	WG1933908

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:29	WG1940041
Arsenic	0.231	J	0.180	2.00	1	10/10/2022 16:29	WG1940041
Barium	144		0.381	2.00	1	10/10/2022 16:29	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:29	WG1940041
Boron	114		9.63	30.0	1	10/10/2022 16:29	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:29	WG1940041
Calcium	140000		93.6	1000	1	10/10/2022 16:29	WG1940041
Chromium	U		1.24	2.00	1	10/10/2022 16:29	WG1940041
Cobalt	0.872	J	0.0596	2.00	1	10/10/2022 16:29	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:29	WG1940041
Magnesium	40600		73.5	1000	1	10/10/2022 16:29	WG1940041
Molybdenum	2.75	J	0.348	5.00	1	10/10/2022 16:29	WG1940041
Potassium	1780	J	108	2000	1	10/10/2022 16:29	WG1940041
Selenium	0.663	J	0.300	2.00	1	10/10/2022 16:29	WG1940041
Sodium	16000		376	2000	1	10/10/2022 16:29	WG1940041
Thallium	0.189	J	0.121	2.00	1	10/10/2022 16:29	WG1940041
Lithium	6.06		0.695	2.00	1	10/10/2022 16:29	WG1940041



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	481000		10000	1	09/28/2022 16:40	WG1933611

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	361000		8450	20000	1	10/02/2022 07:34	WG1935654
Alkalinity,Carbonate	U		8450	20000	1	10/02/2022 07:34	WG1935654

Sample Narrative:

L1538932-24 WG1935654: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

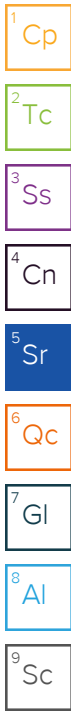
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	4080		379	1000	1	09/26/2022 16:49	WG1931589
Fluoride	137	J	64.0	150	1	09/26/2022 16:49	WG1931589
Sulfate	48000		594	5000	1	09/26/2022 16:49	WG1931589

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/09/2022 12:48	WG1933909

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:33	WG1940041
Arsenic	U		0.180	2.00	1	10/10/2022 16:33	WG1940041
Barium	97.5		0.381	2.00	1	10/10/2022 16:33	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:33	WG1940041
Boron	92.0		9.63	30.0	1	10/10/2022 16:33	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:33	WG1940041
Calcium	115000		93.6	1000	1	10/10/2022 16:33	WG1940041
Chromium	1.32	J	1.24	2.00	1	10/10/2022 16:33	WG1940041
Cobalt	0.188	J	0.0596	2.00	1	10/10/2022 16:33	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:33	WG1940041
Magnesium	35100		73.5	1000	1	10/10/2022 16:33	WG1940041
Molybdenum	0.856	J	0.348	5.00	1	10/10/2022 16:33	WG1940041
Potassium	1380	J	108	2000	1	10/10/2022 16:33	WG1940041
Selenium	0.314	J	0.300	2.00	1	10/10/2022 16:33	WG1940041
Sodium	4080		376	2000	1	10/10/2022 16:33	WG1940041
Thallium	U		0.121	2.00	1	10/10/2022 16:33	WG1940041
Lithium	3.70		0.695	2.00	1	10/10/2022 16:33	WG1940041



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	608000		13300	1	09/28/2022 17:02	WG1933829

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity,Bicarbonate	461000		8450	20000	1	10/02/2022 07:38	WG1935654
Alkalinity,Carbonate	U		8450	20000	1	10/02/2022 07:38	WG1935654

Sample Narrative:

L1538932-25 WG1935654: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

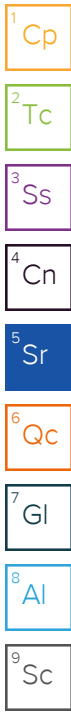
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	37800		379	1000	1	09/26/2022 17:37	WG1931589
Fluoride	142	J	64.0	150	1	09/26/2022 17:37	WG1931589
Sulfate	41500		594	5000	1	09/26/2022 17:37	WG1931589

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.100	0.200	1	10/09/2022 12:51	WG1933909

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	10/10/2022 16:36	WG1940041
Arsenic	0.226	J	0.180	2.00	1	10/10/2022 16:36	WG1940041
Barium	147		0.381	2.00	1	10/10/2022 16:36	WG1940041
Beryllium	U		0.190	2.00	1	10/10/2022 16:36	WG1940041
Boron	110		9.63	30.0	1	10/10/2022 16:36	WG1940041
Cadmium	U		0.150	1.00	1	10/10/2022 16:36	WG1940041
Calcium	141000		93.6	1000	1	10/10/2022 16:36	WG1940041
Chromium	U		1.24	2.00	1	10/10/2022 16:36	WG1940041
Cobalt	1.14	J	0.0596	2.00	1	10/10/2022 16:36	WG1940041
Lead	U		0.849	2.00	1	10/10/2022 16:36	WG1940041
Magnesium	40300		73.5	1000	1	10/10/2022 16:36	WG1940041
Molybdenum	2.72	J	0.348	5.00	1	10/10/2022 16:36	WG1940041
Potassium	1800	J	108	2000	1	10/10/2022 16:36	WG1940041
Selenium	0.605	J	0.300	2.00	1	10/10/2022 16:36	WG1940041
Sodium	16100		376	2000	1	10/10/2022 16:36	WG1940041
Thallium	U		0.121	2.00	1	10/10/2022 16:36	WG1940041
Lithium	6.25		0.695	2.00	1	10/10/2022 16:36	WG1940041



Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.678		0.221	0.619	10/05/2022 12:33	WG1932357
(T) Barium	100			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	98.3			30.0-136	10/05/2022 12:33	WG1932357

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.995		0.330	0.681	10/05/2022 12:33	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.317		0.245	0.283	10/04/2022 15:45	WG1933252
(T) Barium-133	97.4			30.0-143	10/04/2022 15:45	WG1933252

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.608		0.203	0.569	10/05/2022 12:33	WG1932357
(T) Barium	101			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	101			30.0-136	10/05/2022 12:33	WG1932357

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.793		0.286	0.629	10/05/2022 12:33	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.184	J	0.202	0.267	10/04/2022 15:45	WG1933252
(T) Barium-133	95.3			30.0-143	10/04/2022 15:45	WG1933252

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.163	<u>U</u>	0.216	0.631	10/05/2022 12:33	WG1932357
(T) Barium	106			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	109			30.0-136	10/05/2022 12:33	WG1932357

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.693	<u>J</u>	0.376	0.707	10/05/2022 12:33	WG1933252

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.530		0.308	0.318	10/04/2022 15:45	WG1933252
(T) Barium-133	103			30.0-143	10/04/2022 15:45	WG1933252

