Prepared for
Dynegy Miami Fort, LLC

Date
January 31, 2024

Project No.
1940103649-015

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

POND SYSTEM

MIAMI FORT POWER PLANT

NORTH BEND, OHIO

CCR UNIT 115

RAMBOLL Bright ideas. Sustainable change.

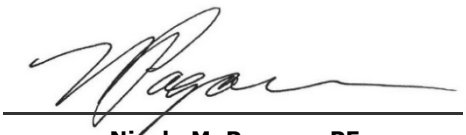
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT POND SYSTEM

Project name	**Miami Fort Power Plant Pond System**
Project no.	**1940103649-015**
Recipient	**Dynegy Miami Fort, LLC**
Document type	**Annual Groundwater Monitoring and Corrective Action Report**
Version	**FINAL**
Date	**January 31, 2024**
Prepared by	**Lauren D. Cook**
Checked by	**Nicole M. Pagano**
Approved by	**Nicole M. Pagano**
Description	**Annual Report required by 40 C.F.R. § 257.90(e)**

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T 414-837-3607
F 414-837-3608
https://ramboll.com

Lauren D. Cook
Managing Scientist



Nicole M. Pagano, PE
Senior Managing Engineer

CONTENTS

TABLES (IN TEXT)

TABLES (ATTACHED)

FIGURES (ATTACHED)

APPENDICES

ACRONYMS AND ABBREVIATIONS

40 C.F.R.	Title 40 of the Code of Federal Regulations
A6	Quarter 1, 2023 Assessment Monitoring sampling event
A6D	Quarter 3, 2023 Assessment Monitoring sampling event
ASD	Alternative 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
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSL	statistically significant level

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.) § 257.90(e) for the Pond System located at the Miami Fort Power Plant (MFPP) near North Bend, Ohio.

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

Two background wells (MW-17 and MW-19, installed in 2020) were added to the monitoring system in 2023 and a background update evaluation was completed in 2023 for the purpose of better characterizing background conditions at the Pond System.

The following Statistically Significant Levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters above groundwater protection standards (GWPSs) were reported in 2023:

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

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 to address the cobalt SSLs. An Alternative Source Demonstration (ASD) was completed to address the arsenic SSLs.

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 ASD for SSLs of arsenic (identified for Basin B) and 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 and apply evaluation criteria to potential corrective measures (Ramboll, 2020b).

The additional background groundwater quality data and sampling and analysis results from additional monitoring wells continue to be incorporated into the groundwater flow and transport model referenced above. Observations from a field investigation conducted in July 2023, including completion of an additional 23 soil borings, three temporary standpipe piezometers, and one monitoring well, will also be incorporated. This model will be used to facilitate the further evaluation and selection of a groundwater remedy.

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 Pond System 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 (**Section 2**), summarizes key actions completed (**Section 3**), describes any problems encountered and actions to resolve the problems (**Section 4**), and projects key activities for the upcoming year (**Section 5**). 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 (**Figure 1**).
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 (**Section 3**, paragraph 1).
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 (**Section 3**, **Table A**).
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) (**Section 3**).
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 (see **Executive Summary**). 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 Pond System for calendar year 2023.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

Groundwater is being monitored at the Pond System 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 Pond System and alternative 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 to address cobalt SSLs. An ASD was completed to address the arsenic SSLs.

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 ASD for SSLs of arsenic (identified for Basin B) and molybdenum. The CMA was revised again on November 30, 2020, to include additional information related to site geology and hydrogeology and apply evaluation criteria to potential corrective measures. Remedy selection is in progress and the associated semiannual reports required by 40 C.F.R. § 257.97(a) are being completed.

The additional background groundwater quality data and sampling and analysis results from additional monitoring wells continue to be incorporated into the groundwater flow and transport model referenced above. Observations from a field investigation conducted in July 2023, including completion of an additional 23 soil borings, three temporary standpipe piezometers, and one monitoring well, will also be incorporated. This model will be used to facilitate the further evaluation and selection of a groundwater remedy.

The Pond System remains in the Assessment Monitoring Program in accordance with 40 C.F.R. § 257.96(b).

3. KEY ACTIONS COMPLETED IN 2023

A summary of the samples collected from background and compliance monitoring wells in 2023 under the Assessment Monitoring Program is included in **Table A** on the following page. Two background wells (MW-17 and MW-19, installed in 2020) were added to the monitoring system in 2023 and a background update evaluation was completed in 2023 for the purpose of better characterizing background conditions at the Pond System. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1**. A groundwater monitoring plan (GMP) was developed for the LRLF in 2023; no changes were made to the monitoring system (Ramboll, 2023a).

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 Multi-Site Sampling and Analysis Plan (SAP) (Ramboll, 2023b).

Potentiometric surfaces are included in **Figures 2 and 3**. All monitoring data and analytical results obtained under 40 C.F.R. § 257.90 through 257.98 are presented in **Tables 1 through 3**. All associated laboratory reports and field data sheets are included in **Appendix A**.

Analytical data were evaluated in accordance with the Multi-Site Statistical Analysis Plan (Ramboll, 2022a), the Multi-Site Quality Assurance Project Plan (Ramboll, 2022b), and the Multi-Site Data Management Plan (Ramboll, 2022c) to determine any SSLs of Appendix IV parameters over GWPSs and 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**. A background update evaluation was completed in 2023. The updated background values are shown on **Table 4** and were used beginning in the first quarter of 2023. GWPS values are provided in **Table 5**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**. Additional information to support the background update evaluation is provided in **Appendix C**. A summary of the determination of SSLs in included in **Table 6**. A flow chart showing the statistical methodology for determination of SSLs is included as **Appendix D**.

Table A. 2023 Assessment Monitoring Program Summary

Event ID	Sampling Dates [1, 2, 3]	Analytical Data Receipt Date	SSL(s) Determination Date	SSL(s)	CMA Initiated
A6	March 13-15, 2023	April 19, 2023	July 18, 2023	Arsenic at wells MW-2, MW-6, MW-10, and MW-13; Cobalt at wells 4A and MW-4	NA
A6D	September 21-25, 2023	October 17, 2023	January 15, 2024	Arsenic at wells MW-2, MW-6, MW-10, and MW-13; Cobalt at wells 4A and MW-4	NA

Notes:

CMA: Corrective Measures Assessment

NA: not applicable

SSL: Statistically Significant Level

[1] All samples were analyzed for Appendix III parameters listed in 40 C.F.R. § 257.94(e) and Appendix IV parameters listed in 40 C.F.R. § 257.95(g).

[2] The following background wells were sampled for each event: MW-7, MW-17, and MW-19

[3] The following compliance wells were sampled for each event: 4A, MW-1, MW-2, MW-3A, MW-4, MW-5, MW-6, MW-8, MW-9, MW-10, MW 11, MW-12, MW-13, MW 14, MW-15, and MW-16

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2023. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2024

The following key activities are planned for 2024:

- Continuation of the Assessment Monitoring Program with semiannual sampling scheduled for the first and third quarters of 2024.
- 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).

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), 2022a. Multi-Site Statistical Analysis Plan, 40 C.F.R. § 257. December 28, 2022.

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

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

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2023a. 40 C.F.R. § 257 Groundwater Monitoring Plan, Pond System, Miami Fort Power Plant, North Bend, Ohio. December 31, 2023.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2023b. Multi-Site Sampling and Analysis Plan, Revision 1. October 10, 2023.

TABLES

TABLE 1
GROUNDWATER ELEVATION DATA
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Well Type	Monitored Unit	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
MW-1	Compliance	UA	03/13/2023	46.49	458.00
MW-1	Compliance	UA	09/21/2023	49.97	454.52
MW-2	Compliance	UA	03/13/2023	17.30	454.93
MW-2	Compliance	UA	09/21/2023	18.87	453.36
MW-3A	Compliance	UA	03/13/2023	11.44	461.79
MW-3A	Compliance	UA	09/21/2023	18.74	454.49
MW-4	Compliance	UA	03/13/2023	20.48	457.41
MW-4	Compliance	UA	09/21/2023	25.62	452.27
MW-5	Compliance	UA	03/13/2023	53.31	456.65
MW-5	Compliance	UA	09/21/2023	56.29	453.67
MW-6	Compliance	UA	03/13/2023	50.80	457.54
MW-6	Compliance	UA	09/21/2023	54.02	454.32
MW-7	Background	UA	03/13/2023	53.29	456.88
MW-7	Background	UA	09/21/2023	56.88	453.29
MW-8	Compliance	UA	03/13/2023	37.10	456.33
MW-8	Compliance	UA	09/21/2023	39.62	453.81
MW-9	Compliance	UA	03/13/2023	17.94	455.11
MW-9	Compliance	UA	09/21/2023	19.95	453.10
MW-10	Compliance	UA	03/13/2023	18.18	455.17
MW-10	Compliance	UA	09/21/2023	19.37	453.98
MW-11	Compliance	UA	03/13/2023	19.07	455.38
MW-11	Compliance	UA	09/21/2023	20.89	453.56
MW-12	Compliance	UA	03/13/2023	52.00	456.44
MW-12	Compliance	UA	09/21/2023	54.37	454.07
MW-13	Compliance	UA	03/13/2023	24.22	456.48
MW-13	Compliance	UA	09/21/2023	26.97	453.73
MW-14	Compliance	UA	03/13/2023	23.24	456.65
MW-14	Compliance	UA	09/21/2023	25.62	454.27
MW-15	Compliance	UA	03/13/2023	40.01	457.51
MW-15	Compliance	UA	09/21/2023	43.29	454.23
MW-16	Compliance	UA	03/13/2023	39.82	457.47
MW-16	Compliance	UA	09/21/2023	43.10	454.19
MW-17	Background	UA	03/13/2023	54.74	457.08
MW-17	Background	UA	09/21/2023	55.30	456.52
MW-19	Background	UA	03/13/2023	42.60	458.78
MW-19	Background	UA	09/21/2023	46.61	454.77

Notes:
Only wells with groundwater elevations measured are included.
BMP = below measuring point
NAVD88 = North American Vertical Datum of 1988
Monitored Unit Abbreviations:

UA = uppermost aquifer

Generated 2024-01-22 12:58:22.267773 by banoffra

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
MW-7	UA	Background	03/14/2023	A6	Boron, total	mg/L	0.13 J	NA	NA
MW-7	UA	Background	09/22/2023	A6D	Boron, total	mg/L	0.115	NA	NA
MW-7	UA	Background	03/14/2023	A6	Calcium, total	mg/L	113	NA	NA
MW-7	UA	Background	09/22/2023	A6D	Calcium, total	mg/L	109	NA	NA
MW-7	UA	Background	03/14/2023	A6	Chloride, total	mg/L	6.67	NA	NA
MW-7	UA	Background	09/22/2023	A6D	Chloride, total	mg/L	3.08	NA	NA
MW-7	UA	Background	03/14/2023	A6	Fluoride, total	mg/L	0.115 J	NA	NA
MW-7	UA	Background	09/22/2023	A6D	Fluoride, total	mg/L	0.114 J	NA	NA
MW-7	UA	Background	03/14/2023	A6	pH (field)	SU	6.9	NA	NA
MW-7	UA	Background	09/22/2023	A6D	pH (field)	SU	6.9	NA	NA
MW-7	UA	Background	03/14/2023	A6	Sulfate, total	mg/L	46.0	NA	NA
MW-7	UA	Background	09/22/2023	A6D	Sulfate, total	mg/L	41.5	NA	NA
MW-7	UA	Background	03/14/2023	A6	Total Dissolved Solids	mg/L	465	NA	NA
MW-7	UA	Background	09/22/2023	A6D	Total Dissolved Solids	mg/L	453	NA	NA
MW-17	UA	Background	03/14/2023	A6	Boron, total	mg/L	0.052 J	NA	NA
MW-17	UA	Background	09/22/2023	A6D	Boron, total	mg/L	0.0628	NA	NA
MW-17	UA	Background	03/14/2023	A6	Calcium, total	mg/L	137	NA	NA
MW-17	UA	Background	09/22/2023	A6D	Calcium, total	mg/L	134	NA	NA
MW-17	UA	Background	03/14/2023	A6	Chloride, total	mg/L	66.8	NA	NA
MW-17	UA	Background	09/22/2023	A6D	Chloride, total	mg/L	52.4	NA	NA
MW-17	UA	Background	03/14/2023	A6	Fluoride, total	mg/L	0.193	NA	NA
MW-17	UA	Background	09/22/2023	A6D	Fluoride, total	mg/L	0.178	NA	NA
MW-17	UA	Background	03/14/2023	A6	pH (field)	SU	7.0	NA	NA
MW-17	UA	Background	09/22/2023	A6D	pH (field)	SU	7.0	NA	NA
MW-17	UA	Background	03/14/2023	A6	Sulfate, total	mg/L	84.8	NA	NA
MW-17	UA	Background	09/22/2023	A6D	Sulfate, total	mg/L	73.8	NA	NA
MW-17	UA	Background	03/14/2023	A6	Total Dissolved Solids	mg/L	615	NA	NA
MW-17	UA	Background	09/22/2023	A6D	Total Dissolved Solids	mg/L	590	NA	NA
MW-19	UA	Background	03/14/2023	A6	Boron, total	mg/L	0.0895	NA	NA
MW-19	UA	Background	09/22/2023	A6D	Boron, total	mg/L	0.0952	NA	NA
MW-19	UA	Background	03/14/2023	A6	Calcium, total	mg/L	140	NA	NA
MW-19	UA	Background	09/22/2023	A6D	Calcium, total	mg/L	134	NA	NA
MW-19	UA	Background	03/14/2023	A6	Chloride, total	mg/L	37.9	NA	NA
MW-19	UA	Background	09/22/2023	A6D	Chloride, total	mg/L	33.0	NA	NA
MW-19	UA	Background	03/14/2023	A6	Fluoride, total	mg/L	0.0906 J	NA	NA
MW-19	UA	Background	09/22/2023	A6D	Fluoride, total	mg/L	0.0759 J	NA	NA
MW-19	UA	Background	03/14/2023	A6	pH (field)	SU	6.8	NA	NA
MW-19	UA	Background	09/22/2023	A6D	pH (field)	SU	6.8	NA	NA
MW-19	UA	Background	03/14/2023	A6	Sulfate, total	mg/L	44.1	NA	NA
MW-19	UA	Background	09/22/2023	A6D	Sulfate, total	mg/L	45.1	NA	NA
MW-19	UA	Background	03/14/2023	A6	Total Dissolved Solids	mg/L	572	NA	NA
MW-19	UA	Background	09/22/2023	A6D	Total Dissolved Solids	mg/L	549	NA	NA
4A	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	7.40	0.137	Determined
4A	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	7.04	0.137	Confirmed
4A	UA	Compliance	12/13/2023	A6DR	Boron, total	mg/L	8.53	0.137	Confirmed
4A	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	175	154	Determined

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
4A	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	181	154	Confirmed
4A	UA	Compliance	12/13/2023	A6DR	Calcium, total	mg/L	191 J+	154	Confirmed
4A	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	191	80.2	Determined
4A	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	201	80.2	Confirmed
4A	UA	Compliance	12/13/2023	A6DR	Chloride, total	mg/L	189 J+	80.2	Confirmed
4A	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.165	0.310	No Exceedance
4A	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.131 J	0.310	No Exceedance
4A	UA	Compliance	12/13/2023	A6DR	Fluoride, total	mg/L	0.347 J	0.310	Determined
4A	UA	Compliance	03/14/2023	A6	pH (field)	SU	7.2	6.6/7.5	No Exceedance
4A	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.1	6.6/7.5	No Exceedance
4A	UA	Compliance	12/13/2023	A6DR	pH (field)	SU	7.5	6.6/7.5	No Exceedance
4A	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	431	85.2	Determined
4A	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	487	85.2	Confirmed
4A	UA	Compliance	12/13/2023	A6DR	Sulfate, total	mg/L	442 J+	85.2	Confirmed
4A	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	1,210	654	Determined
4A	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	1,280	654	Confirmed
4A	UA	Compliance	12/13/2023	A6DR	Total Dissolved Solids	mg/L	1,100 J	654	Confirmed
MW-1	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	0.644	0.137	Determined
MW-1	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	0.718	0.137	Determined
MW-1	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	116	154	No Exceedance
MW-1	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	119	154	No Exceedance
MW-1	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	47.2	80.2	No Exceedance
MW-1	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	43.4	80.2	No Exceedance
MW-1	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.492	0.310	Determined
MW-1	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.462	0.310	Determined
MW-1	UA	Compliance	03/14/2023	A6	pH (field)	SU	7.0	6.6/7.5	No Exceedance
MW-1	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.0	6.6/7.5	No Exceedance
MW-1	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	209	85.2	Determined
MW-1	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	230	85.2	Determined
MW-1	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	584	654	No Exceedance
MW-1	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	641	654	No Exceedance
MW-2	UA	Compliance	03/13/2023	A6	Boron, total	mg/L	0.503	0.137	Determined
MW-2	UA	Compliance	09/25/2023	A6D	Boron, total	mg/L	0.542	0.137	Determined
MW-2	UA	Compliance	03/13/2023	A6	Calcium, total	mg/L	139	154	No Exceedance
MW-2	UA	Compliance	09/25/2023	A6D	Calcium, total	mg/L	131	154	No Exceedance
MW-2	UA	Compliance	03/13/2023	A6	Chloride, total	mg/L	31.7	80.2	No Exceedance
MW-2	UA	Compliance	09/25/2023	A6D	Chloride, total	mg/L	33.2	80.2	No Exceedance
MW-2	UA	Compliance	03/13/2023	A6	Fluoride, total	mg/L	0.135 J	0.310	No Exceedance
MW-2	UA	Compliance	09/25/2023	A6D	Fluoride, total	mg/L	0.0758 J	0.310	No Exceedance
MW-2	UA	Compliance	03/13/2023	A6	pH (field)	SU	6.7	6.6/7.5	No Exceedance
MW-2	UA	Compliance	09/25/2023	A6D	pH (field)	SU	6.8	6.6/7.5	No Exceedance
MW-2	UA	Compliance	03/13/2023	A6	Sulfate, total	mg/L	14.1	85.2	No Exceedance
MW-2	UA	Compliance	09/25/2023	A6D	Sulfate, total	mg/L	10.9	85.2	No Exceedance
MW-2	UA	Compliance	03/13/2023	A6	Total Dissolved Solids	mg/L	620	654	No Exceedance
MW-2	UA	Compliance	09/25/2023	A6D	Total Dissolved Solids	mg/L	573	654	No Exceedance
MW-3A	UA	Compliance	03/15/2023	A6	Boron, total	mg/L	0.0628 J	0.137	No Exceedance (RL > GWPS)