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.0975	<u>U</u>	0.212	0.631	10/05/2022 12:33	WG1932357
(T) Barium	104			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	112			30.0-136	10/05/2022 12:33	WG1932357

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0779	<u>U</u>	0.251	0.668	10/05/2022 12:33	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0779	<u>U</u>	0.135	0.220	10/04/2022 15:45	WG1933252
(T) Barium-133	93.9			30.0-143	10/04/2022 15:45	WG1933252

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.129	<u>U</u>	0.278	0.813	10/05/2022 12:33	WG1932357
(T) Barium	90.4			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	103			30.0-136	10/05/2022 12:33	WG1932357

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.256	<u>U</u>	0.324	0.847	10/05/2022 12:33	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.127	<u>J</u>	0.166	0.238	10/04/2022 15:45	WG1933252
(T) Barium-133	100			30.0-143	10/04/2022 15:45	WG1933252

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.0314	<u>U</u>	0.196	0.360	10/05/2022 15:44	WG1932364
(T) Barium	97.6			30.0-143	10/05/2022 15:44	WG1932364
(T) Yttrium	97.5			30.0-136	10/05/2022 15:44	WG1932364

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.414		0.309	0.408	10/05/2022 15:44	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.383		0.239	0.191	10/04/2022 15:45	WG1933252
(T) Barium-133	92.7			30.0-143	10/04/2022 15:45	WG1933252

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	1.34		0.256	0.685	10/05/2022 12:33	WG1932357
(T) Barium	104			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	105			30.0-136	10/05/2022 12:33	WG1932357

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.80		0.362	0.722	10/05/2022 12:33	WG1933252

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.466		0.256	0.229	10/04/2022 15:45	WG1933252
(T) Barium-133	91.0			30.0-143	10/04/2022 15:45	WG1933252

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	-0.106	<u>U</u>	0.228	0.679	10/05/2022 12:33	WG1932357
(T) Barium	118			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	96.9			30.0-136	10/05/2022 12:33	WG1932357

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.166	<u>U</u>	0.275	0.702	10/05/2022 12:33	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.166	<u>J</u>	0.154	0.178	10/04/2022 15:45	WG1933252
(T) Barium-133	97.2			30.0-143	10/04/2022 15:45	WG1933252

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.498	J	0.215	0.611	10/05/2022 12:33	WG1932357
(T) Barium	107			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	100			30.0-136	10/05/2022 12:33	WG1932357

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.601	J	0.263	0.652	10/05/2022 12:33	WG1933252

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.103	J	0.151	0.227	10/04/2022 15:45	WG1933252
(T) Barium-133	96.1			30.0-143	10/04/2022 15:45	WG1933252

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.343	<u>U</u>	0.194	0.558	10/05/2022 12:33	WG1932357
(T) Barium	107			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	105			30.0-136	10/05/2022 12:33	WG1932357

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.606		0.260	0.576	10/05/2022 12:33	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.263		0.173	0.144	10/04/2022 15:45	WG1933252
(T) Barium-133	102			30.0-143	10/04/2022 15:45	WG1933252

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.463	J	0.218	0.621	10/05/2022 12:33	WG1932357
(T) Barium	102			30.0-143	10/05/2022 12:33	WG1932357
(T) Yttrium	106			30.0-136	10/05/2022 12:33	WG1932357

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.873		0.327	0.663	10/05/2022 12:33	WG1933252

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.410		0.244	0.231	10/04/2022 15:45	WG1933252
(T) Barium-133	100			30.0-143	10/04/2022 15:45	WG1933252

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.476		0.194	0.340	10/05/2022 15:44	WG1932364
(T) Barium	95.3			30.0-143	10/05/2022 15:44	WG1932364
(T) Yttrium	103			30.0-136	10/05/2022 15:44	WG1932364

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.558		0.226	0.379	10/05/2022 15:44	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.0824	J	0.115	0.167	10/04/2022 15:45	WG1933252
(T) Barium-133	99.8			30.0-143	10/04/2022 15:45	WG1933252

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.678		0.210	0.361	10/05/2022 15:44	WG1932364
(T) Barium	88.9			30.0-143	10/05/2022 15:44	WG1932364
(T) Yttrium	99.4			30.0-136	10/05/2022 15:44	WG1932364

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.829		0.287	0.457	10/05/2022 15:44	WG1933252

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.151	J	0.196	0.281	10/04/2022 15:45	WG1933252
(T) Barium-133	104			30.0-143	10/04/2022 15:45	WG1933252

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.559		0.184	0.319	10/05/2022 15:44	WG1932364
(T) Barium	95.4			30.0-143	10/05/2022 15:44	WG1932364
(T) Yttrium	115			30.0-136	10/05/2022 15:44	WG1932364

1 Cp

2 Tc

3 Ss

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.758		0.273	0.411	10/05/2022 15:44	WG1933252

4 Cn

5 Sr

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.199	J	0.202	0.259	10/04/2022 15:45	WG1933252
(T) Barium-133	101			30.0-143	10/04/2022 15:45	WG1933252

6 Qc

7 Gl

8 Al

9 Sc

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-228	0.412		0.197	0.349	10/05/2022 15:44	WG1932364
(T) Barium	101			30.0-143	10/05/2022 15:44	WG1932364
(T) Yttrium	105			30.0-136	10/05/2022 15:44	WG1932364

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.853		0.324	0.421	10/05/2022 15:44	WG1933252

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
RADIUM-226	0.441		0.257	0.235	10/04/2022 15:45	WG1933252
(T) Barium-133	99.1			30.0-143	10/04/2022 15:45	WG1933252

Method Blank (MB)

(MB) R3844664-1 09/28/22 16:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1538369-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1538369-01 09/28/22 16:40 • (DUP) R3844664-3 09/28/22 16:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	286000	283000	1	1.05		5

4 Cn

5 Sr

6 Qc

L1538383-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1538383-01 09/28/22 16:40 • (DUP) R3844664-4 09/28/22 16:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1490000	1520000	1	1.66		5

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3844664-2 09/28/22 16:40

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8750000	99.4	77.3-123	

Method Blank (MB)

(MB) R3844656-1 09/28/22 17:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1538852-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1538852-01 09/28/22 17:02 • (DUP) R3844656-3 09/28/22 17:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1180000	1150000	1	1.89		5

4 Cn

5 Sr

L1538852-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1538852-02 09/28/22 17:02 • (DUP) R3844656-4 09/28/22 17:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	4220000	4000000	1	5.36	J3	5

6 Qc

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R3844656-2 09/28/22 17:02

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8650000	98.3	77.3-123	

9 Sc

Method Blank (MB)