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
MW-3A	UA	Compliance	09/25/2023	A6D	Boron, total	mg/L	0.116 J	0.137	No Exceedance (RL > GWPS)
MW-3A	UA	Compliance	03/15/2023	A6	Calcium, total	mg/L	50.3	154	No Exceedance
MW-3A	UA	Compliance	09/25/2023	A6D	Calcium, total	mg/L	48.2	154	No Exceedance
MW-3A	UA	Compliance	03/15/2023	A6	Chloride, total	mg/L	24.3	80.2	No Exceedance
MW-3A	UA	Compliance	09/25/2023	A6D	Chloride, total	mg/L	23.2	80.2	No Exceedance
MW-3A	UA	Compliance	03/15/2023	A6	Fluoride, total	mg/L	0.176	0.310	No Exceedance
MW-3A	UA	Compliance	09/25/2023	A6D	Fluoride, total	mg/L	0.12 J	0.310	No Exceedance
MW-3A	UA	Compliance	03/15/2023	A6	pH (field)	SU	8.4	6.6/7.5	Determined
MW-3A	UA	Compliance	09/25/2023	A6D	pH (field)	SU	7.3	6.6/7.5	No Exceedance
MW-3A	UA	Compliance	03/15/2023	A6	Sulfate, total	mg/L	7.15	85.2	No Exceedance
MW-3A	UA	Compliance	09/25/2023	A6D	Sulfate, total	mg/L	2.96 J	85.2	No Exceedance
MW-3A	UA	Compliance	03/15/2023	A6	Total Dissolved Solids	mg/L	241	654	No Exceedance
MW-3A	UA	Compliance	09/25/2023	A6D	Total Dissolved Solids	mg/L	213	654	No Exceedance
MW-4	UA	Compliance	03/15/2023	A6	Boron, total	mg/L	0.492	0.137	Determined
MW-4	UA	Compliance	09/25/2023	A6D	Boron, total	mg/L	0.391	0.137	Determined
MW-4	UA	Compliance	03/15/2023	A6	Calcium, total	mg/L	296	154	Determined
MW-4	UA	Compliance	09/25/2023	A6D	Calcium, total	mg/L	255	154	Determined
MW-4	UA	Compliance	03/15/2023	A6	Chloride, total	mg/L	24.4	80.2	No Exceedance
MW-4	UA	Compliance	09/25/2023	A6D	Chloride, total	mg/L	26.0	80.2	No Exceedance
MW-4	UA	Compliance	03/15/2023	A6	Fluoride, total	mg/L	0.138 J	0.310	No Exceedance
MW-4	UA	Compliance	09/25/2023	A6D	Fluoride, total	mg/L	0.0818 J	0.310	No Exceedance
MW-4	UA	Compliance	03/15/2023	A6	pH (field)	SU	6.9	6.6/7.5	No Exceedance
MW-4	UA	Compliance	09/25/2023	A6D	pH (field)	SU	6.2	6.6/7.5	Determined
MW-4	UA	Compliance	03/15/2023	A6	Sulfate, total	mg/L	999	85.2	Determined
MW-4	UA	Compliance	09/25/2023	A6D	Sulfate, total	mg/L	858	85.2	Determined
MW-4	UA	Compliance	03/15/2023	A6	Total Dissolved Solids	mg/L	1,660	654	Determined
MW-4	UA	Compliance	09/25/2023	A6D	Total Dissolved Solids	mg/L	1,260	654	Determined
MW-5	UA	Compliance	03/15/2023	A6	Boron, total	mg/L	28.9	0.137	Determined
MW-5	UA	Compliance	09/21/2023	A6D	Boron, total	mg/L	24.3	0.137	Determined
MW-5	UA	Compliance	03/15/2023	A6	Calcium, total	mg/L	426	154	Determined
MW-5	UA	Compliance	09/21/2023	A6D	Calcium, total	mg/L	410	154	Determined
MW-5	UA	Compliance	03/15/2023	A6	Chloride, total	mg/L	649	80.2	Determined
MW-5	UA	Compliance	09/21/2023	A6D	Chloride, total	mg/L	522	80.2	Determined
MW-5	UA	Compliance	03/15/2023	A6	Fluoride, total	mg/L	0.0643 J	0.310	No Exceedance
MW-5	UA	Compliance	09/21/2023	A6D	Fluoride, total	mg/L	0.064 U	0.310	No Exceedance
MW-5	UA	Compliance	03/15/2023	A6	pH (field)	SU	6.8	6.6/7.5	No Exceedance
MW-5	UA	Compliance	09/21/2023	A6D	pH (field)	SU	6.8	6.6/7.5	No Exceedance
MW-5	UA	Compliance	03/15/2023	A6	Sulfate, total	mg/L	765	85.2	Determined
MW-5	UA	Compliance	09/21/2023	A6D	Sulfate, total	mg/L	727	85.2	Determined
MW-5	UA	Compliance	03/15/2023	A6	Total Dissolved Solids	mg/L	2,170	654	Determined
MW-5	UA	Compliance	09/21/2023	A6D	Total Dissolved Solids	mg/L	2,160	654	Determined
MW-6	UA	Compliance	03/15/2023	A6	Boron, total	mg/L	21.2	0.137	Determined
MW-6	UA	Compliance	09/21/2023	A6D	Boron, total	mg/L	3.52	0.137	Determined
MW-6	UA	Compliance	03/15/2023	A6	Calcium, total	mg/L	108	154	No Exceedance
MW-6	UA	Compliance	09/21/2023	A6D	Calcium, total	mg/L	51.7	154	No Exceedance
MW-6	UA	Compliance	03/15/2023	A6	Chloride, total	mg/L	568	80.2	Determined

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
MW-6	UA	Compliance	09/21/2023	A6D	Chloride, total	mg/L	76.9	80.2	No Exceedance
MW-6	UA	Compliance	03/15/2023	A6	Fluoride, total	mg/L	0.765	0.310	Determined
MW-6	UA	Compliance	09/21/2023	A6D	Fluoride, total	mg/L	0.499	0.310	Determined
MW-6	UA	Compliance	03/15/2023	A6	pH (field)	SU	7.2	6.6/7.5	No Exceedance
MW-6	UA	Compliance	09/21/2023	A6D	pH (field)	SU	7.3	6.6/7.5	No Exceedance
MW-6	UA	Compliance	03/15/2023	A6	Sulfate, total	mg/L	161	85.2	Determined
MW-6	UA	Compliance	09/21/2023	A6D	Sulfate, total	mg/L	6.61 J+	85.2	No Exceedance
MW-6	UA	Compliance	03/15/2023	A6	Total Dissolved Solids	mg/L	1,470	654	Determined
MW-6	UA	Compliance	09/21/2023	A6D	Total Dissolved Solids	mg/L	556	654	No Exceedance
MW-8	UA	Compliance	03/13/2023	A6	Boron, total	mg/L	1.83	0.137	Determined
MW-8	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	0.815	0.137	Determined
MW-8	UA	Compliance	03/13/2023	A6	Calcium, total	mg/L	145	154	No Exceedance
MW-8	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	162	154	Determined
MW-8	UA	Compliance	03/13/2023	A6	Chloride, total	mg/L	41.8	80.2	No Exceedance
MW-8	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	39.6	80.2	No Exceedance
MW-8	UA	Compliance	03/13/2023	A6	Fluoride, total	mg/L	0.213	0.310	No Exceedance
MW-8	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.226	0.310	No Exceedance
MW-8	UA	Compliance	03/13/2023	A6	pH (field)	SU	7.1	6.6/7.5	No Exceedance
MW-8	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.0	6.6/7.5	No Exceedance
MW-8	UA	Compliance	03/13/2023	A6	Sulfate, total	mg/L	335	85.2	Determined
MW-8	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	466	85.2	Determined
MW-8	UA	Compliance	03/13/2023	A6	Total Dissolved Solids	mg/L	743	654	Determined
MW-8	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	820	654	Determined
MW-9	UA	Compliance	03/13/2023	A6	Boron, total	mg/L	2.95	0.137	Determined
MW-9	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	2.80	0.137	Determined
MW-9	UA	Compliance	03/13/2023	A6	Calcium, total	mg/L	174	154	Determined
MW-9	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	181	154	Determined
MW-9	UA	Compliance	03/13/2023	A6	Chloride, total	mg/L	67.8	80.2	No Exceedance
MW-9	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	75.7	80.2	No Exceedance
MW-9	UA	Compliance	03/13/2023	A6	Fluoride, total	mg/L	0.340	0.310	Determined
MW-9	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.325	0.310	Determined
MW-9	UA	Compliance	03/13/2023	A6	pH (field)	SU	7.0	6.6/7.5	No Exceedance
MW-9	UA	Compliance	09/22/2023	A6D	pH (field)	SU	6.9	6.6/7.5	No Exceedance
MW-9	UA	Compliance	03/13/2023	A6	Sulfate, total	mg/L	393	85.2	Determined
MW-9	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	401	85.2	Determined
MW-9	UA	Compliance	03/13/2023	A6	Total Dissolved Solids	mg/L	904	654	Determined
MW-9	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	923	654	Determined
MW-10	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	0.0775 J	0.137	No Exceedance
MW-10	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	0.0895	0.137	No Exceedance
MW-10	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	60.6	154	No Exceedance
MW-10	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	49.1	154	No Exceedance
MW-10	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	46.7	80.2	No Exceedance
MW-10	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	31.1	80.2	No Exceedance
MW-10	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.235	0.310	No Exceedance
MW-10	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.262	0.310	No Exceedance
MW-10	UA	Compliance	03/14/2023	A6	pH (field)	SU	7.7	6.6/7.5	Determined