(MB) R3845386-1 09/29/22 15:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1538896-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1538896-02 09/29/22 15:30 • (DUP) R3845386-3 09/29/22 15:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	2030000	1950000	1	3.77		5

4 Cn

5 Sr

L1538896-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1538896-03 09/29/22 15:30 • (DUP) R3845386-4 09/29/22 15:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	676000	741000	1	9.22	J3	5

6 Qc

7 Gl

8 Al

Laboratory Control Sample (LCS)

(LCS) R3845386-2 09/29/22 15:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	7710000	87.6	77.3-123	

9 Sc

Method Blank (MB)

(MB) R3844657-1 09/29/22 23:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Dissolved Solids	U		10000	10000

1 Cp

2 Tc

3 Ss

L1538932-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-02 09/29/22 23:31 • (DUP) R3844657-3 09/29/22 23:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Dissolved Solids	964000	912000	1	5.54	J3	5

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3844657-2 09/29/22 23:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Dissolved Solids	8800000	8660000	98.4	77.3-123	

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3846078-1 10/05/22 12:33

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.711		0.136	0.365
(T) Barium	98.6		98.6	
(T) Yttrium	94.3		94.3	

L1538932-27 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-27 10/05/22 12:33 • (DUP) R3846078-5 10/05/22 12:33

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.678	0.221	0.619	1.27	0.232	0.619	1	61.0	1.86		20	3
(T) Barium	100			118	118							
(T) Yttrium	98.3			106	106							

Laboratory Control Sample (LCS)

(LCS) R3846078-2 10/05/22 12:33

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.16	83.3	80.0-120	
(T) Barium			104		
(T) Yttrium			101		

L1538335-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538335-12 10/05/22 12:33 • (MS) R3846078-3 10/05/22 12:33 • (MSD) R3846078-4 10/05/22 12:33

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	1.09	8.17	9.74	70.8	86.5	1	70.0-130			17.6		20
(T) Barium		94.6			98.0	102							
(T) Yttrium		99.6			107	96.5							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3845902-1 10/05/22 15:44

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-228	0.0956	<u>U</u>	0.135	0.246
(T) Barium	95.2		95.2	
(T) Yttrium	102		102	

L1538932-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-39 10/05/22 15:44 • (DUP) R3845902-5 10/05/22 15:44

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.678	0.210	0.361	1.26	0.257	0.361	1	59.8	1.74		20	3
(T) Barium	88.9			99.0	99.0							
(T) Yttrium	99.4			99.2	99.2							

Laboratory Control Sample (LCS)

(LCS) R3845902-2 10/05/22 15:44

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.11	82.2	80.0-120	
(T) Barium			94.8		
(T) Yttrium			102		

L1538932-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538932-32 10/05/22 15:44 • (MS) R3845902-3 10/05/22 15:44 • (MSD) R3845902-4 10/05/22 15:44

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	10.0	0.0314	8.14	8.19	81.1	81.6	1	70.0-130			0.600		20
(T) Barium		97.6			113	106							
(T) Yttrium		97.5			111	102							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3845853-1 10/04/22 15:45

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	0.0109	<u>U</u>	0.0391	0.0713
(T) Barium-133	89.7		89.7	

L1538936-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1538936-08 10/04/22 15:45 • (DUP) R3845853-5 10/04/22 15:45

Analyte	Original Result pCi/l	Original Uncertainty + / -	Original MDA pCi/l	DUP Result pCi/l	DUP Uncertainty + / -	DUP MDA pCi/l	Dilution	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.456	0.261	0.230	0.435	0.265	0.230	1	4.69	0.0562		20	3
(T) Barium-133	92.7			96.2	96.2							

Laboratory Control Sample (LCS)

(LCS) R3845853-2 10/04/22 15:45

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.02	5.00	99.6	80.0-120	
(T) Barium-133			98.4		

L1538932-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538932-32 10/04/22 15:45 • (MS) R3845853-3 10/04/22 15:45 • (MSD) R3845853-4 10/04/22 15:45

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.383	18.4	19.3	89.8	94.7	1	75.0-125			5.15		20
(T) Barium-133		92.7			99.9	98.2							

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3843729-2 10/01/22 14:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1537926-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1537926-11 10/01/22 14:34 • (DUP) R3843729-3 10/01/22 14:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	U	U	1	0.000		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1538932-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-11 10/01/22 15:26 • (DUP) R3843729-4 10/01/22 15:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	368000	367000	1	0.0998		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3843821-2 10/02/22 07:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity,Bicarbonate	U		8450	20000
Alkalinity,Carbonate	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1538936-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1538936-01 10/02/22 07:42 • (DUP) R3843821-3 10/02/22 07:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	180000	180000	1	0.0949		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1538951-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1538951-05 10/02/22 09:02 • (DUP) R3843821-4 10/02/22 09:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity,Bicarbonate	435000	440000	1	1.14		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3842536-1 09/27/22 18:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1538932-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-01 09/27/22 18:58 • (DUP) R3842536-3 09/27/22 19:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	43000	42600	1	0.831		15
Fluoride	150	150	1	0.0668	U	15
Sulfate	33900	34200	1	0.719		15

L1538932-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-11 09/27/22 22:34 • (DUP) R3842536-5 09/27/22 22:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	4060	4020	1	0.919		15
Fluoride	122	139	1	13.4	U	15
Sulfate	46500	46400	1	0.244		15

Laboratory Control Sample (LCS)

(LCS) R3842536-2 09/27/22 18:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40000	40400	101	80.0-120	
Fluoride	8000	8040	100	80.0-120	
Sulfate	40000	39600	99.0	80.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1538932-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1538932-01 09/27/22 18:58 • (MS) R3842536-4 09/27/22 19:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	43000	92200	98.4	1	80.0-120	
Fluoride	5000	150	5400	105	1	80.0-120	
Sulfate	50000	33900	83500	99.1	1	80.0-120	

L1538932-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538932-11 09/27/22 22:34 • (MS) R3842536-6 09/27/22 23:25 • (MSD) R3842536-7 09/27/22 23:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	4060	56000	55000	104	102	1	80.0-120			1.85	15
Fluoride	5000	122	5030	4980	98.2	97.2	1	80.0-120			1.02	15
Sulfate	50000	46500	93300	93300	93.6	93.7	1	80.0-120			0.00922	15

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3842036-1 09/26/22 11:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	U		594	5000

L1538922-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1538922-01 09/26/22 14:42 • (DUP) R3842036-3 09/26/22 14:58

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	9160	9190	1	0.342		15
Fluoride	161	153	1	5.22		15
Sulfate	77000	76200	1	0.996		15

L1538932-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1538932-24 09/26/22 16:49 • (DUP) R3842036-6 09/26/22 17:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	4080	4090	1	0.147		15
Fluoride	137	139	1	1.38	U	15
Sulfate	48000	48100	1	0.0608		15

Laboratory Control Sample (LCS)

(LCS) R3842036-2 09/26/22 11:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40000	39200	98.1	80.0-120	
Fluoride	8000	8240	103	80.0-120	
Sulfate	40000	40200	100	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1538922-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538922-01 09/26/22 14:42 • (MS) R3842036-4 09/26/22 15:14 • (MSD) R3842036-5 09/26/22 15:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	9160	58200	59300	98.1	100	1	80.0-120			1.83	15
Fluoride	5000	161	5080	5220	98.3	101	1	80.0-120			2.72	15
Sulfate	50000	77000	124000	124000	94.2	94.4	1	80.0-120			0.0516	15

L1538932-24 Original Sample (OS) • Matrix Spike (MS)

(OS) L1538932-24 09/26/22 16:49 • (MS) R3842036-7 09/26/22 17:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	4080	53900	99.6	1	80.0-120	
Fluoride	5000	137	5120	99.6	1	80.0-120	
Sulfate	50000	48000	97200	98.3	1	80.0-120	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3842815-1 09/28/22 22:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Sulfate	U		594	5000

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1540428-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1540428-07 09/29/22 02:27 • (DUP) R3842815-3 09/29/22 02:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	136000	135000	1	0.165		15

L1540613-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1540613-04 09/29/22 08:49 • (DUP) R3842815-5 09/29/22 09:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Sulfate	29100	29100	1	0.0960		15

Laboratory Control Sample (LCS)

(LCS) R3842815-2 09/28/22 22:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Sulfate	40000	41800	105	80.0-120	

L1540428-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1540428-07 09/29/22 02:27 • (MS) R3842815-4 09/29/22 02:58

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Sulfate	50000	136000	181000	90.3	1	80.0-120	

L1540613-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1540613-04 09/29/22 08:49 • (MS) R3842815-6 09/29/22 09:20 • (MSD) R3842815-7 09/29/22 09:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Sulfate	50000	29100	82500	82300	107	107	1	80.0-120			0.240	15

Method Blank (MB)

(MB) R3845777-1 10/07/22 07:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3845777-2 10/07/22 07:58

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	3.00	3.21	107	80.0-120	

4 Cn

5 Sr

L1538852-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538852-01 10/07/22 08:00 • (MS) R3845777-3 10/07/22 08:03 • (MSD) R3845777-4 10/07/22 08:05

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	3.00	U	2.69	3.07	89.7	102	1	75.0-125			13.2	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3844882-1 10/05/22 10:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R3844882-2 10/05/22 10:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	3.00	3.43	114	80.0-120	

L1538932-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538932-11 10/05/22 10:09 • (MS) R3844882-3 10/05/22 10:11 • (MSD) R3844882-4 10/05/22 10:13

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	3.00	U	3.31	3.57	110	119	1	75.0-125			7.57	20

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3846339-1 10/09/22 12:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury	U		0.100	0.200

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3846339-2 10/09/22 12:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	2.70	90.0	80.0-120	

4 Cn

5 Sr

L1538951-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538951-05 10/09/22 12:37 • (MS) R3846339-3 10/09/22 12:44 • (MSD) R3846339-4 10/09/22 12:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	3.00	U	2.86	2.99	95.3	99.7	1	75.0-125			4.44	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3843748-1 10/02/22 08:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury,Dissolved	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R3843748-2 10/02/22 08:51

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury,Dissolved	3.00	3.31	110	80.0-120	

L1537432-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1537432-04 10/02/22 08:53 • (MS) R3843748-3 10/02/22 08:55 • (MSD) R3843748-4 10/02/22 08:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury,Dissolved	3.00	U	3.13	3.41	104	114	1	75.0-125			8.56	20

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3845579-1 10/06/22 15:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony,Dissolved	U		1.03	4.00
Arsenic,Dissolved	U		0.180	2.00
Barium,Dissolved	U		0.381	2.00
Beryllium,Dissolved	U		0.190	2.00
Cadmium,Dissolved	U		0.150	1.00
Calcium,Dissolved	U		93.6	1000
Chromium,Dissolved	U		1.24	2.00
Cobalt,Dissolved	U		0.0596	2.00
Iron,Dissolved	U		28.1	100
Lead,Dissolved	U		0.849	2.00
Magnesium,Dissolved	U		73.5	1000
Molybdenum,Dissolved	U		0.348	5.00
Potassium,Dissolved	U		108	2000
Selenium,Dissolved	U		0.300	2.00
Sodium,Dissolved	U		376	2000
Thallium,Dissolved	U		0.121	2.00
Lithium,Dissolved	U		0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3845618-1 10/06/22 18:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron,Dissolved	U		9.63	30.0

Laboratory Control Sample (LCS)

(LCS) R3845579-2 10/06/22 15:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	50.0	45.9	91.9	80.0-120	
Arsenic,Dissolved	50.0	52.9	106	80.0-120	
Barium,Dissolved	50.0	48.4	96.9	80.0-120	
Beryllium,Dissolved	50.0	49.8	99.5	80.0-120	
Cadmium,Dissolved	50.0	54.8	110	80.0-120	
Calcium,Dissolved	5000	5270	105	80.0-120	
Chromium,Dissolved	50.0	52.9	106	80.0-120	
Cobalt,Dissolved	50.0	53.5	107	80.0-120	
Iron,Dissolved	5000	5460	109	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3845579-2 10/06/22 15:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead,Dissolved	50.0	50.8	102	80.0-120	
Magnesium,Dissolved	5000	5320	106	80.0-120	
Molybdenum,Dissolved	50.0	50.1	100	80.0-120	
Potassium,Dissolved	5000	5270	105	80.0-120	
Selenium,Dissolved	50.0	59.0	118	80.0-120	
Sodium,Dissolved	5000	5360	107	80.0-120	
Thallium,Dissolved	50.0	49.9	99.9	80.0-120	
Lithium,Dissolved	50.0	47.1	94.1	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R3845618-2 10/06/22 18:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	50.0	50.3	101	80.0-120	