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
MW-10	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.6	6.6/7.5	Determined
MW-10	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	21.2	85.2	No Exceedance
MW-10	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	22.0	85.2	No Exceedance
MW-10	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	309	654	No Exceedance
MW-10	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	274	654	No Exceedance
MW-11	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	0.0682 J	0.137	No Exceedance (RL > GWPS)
MW-11	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	0.0709	0.137	No Exceedance
MW-11	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	48.1	154	No Exceedance
MW-11	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	53.1	154	No Exceedance
MW-11	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	24.0	80.2	No Exceedance
MW-11	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	38.1	80.2	No Exceedance
MW-11	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.191	0.310	No Exceedance
MW-11	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.165	0.310	No Exceedance
MW-11	UA	Compliance	03/14/2023	A6	pH (field)	SU	7.7	6.6/7.5	Determined
MW-11	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.7	6.6/7.5	Determined
MW-11	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	37.3	85.2	No Exceedance
MW-11	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	37.5	85.2	No Exceedance
MW-11	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	257	654	No Exceedance
MW-11	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	281	654	No Exceedance
MW-12	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	5.89	0.137	Determined
MW-12	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	5.45	0.137	Determined
MW-12	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	155	154	Determined
MW-12	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	151	154	No Exceedance
MW-12	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	31.4	80.2	No Exceedance
MW-12	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	195	80.2	Determined
MW-12	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.122 J	0.310	No Exceedance
MW-12	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.0785 J	0.310	No Exceedance
MW-12	UA	Compliance	03/14/2023	A6	pH (field)	SU	5.7	6.6/7.5	Determined
MW-12	UA	Compliance	09/22/2023	A6D	pH (field)	SU	5.9	6.6/7.5	Determined
MW-12	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	14.3	85.2	No Exceedance
MW-12	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	313	85.2	Determined
MW-12	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	810	654	Determined
MW-12	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	842	654	Determined
MW-13	UA	Compliance	03/15/2023	A6	Boron, total	mg/L	0.07 J	0.137	No Exceedance
MW-13	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	0.0837	0.137	No Exceedance
MW-13	UA	Compliance	03/15/2023	A6	Calcium, total	mg/L	43.2	154	No Exceedance
MW-13	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	42.1	154	No Exceedance
MW-13	UA	Compliance	03/15/2023	A6	Chloride, total	mg/L	28.5	80.2	No Exceedance
MW-13	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	28.1	80.2	No Exceedance
MW-13	UA	Compliance	03/15/2023	A6	Fluoride, total	mg/L	0.185	0.310	No Exceedance
MW-13	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.176	0.310	No Exceedance
MW-13	UA	Compliance	03/15/2023	A6	pH (field)	SU	7.8	6.6/7.5	Determined
MW-13	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.6	6.6/7.5	Determined
MW-13	UA	Compliance	03/15/2023	A6	Sulfate, total	mg/L	43.8	85.2	No Exceedance
MW-13	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	46.7	85.2	No Exceedance
MW-13	UA	Compliance	03/15/2023	A6	Total Dissolved Solids	mg/L	237	654	No Exceedance

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Well Type	Date	Event ID	Parameter	Unit	Result	Background	SSI Type
MW-13	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	231	654	No Exceedance
MW-14	UA	Compliance	03/15/2023	A6	Boron, total	mg/L	0.0628 J	0.137	No Exceedance
MW-14	UA	Compliance	09/22/2023	A6D	Boron, total	mg/L	0.0779	0.137	No Exceedance
MW-14	UA	Compliance	03/15/2023	A6	Calcium, total	mg/L	43.2	154	No Exceedance
MW-14	UA	Compliance	09/22/2023	A6D	Calcium, total	mg/L	44.0	154	No Exceedance
MW-14	UA	Compliance	03/15/2023	A6	Chloride, total	mg/L	28.9	80.2	No Exceedance
MW-14	UA	Compliance	09/22/2023	A6D	Chloride, total	mg/L	28.9	80.2	No Exceedance
MW-14	UA	Compliance	03/15/2023	A6	Fluoride, total	mg/L	0.135 J	0.310	No Exceedance
MW-14	UA	Compliance	09/22/2023	A6D	Fluoride, total	mg/L	0.135 J	0.310	No Exceedance
MW-14	UA	Compliance	03/15/2023	A6	pH (field)	SU	8.3	6.6/7.5	Determined
MW-14	UA	Compliance	09/22/2023	A6D	pH (field)	SU	7.6	6.6/7.5	Determined
MW-14	UA	Compliance	03/15/2023	A6	Sulfate, total	mg/L	49.1	85.2	No Exceedance
MW-14	UA	Compliance	09/22/2023	A6D	Sulfate, total	mg/L	54.2	85.2	No Exceedance
MW-14	UA	Compliance	03/15/2023	A6	Total Dissolved Solids	mg/L	250	654	No Exceedance
MW-14	UA	Compliance	09/22/2023	A6D	Total Dissolved Solids	mg/L	235	654	No Exceedance
MW-15	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	0.514	0.137	Determined
MW-15	UA	Compliance	09/21/2023	A6D	Boron, total	mg/L	0.503	0.137	Determined
MW-15	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	123	154	No Exceedance
MW-15	UA	Compliance	09/21/2023	A6D	Calcium, total	mg/L	121	154	No Exceedance
MW-15	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	244	80.2	Determined
MW-15	UA	Compliance	09/21/2023	A6D	Chloride, total	mg/L	247	80.2	Determined
MW-15	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.251	0.310	No Exceedance
MW-15	UA	Compliance	09/21/2023	A6D	Fluoride, total	mg/L	0.171	0.310	No Exceedance
MW-15	UA	Compliance	03/14/2023	A6	pH (field)	SU	7.0	6.6/7.5	No Exceedance
MW-15	UA	Compliance	09/21/2023	A6D	pH (field)	SU	7.1	6.6/7.5	No Exceedance
MW-15	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	3.6 J	85.2	No Exceedance
MW-15	UA	Compliance	09/21/2023	A6D	Sulfate, total	mg/L	5 UJ	85.2	No Exceedance
MW-15	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	708	654	Determined
MW-15	UA	Compliance	09/21/2023	A6D	Total Dissolved Solids	mg/L	676 J	654	Determined
MW-16	UA	Compliance	03/14/2023	A6	Boron, total	mg/L	0.0664 J	0.137	No Exceedance
MW-16	UA	Compliance	09/21/2023	A6D	Boron, total	mg/L	0.0726	0.137	No Exceedance
MW-16	UA	Compliance	03/14/2023	A6	Calcium, total	mg/L	177	154	Determined
MW-16	UA	Compliance	09/21/2023	A6D	Calcium, total	mg/L	183	154	Determined
MW-16	UA	Compliance	03/14/2023	A6	Chloride, total	mg/L	106	80.2	Determined
MW-16	UA	Compliance	09/21/2023	A6D	Chloride, total	mg/L	101	80.2	Determined
MW-16	UA	Compliance	03/14/2023	A6	Fluoride, total	mg/L	0.106 J	0.310	No Exceedance
MW-16	UA	Compliance	09/21/2023	A6D	Fluoride, total	mg/L	0.0948 J	0.310	No Exceedance
MW-16	UA	Compliance	03/14/2023	A6	pH (field)	SU	6.8	6.6/7.5	No Exceedance
MW-16	UA	Compliance	09/21/2023	A6D	pH (field)	SU	6.8	6.6/7.5	No Exceedance
MW-16	UA	Compliance	03/14/2023	A6	Sulfate, total	mg/L	206	85.2	Determined
MW-16	UA	Compliance	09/21/2023	A6D	Sulfate, total	mg/L	194	85.2	Determined
MW-16	UA	Compliance	03/14/2023	A6	Total Dissolved Solids	mg/L	856	654	Determined
MW-16	UA	Compliance	09/21/2023	A6D	Total Dissolved Solids	mg/L	822	654	Determined

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Notes:
HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

ID = identification
mg/L = milligrams per liter
NA = not applicable
R = resample
Statistically Significant Increase (SSI) Type:

No Exceedance: No exceedance of the background.

Determined: An exceedance was determined without comparison to a resample.

Confirmed: An exceedance was determined with comparison to a resample. If a determined exceedance is confirmed by resample, both the sample and resample are noted as confirmed.

SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Generated 2024-01-22 15:16:38.657613 by banoffra