⁷Gl

⁸Al

L1538686-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538686-02 10/06/22 15:20 • (MS) R3845579-4 10/06/22 15:26 • (MSD) R3845579-5 10/06/22 15:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	50.0	U	47.8	48.7	95.5	97.3	1	75.0-125			1.87	20
Arsenic,Dissolved	50.0	2.96	57.4	57.2	109	109	1	75.0-125			0.266	20
Barium,Dissolved	50.0	11.0	61.0	61.6	100	101	1	75.0-125			0.876	20
Beryllium,Dissolved	50.0	U	48.2	48.7	96.4	97.3	1	75.0-125			0.925	20
Cadmium,Dissolved	50.0	U	53.7	54.3	107	109	1	75.0-125			1.17	20
Calcium,Dissolved	5000	258000	265000	263000	143	112	1	75.0-125	V		0.588	20
Chromium,Dissolved	50.0	9.76	62.3	62.9	105	106	1	75.0-125			1.02	20
Cobalt,Dissolved	50.0	U	52.3	52.0	105	104	1	75.0-125			0.509	20
Iron,Dissolved	5000	U	5440	5390	109	108	1	75.0-125			0.906	20
Lead,Dissolved	50.0	U	51.3	51.3	103	103	1	75.0-125			0.0864	20
Magnesium,Dissolved	5000	100000	103000	105000	59.3	102	1	75.0-125	V		2.05	20
Molybdenum,Dissolved	50.0	2.53	55.3	56.0	106	107	1	75.0-125			1.21	20
Potassium,Dissolved	5000	3750	8790	8780	101	101	1	75.0-125			0.0900	20
Selenium,Dissolved	50.0	4.05	62.1	62.5	116	117	1	75.0-125			0.501	20
Sodium,Dissolved	5000	525000	541000	542000	321	335	1	75.0-125	V	V	0.128	20
Thallium,Dissolved	50.0	U	50.8	51.1	102	102	1	75.0-125			0.600	20
Lithium,Dissolved	50.0	57.0	103	104	91.2	95.0	1	75.0-125			1.81	20

⁹Sc

L1538686-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538686-02 10/06/22 18:16 • (MS) R3845618-4 10/06/22 18:23 • (MSD) R3845618-5 10/06/22 18:26

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	50.0	303	365	373	124	140	1	75.0-125	<u>E</u>	<u>EV</u>	2.20	20

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

Method Blank (MB)

(MB) R3845620-1 10/06/22 18:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	0.209	U	0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Boron	U		9.63	30.0
Cadmium	U		0.150	1.00
Calcium	U		93.6	1000
Chromium	U		1.24	2.00
Cobalt	U		0.0596	2.00
Iron	U		28.1	100
Lead	U		0.849	2.00
Magnesium	U		73.5	1000
Molybdenum	U		0.348	5.00
Potassium	U		108	2000
Selenium	U		0.300	2.00
Sodium	U		376	2000
Thallium	U		0.121	2.00
Lithium	U		0.695	2.00

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3845620-2 10/06/22 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	46.4	92.8	80.0-120	
Arsenic	50.0	50.3	101	80.0-120	
Barium	50.0	47.6	95.2	80.0-120	
Beryllium	50.0	54.6	109	80.0-120	
Boron	50.0	56.0	112	80.0-120	
Cadmium	50.0	53.7	107	80.0-120	
Calcium	5000	5010	100	80.0-120	
Chromium	50.0	51.5	103	80.0-120	
Cobalt	50.0	51.9	104	80.0-120	
Iron	5000	5010	100	80.0-120	
Lead	50.0	50.3	101	80.0-120	
Magnesium	5000	4820	96.4	80.0-120	
Molybdenum	50.0	49.1	98.1	80.0-120	
Potassium	5000	4600	91.9	80.0-120	
Selenium	50.0	52.0	104	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3845620-2 10/06/22 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Sodium	5000	5390	108	80.0-120	
Thallium	50.0	50.3	101	80.0-120	
Lithium	50.0	52.9	106	80.0-120	

L1538932-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1538932-11 10/06/22 18:55 • (MS) R3845620-4 10/06/22 19:01 • (MSD) R3845620-5 10/06/22 19:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Antimony	50.0	U	47.1	47.0	94.2	94.0	1	75.0-125			0.219	20
Arsenic	50.0	0.245	50.9	50.2	101	99.9	1	75.0-125			1.39	20
Barium	50.0	91.9	142	138	99.7	92.6	1	75.0-125			2.54	20
Beryllium	50.0	U	53.7	52.6	107	105	1	75.0-125			2.04	20
Boron	50.0	84.1	140	137	111	106	1	75.0-125			2.00	20
Cadmium	50.0	U	53.5	53.0	107	106	1	75.0-125			1.00	20
Calcium	5000	108000	113000	112000	94.4	75.8	1	75.0-125			0.826	20
Chromium	50.0	U	51.1	50.7	102	101	1	75.0-125			0.762	20
Cobalt	50.0	0.123	50.7	49.7	101	99.1	1	75.0-125			1.95	20
Iron	5000	30.4	5000	4950	99.5	98.5	1	75.0-125			1.01	20
Lead	50.0	U	50.2	49.6	100	99.3	1	75.0-125			1.12	20
Magnesium	5000	34100	39200	38300	102	83.5	1	75.0-125			2.39	20
Molybdenum	50.0	0.592	51.0	50.7	101	100	1	75.0-125			0.721	20
Potassium	5000	1180	6500	6190	107	100	1	75.0-125			5.02	20
Selenium	50.0	U	53.6	52.0	107	104	1	75.0-125			3.03	20
Sodium	5000	4130	9390	9470	105	107	1	75.0-125			0.896	20
Thallium	50.0	U	50.2	49.9	100	99.9	1	75.0-125			0.621	20
Lithium	50.0	4.55	55.1	53.6	101	98.1	1	75.0-125			2.76	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3848148-1 10/13/22 13:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony,Dissolved	U		1.03	4.00
Arsenic,Dissolved	U		0.180	2.00
Barium,Dissolved	U		0.381	2.00
Beryllium,Dissolved	U		0.190	2.00
Cadmium,Dissolved	U		0.150	1.00
Calcium,Dissolved	U		93.6	1000
Chromium,Dissolved	1.76	U	1.24	2.00
Cobalt,Dissolved	0.0636	U	0.0596	2.00
Lead,Dissolved	U		0.849	2.00
Magnesium,Dissolved	U		73.5	1000
Molybdenum,Dissolved	U		0.348	5.00
Potassium,Dissolved	U		108	2000
Selenium,Dissolved	U		0.300	2.00
Sodium,Dissolved	U		376	2000
Thallium,Dissolved	U		0.121	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3848148-6 10/14/22 00:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Boron,Dissolved	U		9.63	30.0
Lithium,Dissolved	U		0.695	2.00

Laboratory Control Sample (LCS)

(LCS) R3848148-2 10/13/22 13:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	50.0	46.7	93.4	80.0-120	
Arsenic,Dissolved	50.0	49.0	98.0	80.0-120	
Barium,Dissolved	50.0	47.2	94.5	80.0-120	
Beryllium,Dissolved	50.0	42.4	84.7	80.0-120	
Cadmium,Dissolved	50.0	52.4	105	80.0-120	
Calcium,Dissolved	5000	4970	99.4	80.0-120	
Chromium,Dissolved	50.0	51.3	103	80.0-120	
Cobalt,Dissolved	50.0	51.5	103	80.0-120	
Lead,Dissolved	50.0	49.6	99.2	80.0-120	
Magnesium,Dissolved	5000	5310	106	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3848148-2 10/13/22 13:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Molybdenum,Dissolved	50.0	48.4	96.8	80.0-120	
Potassium,Dissolved	5000	4940	98.8	80.0-120	
Selenium,Dissolved	50.0	52.8	106	80.0-120	
Sodium,Dissolved	5000	5630	113	80.0-120	
Thallium,Dissolved	50.0	48.9	97.8	80.0-120	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

Laboratory Control Sample (LCS)

(LCS) R3848148-7 10/14/22 00:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron,Dissolved	500	519	104	80.0-120	
Lithium,Dissolved	50.0	45.7	91.3	80.0-120	

⁶ Qc

⁷ Gl

⁸ Al

L1539514-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1539514-03 10/13/22 14:01 • (MS) R3848148-4 10/13/22 14:08 • (MSD) R3848148-5 10/13/22 14:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	50.0	U	48.1	49.9	96.2	99.8	1	75.0-125			3.64	20
Arsenic,Dissolved	50.0	0.285	50.2	49.7	99.8	98.9	1	75.0-125			0.979	20
Barium,Dissolved	50.0	16.7	65.2	65.9	96.9	98.4	1	75.0-125			1.17	20
Beryllium,Dissolved	50.0	U	41.5	41.2	83.1	82.4	1	75.0-125			0.785	20
Cadmium,Dissolved	50.0	U	51.7	51.5	103	103	1	75.0-125			0.326	20
Calcium,Dissolved	5000	291000	308000	297000	336	119	1	75.0-125	V		3.60	20
Chromium,Dissolved	50.0	U	49.6	48.7	99.2	97.4	1	75.0-125			1.80	20
Cobalt,Dissolved	50.0	0.535	50.0	48.6	99.0	96.2	1	75.0-125			2.87	20
Lead,Dissolved	50.0	U	49.7	50.5	99.4	101	1	75.0-125			1.60	20
Magnesium,Dissolved	5000	32200	37200	36300	99.7	82.2	1	75.0-125			2.37	20
Molybdenum,Dissolved	50.0	1.64	52.2	52.8	101	102	1	75.0-125			1.11	20
Potassium,Dissolved	5000	1730	6470	6520	94.7	95.8	1	75.0-125			0.807	20
Selenium,Dissolved	50.0	4.00	59.0	58.4	110	109	1	75.0-125			1.04	20
Sodium,Dissolved	5000	419000	404000	416000	0.000	0.000	1	75.0-125	V	V	3.01	20
Thallium,Dissolved	50.0	U	49.7	51.4	99.4	103	1	75.0-125			3.35	20

⁹ Sc

L1539514-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1539514-03 10/14/22 00:20 • (MS) R3848148-9 10/14/22 00:27 • (MSD) R3848148-10 10/14/22 00:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron,Dissolved	500	419	945	975	105	111	1	75.0-125			3.15	20
Lithium,Dissolved	50.0	55.0	105	105	100	99.3	1	75.0-125			0.393	20

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3846740-1 10/10/22 14:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	U		1.03	4.00
Arsenic	U		0.180	2.00
Barium	U		0.381	2.00
Beryllium	U		0.190	2.00
Boron	U		9.63	30.0
Cadmium	U		0.150	1.00
Calcium	U		93.6	1000
Chromium	U		1.24	2.00
Cobalt	U		0.0596	2.00
Lead	U		0.849	2.00
Magnesium	U		73.5	1000
Molybdenum	U		0.348	5.00
Potassium	U		108	2000
Selenium	U		0.300	2.00
Sodium	U		376	2000
Thallium	U		0.121	2.00
Lithium	U		0.695	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3846740-2 10/10/22 14:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	47.6	95.2	80.0-120	
Arsenic	50.0	49.4	98.8	80.0-120	
Barium	50.0	48.2	96.5	80.0-120	
Beryllium	50.0	47.5	95.0	80.0-120	
Boron	500	509	102	80.0-120	
Cadmium	50.0	51.0	102	80.0-120	
Calcium	5000	5000	100	80.0-120	
Chromium	50.0	50.7	101	80.0-120	
Cobalt	50.0	51.3	103	80.0-120	
Lead	50.0	47.7	95.4	80.0-120	
Magnesium	5000	5190	104	80.0-120	
Molybdenum	50.0	49.2	98.4	80.0-120	
Potassium	5000	5000	100	80.0-120	
Selenium	50.0	53.2	106	80.0-120	
Sodium	5000	5170	103	80.0-120	
Thallium	50.0	47.7	95.5	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3846740-2 10/10/22 14:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lithium	50.0	45.4	90.9	80.0-120	

L1536511-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1536511-06 10/10/22 14:19 • (MS) R3846740-4 10/10/22 14:25 • (MSD) R3846740-5 10/10/22 14:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	50.0	U	50.1	49.6	100	99.1	1	75.0-125			1.01	20
Arsenic	50.0	16.8	67.8	65.8	102	98.0	1	75.0-125			3.07	20
Barium	50.0	43.0	91.3	92.1	96.6	98.1	1	75.0-125			0.825	20
Beryllium	50.0	U	47.1	48.9	94.1	97.9	1	75.0-125			3.91	20
Boron	500	129	633	648	101	104	1	75.0-125	E	E	2.28	20
Cadmium	50.0	U	51.8	52.5	104	105	1	75.0-125			1.37	20
Calcium	5000	94900	97300	99100	47.9	84.2	1	75.0-125	V		1.85	20
Chromium	50.0	U	51.6	51.4	103	103	1	75.0-125			0.347	20
Cobalt	50.0	0.133	51.7	52.1	103	104	1	75.0-125			0.858	20
Lead	50.0	U	49.4	48.6	98.8	97.2	1	75.0-125			1.60	20
Magnesium	5000	18100	22900	23300	96.0	106	1	75.0-125			2.10	20
Molybdenum	50.0	3.88	55.3	54.5	103	101	1	75.0-125			1.45	20
Potassium	5000	1550	6360	6440	96.2	97.7	1	75.0-125			1.18	20
Selenium	50.0	U	54.9	55.7	110	111	1	75.0-125			1.34	20
Sodium	5000	63700	64800	68300	21.5	91.0	1	75.0-125	V		5.22	20
Thallium	50.0	U	49.6	48.7	99.1	97.4	1	75.0-125			1.80	20
Lithium	50.0	2.17	46.6	47.4	88.9	90.4	1	75.0-125			1.59	20