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Well Type	Date	Event ID	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	B	03/14/2023	A6	0.00103 U	0.000271 J	0.104	0.00019 U	0.00015 U	0.00151 J	0.000328 J	0.115 J	0.000849 U	0.00428	0.000108 J	0.000698 J	0.393	0.000876 J	0.000121 U
MW-7	B	09/22/2023	A6D	0.00103 U	0.00018 U	0.0910	0.00019 U	0.00015 U	0.00124 U	0.0000596 U	0.114 J	0.000849 U	0.00387	0.0001 U	0.00077 J	0.600	0.0003 U	0.000121 U
MW-17	B	03/14/2023	A6	0.00103 U	0.00038 J	0.0532	0.00019 U	0.00015 U	0.00274	0.00161 J	0.193	0.000849 U	0.00944	0.000122 J	0.00281 J	0.980	0.0003 U	0.000121 U
MW-17	B	09/22/2023	A6D	0.00103 U	0.000226 J	0.0527	0.00019 U	0.00015 U	0.00124 U	0.00154 J	0.178	0.000849 U	0.00932	0.0001 U	0.00303 J	0.681	0.0003 U	0.000121 U
MW-19	B	03/14/2023	A6	0.00103 U	0.0003 J	0.128	0.00019 U	0.00015 U	0.00124 U	0.000474 J	0.0906 J	0.000849 U	0.00689	0.000105 J	0.00268 J	0.113	0.0003 U	0.000121 U
MW-19	B	09/22/2023	A6D	0.00103 U	0.00018 U	0.135	0.00019 U	0.00015 U	0.00124 U	0.000396 J	0.0759 J	0.000849 U	0.00566	0.0001 U	0.00254 J	0.838	0.0003 U	0.000121 U
4A	C	03/14/2023	A6	0.00103 U	0.00593	0.0864	0.00019 U	0.000338 J	0.00189 J	0.0107	0.165	0.00501	0.00837	0.0001 U	0.0143	0.987	0.000357 J	0.000121 U
4A	C	09/22/2023	A6D	0.00103 U	0.00602	0.0676	0.00019 U	0.000327 J	0.00124 U	0.00770	0.131 J	0.00119 J	0.00852	0.0001 UJ	0.0134	0.996	0.0003 U	0.000121 U
4A	C	12/13/2023	A6DR	0.0021 UJ	0.00117 UJ	0.0622 J+	0.00019 U	0.000309 J	0.00124 U	0.00655	0.347 J	0.000849 U	0.00930 J+	0.0001 U	0.0160 J+	--	0.000337 J	0.000142 J
MW-1	C	03/14/2023	A6	0.00103 U	0.000342 J	0.0378	0.00019 U	0.000606 J	0.00124 U	0.0000983 J	0.492	0.000849 U	0.0310	0.000124 J	0.0798	0.0534	0.0003 U	0.000221 J
MW-1	C	09/22/2023	A6D	0.00103 U	0.000295 J	0.0406	0.00019 U	0.00015 U	0.00124 U	0.000082 J	0.462	0.000849 U	0.0314	0.0001 U	0.103	0.866	0.0003 U	0.000223 J
MW-2	C	03/13/2023	A6	0.00103 U	0.0353	0.439	0.00019 U	0.00015 U	0.00124 U	0.000264 J	0.135 J	0.000849 U	0.000969 J	0.000113 J	0.000389 J	1.67	0.000568 J	0.000121 U
MW-2	C	09/25/2023	A6D	0.00103 U	0.0344	0.439	0.00019 U	0.00015 U	0.00124 U	0.000302 J	0.0758 J	0.000849 U	0.000761 J	0.0001 U	0.000462 J	0.766	0.0003 U	0.000121 U
MW-3A	C	03/15/2023	A6	0.00103 U	0.00845	0.126	0.00019 U	0.00015 U	0.00124 U	0.0000649 J	0.176	0.000849 U	0.00127 J	0.000126 J	0.00127 J	0.395	0.0003 U	0.000121 U
MW-3A	C	09/25/2023	A6D	0.00103 U	0.00977	0.114	0.00019 U	0.00015 U	0.00124 U	0.0000611 J	0.12 J	0.000849 U	0.00104 J	0.0001 U	0.000835 J	1.22	0.0003 U	0.000121 U
MW-4	C	03/15/2023	A6	0.00103 U	0.00191 J	0.0190	0.00019 U	0.00074 J	0.00124 U	0.0141	0.138 J	0.00134 J	0.00559	0.000133 J	0.000654 J	0.914	0.0003 U	0.000121 U
MW-4	C	09/25/2023	A6D	0.00103 U	0.00165 J	0.0158	0.00019 U	0.000726 J	0.00149 J	0.0114	0.0818 J	0.002 UJ	0.00411	0.0001 U	0.000899 J	0.955	0.0003 U	0.000121 U
MW-5	C	03/15/2023	A6	0.00103 U	0.000313 J	0.0734	0.00019 U	0.00015 U	0.00124 U	0.000235 J	0.0643 J	0.000849 U	0.0109	0.000111 J	0.0166	0.494	0.0003 U	0.000236 J
MW-5	C	09/21/2023	A6D	0.00103 U	0.000471 J	0.0714	0.00019 U	0.00015 U	0.00124 U	0.00041 J	0.064 U	0.000849 U	0.0107	0.0001 U	0.0271	0.266	0.0003 U	0.000169 J
MW-6	C	03/15/2023	A6	0.00103 U	0.0160	0.160	0.00019 U	0.00015 U	0.00124 U	0.00486	0.765	0.000849 U	0.0104	0.0001 U	0.151	0.834	0.0003 U	0.000121 U
MW-6	C	09/21/2023	A6D	0.00103 U	0.0153	0.734	0.00019 U	0.00015 U	0.00124 U	0.00169 J	0.499	0.000849 U	0.00783	0.0001 U	0.157	0.140	0.0003 U	0.000121 U
MW-8	C	03/13/2023	A6	0.00103 U	0.000218 J	0.0393	0.00019 U	0.00015 U	0.00124 U	0.0000871 J	0.213	0.000849 U	0.0153	0.000104 J	0.00720	0.850	0.00184 J	0.000121 U
MW-8	C	09/22/2023	A6D	0.00103 U	0.00028 J	0.0477	0.00019 U	0.00015 U	0.00124 U	0.0000596 U	0.226	0.000849 U	0.0131	0.0001 U	0.00781	1.59	0.00333	0.000121 U
MW-9	C	03/13/2023	A6	0.00103 U	0.000288 J	0.0658	0.00019 U	0.00015 U	0.00124 U	0.000159 J	0.340	0.000849 U	0.00929	0.000113 J	0.0428	0	0.0003 U	0.000121 U
MW-9	C	09/22/2023	A6D	0.00103 U	0.000318 J	0.0744	0.00019 U	0.00015 U	0.00124 U	0.000128 J	0.325	0.000849 U	0.00987	0.0001 U	0.0445	1.77	0.0003 U	0.000121 U
MW-10	C	03/14/2023	A6	0.00103 U	0.0162	0.149	0.00019 U	0.00015 U	0.00124 U	0.0000596 U	0.235	0.000849 U	0.00183 J	0.000114 J	0.00457 J	0.519	0.0003 U	0.000121 U
MW-10	C	09/22/2023	A6D	0.00103 U	0.0141	0.121	0.00019 U	0.00015 U	0.00124 U	0.0000702 J	0.262	0.000849 U	0.00191 J	0.0001 U	0.00517	1.37	0.0003 U	0.000121 U

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Well Type	Date	Event ID	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-11	C	03/14/2023	A6	0.00103 U	0.00831	0.199	0.00019 U	0.00015 U	0.00124 U	0.000507 J	0.191	0.000849 U	0.00273	0.00011 J	0.00475 J	0.371	0.0003 U	0.000121 U
MW-11	C	09/22/2023	A6D	0.00103 U	0.00819	0.217	0.00019 U	0.00015 U	0.00124 U	0.000616 J	0.165	0.000849 U	0.00263	0.0001 U	0.00421 J	1.75	0.0003 U	0.000121 U
MW-12	C	03/14/2023	A6	0.00103 U	0.000208 J	0.0146	0.00019 U	0.00117	0.00124 U	0.00271	0.122 J	0.000849 U	0.00316	0.000814	0.000604 J	0.300	0.0003 U	0.000121 U
MW-12	C	09/22/2023	A6D	0.00103 U	0.00018 U	0.0156	0.00019 U	0.00100	0.00124 U	0.00301	0.0785 J	0.000849 U	0.00268	0.00143	0.000348 U	0.497	0.0003 U	0.000121 U
MW-13	C	03/15/2023	A6	0.00103 U	0.0125	0.176	0.00019 U	0.00015 U	0.00124 U	0.000316 J	0.185	0.000849 U	0.00444	0.000118 J	0.0111	0.611	0.0003 U	0.000121 U
MW-13	C	09/22/2023	A6D	0.00103 U	0.00849	0.171	0.00019 U	0.00015 U	0.00246	0.000294 J	0.176	0.000849 U	0.00443	0.0001 U	0.0126	1.69	0.0003 U	0.000121 U
MW-14	C	03/15/2023	A6	0.00103 U	0.000761 J	0.0441	0.00019 U	0.00015 U	0.00124 U	0.000493 J	0.135 J	0.000849 U	0.00389	0.0001 U	0.00608	0.139	0.0003 U	0.000121 U
MW-14	C	09/22/2023	A6D	0.00103 U	0.000651 J	0.0423	0.00019 U	0.00015 U	0.00124 U	0.000468 J	0.135 J	0.000849 U	0.00373	0.0001 U	0.00588	1.60	0.0003 U	0.000121 U
MW-15	C	03/14/2023	A6	0.00103 U	0.000731 J	0.0824	0.00019 U	0.00015 U	0.00124 U	0.00260	0.251	0.000849 U	0.00700	0.0001 U	0.0229	0.537	0.0003 U	0.000121 U
MW-15	C	09/21/2023	A6D	0.00103 U	0.000772 J	0.0723	0.00019 U	0.00015 U	0.00124 U	0.00244	0.171	0.000849 U	0.00636	0.0001 U	0.0305	0.639	0.0003 U	0.000121 U
MW-16	C	03/14/2023	A6	0.00103 U	0.000327 J	0.0815	0.00019 U	0.00015 U	0.00124 U	0.00105 J	0.106 J	0.000849 U	0.0108	0.000121 J	0.000348 U	0.275	0.0003 U	0.000121 U
MW-16	C	09/21/2023	A6D	0.00103 U	0.000216 J	0.0729	0.00019 U	0.00015 U	0.00124 U	0.00102 J	0.0948 J	0.000849 U	0.0102	0.0001 U	0.000524 J	0.521	0.0003 U	0.000121 U

Notes:
– = no data available
ID = identification
mg/L = milligrams per liter
pCi/L = picoCuries per liter
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
Well Type:

B = Background

C = Compliance

Generated 2024-01-14 00:57:04.163118 by banoffra

TABLE 4
STATISTICAL BACKGROUND VALUES
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Parameter	Date Range	Sample Count	Percent Non-Detects	Statistical Calculation	Statistical Background Value (LPL/UPL)
Boron (mg/L)	09/14/2020 - 09/21/2022	33	0	Parametric UPL	0.137
Calcium (mg/L)	09/14/2020 - 09/21/2022	33	0	Parametric UPL	154
Chloride (mg/L)	09/14/2020 - 09/21/2022	32	0	Non-Parametric UPL	80.2
Fluoride (mg/L)	09/14/2020 - 09/21/2022	33	64	Non-Parametric UPL	0.310
pH (field) (SU)	09/14/2020 - 09/21/2022	33	0	Parametric LPL/UPL	6.6/7.5
Sulfate (mg/L)	09/14/2020 - 09/21/2022	33	0	Non-Parametric UPL	85.2
Total Dissolved Solids (mg/L)	09/14/2020 - 09/21/2022	32	0	Non-Parametric UPL	654