L1536551-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1536551-04 10/10/22 14:32 • (MS) R3846740-6 10/10/22 14:35 • (MSD) R3846740-7 10/10/22 14:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	50.0	U	47.6	47.9	95.2	95.9	1	75.0-125			0.667	20
Arsenic	50.0	0.863	51.2	50.2	101	98.6	1	75.0-125			2.01	20
Barium	50.0	31.9	82.7	80.9	102	98.0	1	75.0-125			2.30	20
Beryllium	50.0	0.251	46.7	46.1	92.9	91.7	1	75.0-125			1.31	20
Boron	500	89.2	589	588	100	99.7	1	75.0-125	E	E	0.278	20
Cadmium	50.0	U	52.6	52.1	105	104	1	75.0-125			1.02	20
Calcium	5000	26000	30300	30400	86.2	87.1	1	75.0-125			0.157	20
Chromium	50.0	1.48	52.3	51.6	102	100	1	75.0-125			1.31	20
Cobalt	50.0	0.672	51.7	51.0	102	101	1	75.0-125			1.46	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1536551-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1536551-04 10/10/22 14:32 • (MS) R3846740-6 10/10/22 14:35 • (MSD) R3846740-7 10/10/22 14:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	50.0	1.16	49.3	48.6	96.3	94.9	1	75.0-125			1.43	20
Magnesium	5000	15000	19900	19700	98.5	94.7	1	75.0-125			0.969	20
Molybdenum	50.0	U	49.8	50.1	99.7	100	1	75.0-125			0.455	20
Potassium	5000	685	5700	5500	100	96.3	1	75.0-125			3.48	20
Selenium	50.0	U	54.7	53.9	109	108	1	75.0-125			1.51	20
Sodium	5000	8940	14000	13800	101	96.3	1	75.0-125			1.62	20
Thallium	50.0	U	48.6	47.7	97.1	95.4	1	75.0-125			1.81	20
Lithium	50.0		45.6	45.2	88.0	87.1	1	75.0-125			0.996	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

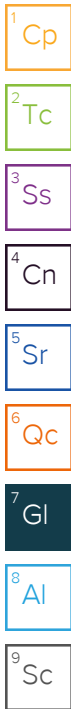
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
U	Below Detectable Limits: Indicates that the analyte was not detected.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address:
S&ME - Nashville, TN
 862 East Crescentville Road
 Cincinnati, OH 45246

Billing Information:
Accounts Payable
 658 Grassmere Park Dr, Ste 100
 Nashville, TN 37211

Pres Chk																					
	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K, Na, Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3														

Chain of Custody Page 1 of 3

Pace
 PEOPLE ADVANCING SCIENCE

MT JULIET, TN
 12065 Lebanon Rd Mount Juliet, TN 37122
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # L153892
 Ta G155
 Acctnum: LITENGNTN
 Template: T181344
 Prelogin: P950060
 PM: 134 - Mark W. Beasley
 PB: 9/10/22 cam
 Shipped Via: Courier

Report to:
Vince Epps

Email To:
 vepps@smeinc.com;vgallagher@smeinc.com

Project Description:
Miami Fort Station - North Bend, OH

City/State Collected: North Bend, OH
 Please Circle: PT MT CT ET

Phone: **513-771-8471**

Client Project #
7217-17-003D

Lab Project #
LITENGNTN-MIAMI

Collected by (print):
Victoria Gallagher

Site/Facility ID #
MIAMI (SITE 115)

P.O. #

Collected by (signature):
Victoria Gallagher

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Immediately Packed on Ice N Y

Date Results Needed

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K, Na, Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3												
MW-11		GW		9/22/22	1310	5	1	1			2	1													01/27
MW-12		GW		9/22/22	0955	5	1	1			2	1													02/28
MW-13		GW		9/22/22	1110	5	1	1			2	1													03/25
MW-14		GW		9/22/22	1330	3	1	1				1													04
MW-15		GW		9/21/22	1125	3	1	1				1													05
MW-16		GW		9/21/22	1050	3	1	1				1													06
4A		GW		9/21/22	1140	3	1	1				1													07
MFS_A1_SOURCE WATER CCR_TOTAL		GW		9/21/22	1815	5	1	1	0		2	1													08/13
MFS_A1_SOURCE WATER CCR DISS		GW		9/21/22	1815	1			1																09
MFS_B1_SOURCE WATER CCR_TOTAL		GW		9/22/22	1330	5	1	1			2	1													10/17

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks: ***Log rad to same SDG as different dash #'s as EX 10 day TAT***

Samples returned via: UPS FedEx Courier

Tracking #

pH _____ Temp _____
 Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N

If Applicable

VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature)
Victoria Gallagher

Date: _____ Time: _____

Received by: (Signature)
[Signature]

Trip Blank Received: Yes / No
 HCL / MeOH
 TBR

Temp: _____ °C Bottles Received: 108
 If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: _____ Time: _____

Received for lab by: (Signature)
[Signature]

Date: 9/23/22 Time: 0900

Hold: _____ Condition: NCF / 08

Company Name/Address: **S&ME - Nashville, TN**
 862 East Crescentville Road
 Cincinnati, OH 45246

Billing Information:
 Accounts Payable
 658 Grassmere Park Dr, Ste 100
 Nashville, TN 37211

Chain of Custody Page **2** of **3**

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 Email To: **vepps@smeinc.com;vgallagher@smeinc.com**

Project Description: **Miami Fort Station - North Bend, OH**
 City/State Collected: **North Bend, OH**
 Please Circle: **PT MT CT ET** (E)

Phone: **513-771-8471**
 Client Project #: **7217-17-003D**
 Lab Project #: **LITENGNTN-MIAMI**

Collected by (print): **Victoria Gallagher**
 Site/Facility ID #: **MIAMI (SITE 115)**
 P.O. #

Collected by (signature): *Victoria Gallagher*
 Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #
 Date Results Needed

Immediately Packed on Ice N Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-7		GW		9/21/22	1355	5
MW-2		GW		9/22/22	1055	7
MW-3A		GW		9/22/22	1400	5
MW-4		GW		9/22/22	1230	5
MW-5		GW		9/21/22	1810	5
MW-6		GW		9/21/22	1655	5
MW-1		GW		9/22/22	0905	5
MW-8		GW		9/22/22	1415	5
MW-9		GW		9/22/22	0920	5
MW-10		GW		9/22/22	1225	5

Analysis / Container / Preservative	ALKB/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K,Na,Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3
	1	1			2	1	
				1	2	1	1
					2	1	
					2	1	
					2	1	
					2	1	
					2	1	
					2	1	
					2	1	
					2	1	

SDG #: **457892**

Table #

Acctnum: **LITENGNTN**
 Template: **T181344**
 Prelogin: **P950060**
 PM: **134 - Mark W. Beasley**
 PB: **9/10/22 cam**

Shipped Via: **Courier**

Remarks | Sample # (lab only)

* Matrix: SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:***Log rad to same SDG as different dash #'s as EX 10 day TAT***

Samples returned via: UPS FedEx Courier
 Tracking #

Relinquished by: (Signature) *Victoria Gallagher* Date: Time: Received by: (Signature) Trip Blank Received: Yes / No HCL / MeOH TBR

Relinquished by: (Signature) Date: Time: Received by: (Signature) Temp: °C Bottles Received: **108** If preservation required by Login: Date/Time

Relinquished by: (Signature) Date: Time: Received for lab by: (Signature) Date: **9/23/22** Time: **0900** Hold: Condition: **NCF / OK**

Sample Receipt Checklist
 COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 if Applicable
 VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

862 East Crescentville Road
Cincinnati, OH 45246

Email To:
vepps@smeinc.com;vgallagher@smeinc.com

Report to:
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City/State
Collected: North Bend, OH

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Collected by (print):
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Site/Facility ID #
MIAMI (SITE 115)

P.O. #

Collected by (signature):
Victoria Gallagher

Rush? (Lab MUST Be Notified)
 ___ Same Day ___ Five Day
 ___ Next Day ___ 5 Day (Rad Only)
 ___ Two Day ___ 10 Day (Rad Only)
 ___ Three Day

Quote #
Date Results Needed

Immediately
Packed on Ice N ___ Y **X**

No. of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	ALKBI/CA, Cl, F, SO4 125mlHDPE-NoPres	CCR Metals + K,Na,Mg 250mlHDPE-HNO3	Diss Metals (FF) 250mlHDPE-HNO3	Dissolved Fe 250mlHDPE NoPres	RA-226/228COMB 1L-HDPE-Add HNO3	TDS 250mlHDPE-NoPres	Total Fe 250mlHDPE-HNO3	Remarks	Sample # (lab only)
MFS_B1_SOURCE WATER CCR DISS		GW		9/22/22	1330	1								21
MW-17		GW		9/21/22	1245	3	1	1			1			22
MW-19		GW		9/21/22	1520	3	1	1			1			23
09/21/2022-DUP		GW				3	1	1			1			24
09/21/2022-DU PA		GW				3	1	1			1			25
SPIKE		GW		9/21/22	1355	5	1	1		2	1			11/32
		NPW												
		NPW												
		NPW												

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SDG #
Table #
Acctnum: LITENGNTN
Template: T181344
Prelogin: P950060
PM: 134 - Mark W. Beasley
PB: 9/10/22 cam
Shipped Via: Courier
Remarks **Sample # (lab only)**

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:*Log rad to same SDG as different dash #'s as EX 10 day TAT*****

pH _____ Temp _____
 Flow _____ Other _____

Sample Receipt Checklist
 COC Seal Present/Intact: ___ NP ___ Y ___ N
 COC Signed/Accurate: ___ Y ___ N
 Bottles arrive intact: ___ Y ___ N
 Correct bottles used: ___ Y ___ N
 Sufficient volume sent: ___ Y ___ N
If Applicable
 VOA Zero Headspace: ___ Y ___ N
 Preservation Correct/Checked: ___ Y ___ N
 RAD Screen <0.5 mR/hr: ___ Y ___ N

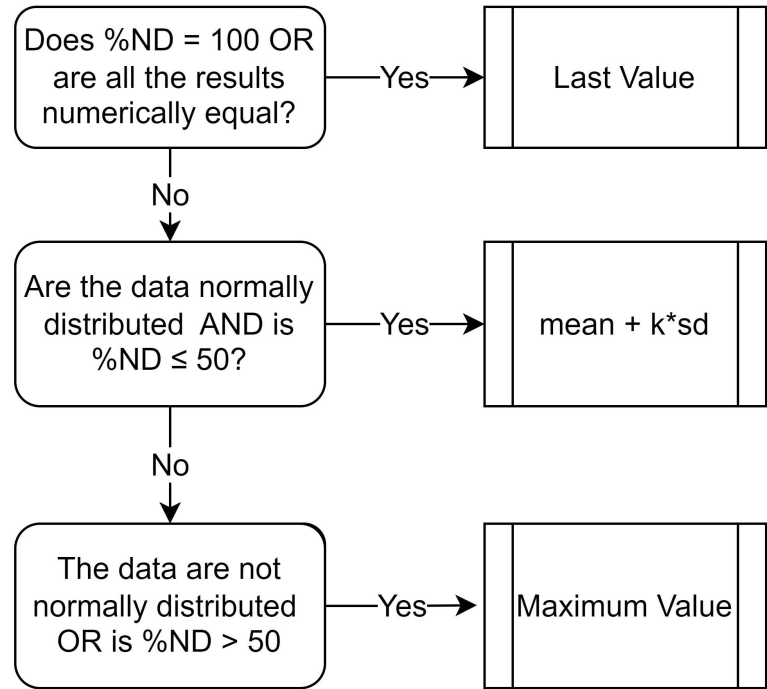
Samples returned via: ___ UPS ___ FedEx **X** Courier
Tracking #

Relinquished by: (Signature) <i>Victoria Gallagher</i>	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR
Relinquished by: (Signature) <i>Victoria Gallagher</i>	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 103
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>Mark W. Beasley</i>	Date: 9/22/22 Time: 8:50 Hold: Condition: NCF / OK

<u>Tracking Numbers</u>		<u>Temperature</u>
6053 3807 0576		5.8 1.4 ± 0.1 °C
6855		2.0 ± 0.2 °C
0779		8 ± 0.8
0810		9 ± 0.9

**APPENDIX B
STATISTICAL METHODOLOGY FOR DETERMINATION OF
BACKGROUND VALUES**

Notes
%ND = Percent non-detected samples
sd = standard deviation
k = kappa for tolerance limit (95% confidence/95% coverage)



**APPENDIX C
STATISTICAL METHODOLOGY FOR DETERMINATION OF
STATISTICALLY SIGNIFICANT LEVELS**

Notes
%ND = Percent non-detected samples
Future Median = Median of most recent 3 samples
MK = Mann-Kendall Trend Test
<u>Alpha Levels</u>
Normality = 0.01
MK Trend = 0.01
Residuals = 0.01
Confidence Interval = 0.01