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

Generated 2024-01-14 01:44:04.395282 by banoffra

TABLE 5
GROUNDWATER PROTECTION STANDARDS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
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)	09/15/2020 - 09/21/2022	32	100	All ND - Last Reporting Limit	0.004	0.006	0.006	MCL/HBL
Arsenic (mg/L)	09/14/2020 - 09/21/2022	33	79	Non-parametric UTL	0.00828	0.010	0.010	MCL/HBL
Barium (mg/L)	09/14/2020 - 09/21/2022	33	0	Non-parametric UTL	0.203	2.0	2.0	MCL/HBL
Beryllium (mg/L)	09/14/2020 - 09/21/2022	33	100	All ND - Last Reporting Limit	0.002	0.004	0.004	MCL/HBL
Cadmium (mg/L)	09/14/2020 - 09/21/2022	33	100	All ND - Last Reporting Limit	0.001	0.005	0.005	MCL/HBL
Chromium (mg/L)	09/14/2020 - 09/21/2022	33	94	Non-parametric UTL	0.00207	0.1	0.1	MCL/HBL
Cobalt (mg/L)	09/14/2020 - 09/21/2022	32	78	Non-parametric UTL	0.00435	0.006	0.006	MCL/HBL
Fluoride (mg/L)	09/14/2020 - 09/21/2022	33	64	Non-parametric UTL	0.310	4.0	4.0	MCL/HBL
Lead (mg/L)	09/14/2020 - 09/21/2022	33	100	All ND - Last Reporting Limit	0.002	0.015	0.015	MCL/HBL
Lithium (mg/L)	09/14/2020 - 09/21/2022	33	0	Parametric UTL	0.0119	0.04	0.04	MCL/HBL
Mercury (mg/L)	09/14/2020 - 09/21/2022	33	100	All ND - Last Reporting Limit	0.0002	0.002	0.002	MCL/HBL
Molybdenum (mg/L)	09/14/2020 - 09/21/2022	33	91	Non-parametric UTL	0.0125	0.1	0.1	MCL/HBL
Radium 226 + Radium 228 (pCi/L)	09/14/2020 - 09/21/2022	28	0	Parametric UTL (log-transformed)	2.88	5	5	MCL/HBL
Selenium (mg/L)	09/14/2020 - 09/21/2022	33	91	Non-parametric UTL	0.00459	0.05	0.05	MCL/HBL
Thallium (mg/L)	09/14/2020 - 09/21/2022	33	100	All ND - Last Reporting Limit	0.002	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

Generated 2024-01-14 00:57:10.017092 by banoffra

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
4A	UA	A6	Antimony, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
4A	UA	A6D	Antimony, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
4A	UA	A6DR	Antimony, total	mg/L	09/15/2020 - 12/13/2023	12	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
4A	UA	A6	Arsenic, total	mg/L	09/15/2020 - 03/14/2023	10	40	CI around geomean	0.00186	0.010	MCL/HBL	No Exceedance
4A	UA	A6D	Arsenic, total	mg/L	09/15/2020 - 09/22/2023	11	36	CI around geomean	0.00212	0.010	MCL/HBL	No Exceedance
4A	UA	A6DR	Arsenic, total	mg/L	09/15/2020 - 12/13/2023	12	42	CI around median	0.002	0.010	MCL/HBL	No Exceedance
4A	UA	A6	Barium, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around median	0.0864	2.0	MCL/HBL	No Exceedance
4A	UA	A6D	Barium, total	mg/L	09/15/2020 - 09/22/2023	11	0	CI around median	0.0807	2.0	MCL/HBL	No Exceedance
4A	UA	A6DR	Barium, total	mg/L	09/15/2020 - 12/13/2023	12	0	CI around median	0.0676	2.0	MCL/HBL	No Exceedance
4A	UA	A6	Beryllium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
4A	UA	A6D	Beryllium, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
4A	UA	A6DR	Beryllium, total	mg/L	09/15/2020 - 12/13/2023	12	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
4A	UA	A6	Cadmium, total	mg/L	09/15/2020 - 03/14/2023	10	90	CI around median	0.001	0.005	MCL/HBL	No Exceedance
4A	UA	A6D	Cadmium, total	mg/L	09/15/2020 - 09/22/2023	11	91	CI around median	0.001	0.005	MCL/HBL	No Exceedance
4A	UA	A6DR	Cadmium, total	mg/L	09/15/2020 - 12/13/2023	12	92	CI around median	0.001	0.005	MCL/HBL	No Exceedance
4A	UA	A6	Chromium, total	mg/L	09/15/2020 - 03/14/2023	10	70	CI around median	0.002	0.1	MCL/HBL	No Exceedance
4A	UA	A6D	Chromium, total	mg/L	09/15/2020 - 09/22/2023	11	73	CI around median	0.002	0.1	MCL/HBL	No Exceedance
4A	UA	A6DR	Chromium, total	mg/L	09/15/2020 - 12/13/2023	12	75	CI around median	0.002	0.1	MCL/HBL	No Exceedance
4A	UA	A6	Cobalt, total	mg/L	06/12/2020 - 03/14/2023	11	18	CI around mean	0.00633	0.006	MCL/HBL	Determined
4A	UA	A6D	Cobalt, total	mg/L	06/12/2020 - 09/22/2023	12	17	CI around mean	0.00647	0.006	MCL/HBL	Confirmed
4A	UA	A6DR	Cobalt, total	mg/L	06/12/2020 - 12/13/2023	13	15	CI around mean	0.00645	0.006	MCL/HBL	Confirmed
4A	UA	A6	Fluoride, total	mg/L	09/15/2020 - 03/14/2023	10	20	CI around median	0.15	4.0	MCL/HBL	No Exceedance
4A	UA	A6D	Fluoride, total	mg/L	09/15/2020 - 09/22/2023	11	27	CI around median	0.15	4.0	MCL/HBL	No Exceedance
4A	UA	A6DR	Fluoride, total	mg/L	09/15/2020 - 12/13/2023	12	33	CI around median	0.15	4.0	MCL/HBL	No Exceedance
4A	UA	A6	Lead, total	mg/L	09/15/2020 - 03/14/2023	10	40	CI around geomean	0.00202	0.015	MCL/HBL	No Exceedance
4A	UA	A6D	Lead, total	mg/L	09/15/2020 - 09/22/2023	11	45	CI around geomean	0.00198	0.015	MCL/HBL	No Exceedance
4A	UA	A6DR	Lead, total	mg/L	09/15/2020 - 12/13/2023	12	50	CI around geomean	0.00196	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
4A	UA	A6	Lithium, total	mg/L	09/15/2020 - 03/14/2023	10	10	CI around geomean	0.00716	0.04	MCL/HBL	No Exceedance
4A	UA	A6D	Lithium, total	mg/L	09/15/2020 - 09/22/2023	11	9.1	CI around geomean	0.00731	0.04	MCL/HBL	No Exceedance
4A	UA	A6DR	Lithium, total	mg/L	09/15/2020 - 12/13/2023	12	8.3	CI around geomean	0.0075	0.04	MCL/HBL	No Exceedance
4A	UA	A6	Mercury, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
4A	UA	A6D	Mercury, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
4A	UA	A6DR	Mercury, total	mg/L	09/15/2020 - 12/13/2023	12	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
4A	UA	A6	Molybdenum, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around geomean	0.0128	0.1	MCL/HBL	No Exceedance
4A	UA	A6D	Molybdenum, total	mg/L	09/15/2020 - 09/22/2023	11	0	CI around median	0.0134	0.1	MCL/HBL	No Exceedance
4A	UA	A6DR	Molybdenum, total	mg/L	09/15/2020 - 12/13/2023	12	0	CI around median	0.0134	0.1	MCL/HBL	No Exceedance
4A	UA	A6	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 03/14/2023	7	0	CI around mean	0.756	5	MCL/HBL	No Exceedance
4A	UA	A6D	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 09/22/2023	8	0	CI around mean	0.784	5	MCL/HBL	No Exceedance
4A	UA	A6DR	Radium 226 + Radium 228, total	pCi/L	--	--	--	--	--	5	MCL/HBL	--
4A	UA	A6	Selenium, total	mg/L	09/15/2020 - 03/14/2023	10	90	CI around median	0.002	0.05	MCL/HBL	No Exceedance
4A	UA	A6D	Selenium, total	mg/L	09/15/2020 - 09/22/2023	11	91	CI around median	0.002	0.05	MCL/HBL	No Exceedance
4A	UA	A6DR	Selenium, total	mg/L	09/15/2020 - 12/13/2023	12	92	CI around median	0.002	0.05	MCL/HBL	No Exceedance
4A	UA	A6	Thallium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
4A	UA	A6D	Thallium, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
4A	UA	A6DR	Thallium, total	mg/L	09/15/2020 - 12/13/2023	12	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-1	UA	A6	Antimony, total	mg/L	12/08/2015 - 03/14/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-1	UA	A6D	Antimony, total	mg/L	12/08/2015 - 09/22/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-1	UA	A6	Arsenic, total	mg/L	12/08/2015 - 03/14/2023	19	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-1	UA	A6D	Arsenic, total	mg/L	12/08/2015 - 09/22/2023	20	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-1	UA	A6	Barium, total	mg/L	12/08/2015 - 03/14/2023	19	5.3	CI around median	0.0378	2.0	MCL/HBL	No Exceedance
MW-1	UA	A6D	Barium, total	mg/L	12/08/2015 - 09/22/2023	20	5.0	CI around median	0.0378	2.0	MCL/HBL	No Exceedance
MW-1	UA	A6	Beryllium, total	mg/L	12/08/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-1	UA	A6D	Beryllium, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-1	UA	A6	Cadmium, total	mg/L	12/08/2015 - 03/14/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-1	UA	A6D	Cadmium, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-1	UA	A6	Chromium, total	mg/L	12/08/2015 - 03/14/2023	19	95	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-1	UA	A6D	Chromium, total	mg/L	12/08/2015 - 09/22/2023	20	95	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-1	UA	A6	Cobalt, total	mg/L	12/08/2015 - 03/14/2023	20	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
MW-1	UA	A6D	Cobalt, total	mg/L	12/08/2015 - 09/22/2023	21	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
MW-1	UA	A6	Fluoride, total	mg/L	12/08/2015 - 03/14/2023	20	55	CI around median	0.373	4.0	MCL/HBL	No Exceedance
MW-1	UA	A6D	Fluoride, total	mg/L	12/08/2015 - 09/22/2023	21	52	CI around median	0.383	4.0	MCL/HBL	No Exceedance
MW-1	UA	A6	Lead, total	mg/L	12/08/2015 - 03/14/2023	18	94	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-1	UA	A6D	Lead, total	mg/L	12/08/2015 - 09/22/2023	19	95	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-1	UA	A6	Lithium, total	mg/L	12/08/2015 - 03/14/2023	18	28	CB around linear reg	0.0125	0.04	MCL/HBL	No Exceedance
MW-1	UA	A6D	Lithium, total	mg/L	12/08/2015 - 09/22/2023	19	26	CB around linear reg	0.0126	0.04	MCL/HBL	No Exceedance
MW-1	UA	A6	Mercury, total	mg/L	12/08/2015 - 03/14/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-1	UA	A6D	Mercury, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-1	UA	A6	Molybdenum, total	mg/L	12/08/2015 - 03/14/2023	20	0	CI around mean	0.0323	0.1	MCL/HBL	No Exceedance
MW-1	UA	A6D	Molybdenum, total	mg/L	12/08/2015 - 09/22/2023	21	0	CI around geomean	0.0324	0.1	MCL/HBL	No Exceedance
MW-1	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/08/2015 - 03/14/2023	19	0	CI around geomean	0.147	5	MCL/HBL	No Exceedance
MW-1	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/08/2015 - 09/22/2023	20	0	CI around geomean	0.158	5	MCL/HBL	No Exceedance
MW-1	UA	A6	Selenium, total	mg/L	12/08/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-1	UA	A6D	Selenium, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-1	UA	A6	Thallium, total	mg/L	12/08/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-1	UA	A6D	Thallium, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-2	UA	A6	Antimony, total	mg/L	12/09/2015 - 03/13/2023	16	94	CB around T-S line	0.002	0.006	MCL/HBL	No Exceedance
MW-2	UA	A6D	Antimony, total	mg/L	12/09/2015 - 09/25/2023	17	94	CB around T-S line	0.002	0.006	MCL/HBL	No Exceedance
MW-2	UA	A6	Arsenic, total	mg/L	12/09/2015 - 03/13/2023	19	0	CI around mean	0.027	0.010	MCL/HBL	Determined
MW-2	UA	A6D	Arsenic, total	mg/L	12/09/2015 - 09/25/2023	20	0	CI around mean	0.0273	0.010	MCL/HBL	Determined
MW-2	UA	A6	Barium, total	mg/L	12/09/2015 - 03/13/2023	19	0	CI around mean	0.422	2.0	MCL/HBL	No Exceedance
MW-2	UA	A6D	Barium, total	mg/L	12/09/2015 - 09/25/2023	20	0	CI around mean	0.423	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-2	UA	A6	Beryllium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-2	UA	A6D	Beryllium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-2	UA	A6	Cadmium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-2	UA	A6D	Cadmium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-2	UA	A6	Chromium, total	mg/L	12/09/2015 - 03/13/2023	19	74	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-2	UA	A6D	Chromium, total	mg/L	12/09/2015 - 09/25/2023	20	75	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-2	UA	A6	Cobalt, total	mg/L	12/09/2015 - 03/13/2023	18	67	CI around median	0.000626	0.006	MCL/HBL	No Exceedance
MW-2	UA	A6D	Cobalt, total	mg/L	12/09/2015 - 09/25/2023	19	68	CI around median	0.000626	0.006	MCL/HBL	No Exceedance
MW-2	UA	A6	Fluoride, total	mg/L	12/09/2015 - 03/13/2023	20	90	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-2	UA	A6D	Fluoride, total	mg/L	12/09/2015 - 09/25/2023	21	90	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-2	UA	A6	Lead, total	mg/L	12/09/2015 - 03/13/2023	18	67	CI around median	0.001	0.015	MCL/HBL	No Exceedance
MW-2	UA	A6D	Lead, total	mg/L	12/09/2015 - 09/25/2023	19	68	CI around median	0.001	0.015	MCL/HBL	No Exceedance
MW-2	UA	A6	Lithium, total	mg/L	12/09/2015 - 03/13/2023	18	78	CB around T-S line	-0.0314	0.04	MCL/HBL	No Exceedance
MW-2	UA	A6D	Lithium, total	mg/L	12/09/2015 - 09/25/2023	19	79	CB around T-S line	-0.0374	0.04	MCL/HBL	No Exceedance
MW-2	UA	A6	Mercury, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-2	UA	A6D	Mercury, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-2	UA	A6	Molybdenum, total	mg/L	12/09/2015 - 03/13/2023	19	95	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-2	UA	A6D	Molybdenum, total	mg/L	12/09/2015 - 09/25/2023	20	95	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-2	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 03/13/2023	19	0	CI around mean	0.718	5	MCL/HBL	No Exceedance
MW-2	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 09/25/2023	20	0	CI around geomean	0.681	5	MCL/HBL	No Exceedance
MW-2	UA	A6	Selenium, total	mg/L	12/09/2015 - 03/13/2023	18	94	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-2	UA	A6D	Selenium, total	mg/L	12/09/2015 - 09/25/2023	19	95	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-2	UA	A6	Thallium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-2	UA	A6D	Thallium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-3A	UA	A6	Antimony, total	mg/L	12/09/2015 - 03/15/2023	16	94	CB around T-S line	0.00205	0.006	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Antimony, total	mg/L	12/09/2015 - 09/25/2023	17	94	CB around T-S line	0.0034	0.006	MCL/HBL	No Exceedance
MW-3A	UA	A6	Arsenic, total	mg/L	12/09/2015 - 03/15/2023	19	0	CI around geomean	0.00633	0.010	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-3A	UA	A6D	Arsenic, total	mg/L	12/09/2015 - 09/25/2023	20	0	CI around geomean	0.00647	0.010	MCL/HBL	No Exceedance
MW-3A	UA	A6	Barium, total	mg/L	12/09/2015 - 03/15/2023	19	5.3	CI around mean	0.118	2.0	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Barium, total	mg/L	12/09/2015 - 09/25/2023	20	5.0	CI around mean	0.118	2.0	MCL/HBL	No Exceedance
MW-3A	UA	A6	Beryllium, total	mg/L	12/09/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Beryllium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-3A	UA	A6	Cadmium, total	mg/L	12/09/2015 - 03/15/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Cadmium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-3A	UA	A6	Chromium, total	mg/L	12/09/2015 - 03/15/2023	19	79	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Chromium, total	mg/L	12/09/2015 - 09/25/2023	20	80	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-3A	UA	A6	Cobalt, total	mg/L	12/09/2015 - 03/15/2023	18	78	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Cobalt, total	mg/L	12/09/2015 - 09/25/2023	19	79	CB around T-S line	0.0005	0.006	MCL/HBL	No Exceedance
MW-3A	UA	A6	Fluoride, total	mg/L	12/09/2015 - 03/15/2023	20	75	CI around median	0.169	4.0	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Fluoride, total	mg/L	12/09/2015 - 09/25/2023	21	76	CB around T-S line	-0.46	4.0	MCL/HBL	No Exceedance
MW-3A	UA	A6	Lead, total	mg/L	12/09/2015 - 03/15/2023	18	78	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Lead, total	mg/L	12/09/2015 - 09/25/2023	19	79	CB around T-S line	0.00118	0.015	MCL/HBL	No Exceedance
MW-3A	UA	A6	Lithium, total	mg/L	12/09/2015 - 03/15/2023	18	83	CB around T-S line	-0.0332	0.04	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Lithium, total	mg/L	12/09/2015 - 09/25/2023	19	84	CB around T-S line	-0.0431	0.04	MCL/HBL	No Exceedance
MW-3A	UA	A6	Mercury, total	mg/L	12/09/2015 - 03/15/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Mercury, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-3A	UA	A6	Molybdenum, total	mg/L	12/09/2015 - 03/15/2023	19	95	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Molybdenum, total	mg/L	12/09/2015 - 09/25/2023	20	95	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-3A	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 03/15/2023	19	0	CI around mean	0.432	5	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 09/25/2023	20	0	CI around mean	0.462	5	MCL/HBL	No Exceedance
MW-3A	UA	A6	Selenium, total	mg/L	12/09/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Selenium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-3A	UA	A6	Thallium, total	mg/L	12/09/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-3A	UA	A6D	Thallium, total	mg/L	12/09/2015 - 09/25/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-4	UA	A6	Antimony, total	mg/L	12/07/2015 - 03/15/2023	22	95	CB around T-S line	0.00347	0.006	MCL/HBL	No Exceedance
MW-4	UA	A6D	Antimony, total	mg/L	12/07/2015 - 09/25/2023	23	96	CB around T-S line	0.00362	0.006	MCL/HBL	No Exceedance
MW-4	UA	A6	Arsenic, total	mg/L	12/07/2015 - 03/15/2023	25	44	CI around geomean	0.00129	0.010	MCL/HBL	No Exceedance
MW-4	UA	A6D	Arsenic, total	mg/L	12/07/2015 - 09/25/2023	26	46	CI around median	0.002	0.010	MCL/HBL	No Exceedance
MW-4	UA	A6	Barium, total	mg/L	12/07/2015 - 03/15/2023	25	16	CI around median	0.0191	2.0	MCL/HBL	No Exceedance
MW-4	UA	A6D	Barium, total	mg/L	12/07/2015 - 09/25/2023	26	15	CI around median	0.0191	2.0	MCL/HBL	No Exceedance
MW-4	UA	A6	Beryllium, total	mg/L	12/07/2015 - 03/15/2023	24	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-4	UA	A6D	Beryllium, total	mg/L	12/07/2015 - 09/25/2023	25	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-4	UA	A6	Cadmium, total	mg/L	12/07/2015 - 03/15/2023	24	71	CI around median	0.001	0.005	MCL/HBL	No Exceedance
MW-4	UA	A6D	Cadmium, total	mg/L	12/07/2015 - 09/25/2023	25	72	CI around median	0.001	0.005	MCL/HBL	No Exceedance
MW-4	UA	A6	Chromium, total	mg/L	12/07/2015 - 03/15/2023	24	62	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-4	UA	A6D	Chromium, total	mg/L	12/07/2015 - 09/25/2023	25	64	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-4	UA	A6	Cobalt, total	mg/L	12/07/2015 - 03/15/2023	26	0	CI around mean	0.00923	0.006	MCL/HBL	Determined
MW-4	UA	A6D	Cobalt, total	mg/L	12/07/2015 - 09/25/2023	27	0	CI around mean	0.00931	0.006	MCL/HBL	Determined
MW-4	UA	A6	Fluoride, total	mg/L	12/07/2015 - 03/15/2023	26	69	CB around T-S line	-0.305	4.0	MCL/HBL	No Exceedance
MW-4	UA	A6D	Fluoride, total	mg/L	12/07/2015 - 09/25/2023	27	70	CB around T-S line	-0.379	4.0	MCL/HBL	No Exceedance
MW-4	UA	A6	Lead, total	mg/L	12/07/2015 - 03/15/2023	24	71	CI around median	0.00112	0.015	MCL/HBL	No Exceedance
MW-4	UA	A6D	Lead, total	mg/L	12/07/2015 - 09/25/2023	25	72	CI around median	0.00112	0.015	MCL/HBL	No Exceedance
MW-4	UA	A6	Lithium, total	mg/L	12/07/2015 - 03/15/2023	24	33	CB around linear reg	-0.0194	0.04	MCL/HBL	No Exceedance
MW-4	UA	A6D	Lithium, total	mg/L	12/07/2015 - 09/25/2023	25	32	CB around linear reg	-0.0209	0.04	MCL/HBL	No Exceedance
MW-4	UA	A6	Mercury, total	mg/L	12/07/2015 - 03/15/2023	24	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-4	UA	A6D	Mercury, total	mg/L	12/07/2015 - 09/25/2023	25	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-4	UA	A6	Molybdenum, total	mg/L	12/07/2015 - 03/15/2023	26	96	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-4	UA	A6D	Molybdenum, total	mg/L	12/07/2015 - 09/25/2023	27	96	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-4	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/07/2015 - 03/15/2023	25	0	CI around median	0.34	5	MCL/HBL	No Exceedance
MW-4	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/07/2015 - 09/25/2023	26	0	CI around median	0.369	5	MCL/HBL	No Exceedance
MW-4	UA	A6	Selenium, total	mg/L	12/07/2015 - 03/15/2023	24	88	CB around T-S line	0.000494	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-4	UA	A6D	Selenium, total	mg/L	12/07/2015 - 09/25/2023	25	88	CB around T-S line	0.00024	0.05	MCL/HBL	No Exceedance
MW-4	UA	A6	Thallium, total	mg/L	12/07/2015 - 03/15/2023	24	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-4	UA	A6D	Thallium, total	mg/L	12/07/2015 - 09/25/2023	25	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-5	UA	A6	Antimony, total	mg/L	12/08/2015 - 03/15/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-5	UA	A6D	Antimony, total	mg/L	12/08/2015 - 09/21/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-5	UA	A6	Arsenic, total	mg/L	12/08/2015 - 03/15/2023	19	79	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-5	UA	A6D	Arsenic, total	mg/L	12/08/2015 - 09/21/2023	20	80	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-5	UA	A6	Barium, total	mg/L	12/08/2015 - 03/15/2023	19	5.3	CI around mean	0.0608	2.0	MCL/HBL	No Exceedance
MW-5	UA	A6D	Barium, total	mg/L	12/08/2015 - 09/21/2023	20	5.0	CI around mean	0.0614	2.0	MCL/HBL	No Exceedance
MW-5	UA	A6	Beryllium, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-5	UA	A6D	Beryllium, total	mg/L	12/08/2015 - 09/21/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-5	UA	A6	Cadmium, total	mg/L	12/08/2015 - 03/15/2023	18	94	CI around median	0.001	0.005	MCL/HBL	No Exceedance
MW-5	UA	A6D	Cadmium, total	mg/L	12/08/2015 - 09/21/2023	19	95	CI around median	0.001	0.005	MCL/HBL	No Exceedance
MW-5	UA	A6	Chromium, total	mg/L	12/08/2015 - 03/15/2023	18	78	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-5	UA	A6D	Chromium, total	mg/L	12/08/2015 - 09/21/2023	19	79	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-5	UA	A6	Cobalt, total	mg/L	12/08/2015 - 03/15/2023	20	80	CB around T-S line	0.0005	0.006	MCL/HBL	No Exceedance
MW-5	UA	A6D	Cobalt, total	mg/L	12/08/2015 - 09/21/2023	21	81	CB around T-S line	0.0005	0.006	MCL/HBL	No Exceedance
MW-5	UA	A6	Fluoride, total	mg/L	12/08/2015 - 03/15/2023	20	90	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-5	UA	A6D	Fluoride, total	mg/L	12/08/2015 - 09/21/2023	21	90	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-5	UA	A6	Lead, total	mg/L	12/08/2015 - 03/15/2023	18	89	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-5	UA	A6D	Lead, total	mg/L	12/08/2015 - 09/21/2023	19	89	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-5	UA	A6	Lithium, total	mg/L	12/08/2015 - 03/15/2023	18	50	CI around median	0.00982	0.04	MCL/HBL	No Exceedance
MW-5	UA	A6D	Lithium, total	mg/L	12/08/2015 - 09/21/2023	19	47	CI around median	0.00982	0.04	MCL/HBL	No Exceedance
MW-5	UA	A6	Mercury, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-5	UA	A6D	Mercury, total	mg/L	12/08/2015 - 09/21/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-5	UA	A6	Molybdenum, total	mg/L	12/08/2015 - 03/15/2023	20	15	CB around linear reg	0.0115	0.1	MCL/HBL	No Exceedance
MW-5	UA	A6D	Molybdenum, total	mg/L	12/08/2015 - 09/21/2023	21	14	CB around linear reg	0.0142	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-5	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/08/2015 - 03/15/2023	19	0	CI around mean	0.249	5	MCL/HBL	No Exceedance
MW-5	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/08/2015 - 09/21/2023	20	0	CI around median	0.195	5	MCL/HBL	No Exceedance
MW-5	UA	A6	Selenium, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-5	UA	A6D	Selenium, total	mg/L	12/08/2015 - 09/21/2023	19	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-5	UA	A6	Thallium, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-5	UA	A6D	Thallium, total	mg/L	12/08/2015 - 09/21/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-6	UA	A6	Antimony, total	mg/L	12/07/2015 - 03/15/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-6	UA	A6D	Antimony, total	mg/L	12/07/2015 - 09/21/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-6	UA	A6	Arsenic, total	mg/L	12/07/2015 - 03/15/2023	19	5.3	CB around linear reg	0.0143	0.010	MCL/HBL	Determined
MW-6	UA	A6D	Arsenic, total	mg/L	12/07/2015 - 09/21/2023	20	5.0	CB around linear reg	0.0149	0.010	MCL/HBL	Determined
MW-6	UA	A6	Barium, total	mg/L	12/07/2015 - 03/15/2023	19	0	CI around mean	0.291	2.0	MCL/HBL	No Exceedance
MW-6	UA	A6D	Barium, total	mg/L	12/07/2015 - 09/21/2023	20	0	CI around mean	0.306	2.0	MCL/HBL	No Exceedance
MW-6	UA	A6	Beryllium, total	mg/L	12/07/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-6	UA	A6D	Beryllium, total	mg/L	12/07/2015 - 09/21/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-6	UA	A6	Cadmium, total	mg/L	12/07/2015 - 03/15/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-6	UA	A6D	Cadmium, total	mg/L	12/07/2015 - 09/21/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-6	UA	A6	Chromium, total	mg/L	12/07/2015 - 03/15/2023	18	78	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-6	UA	A6D	Chromium, total	mg/L	12/07/2015 - 09/21/2023	19	79	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-6	UA	A6	Cobalt, total	mg/L	12/07/2015 - 03/15/2023	20	0	CI around geomean	0.00301	0.006	MCL/HBL	No Exceedance
MW-6	UA	A6D	Cobalt, total	mg/L	12/07/2015 - 09/21/2023	21	4.8	CI around mean	0.00298	0.006	MCL/HBL	No Exceedance
MW-6	UA	A6	Fluoride, total	mg/L	12/07/2015 - 03/15/2023	20	5.0	CB around T-S line	0.207	4.0	MCL/HBL	No Exceedance
MW-6	UA	A6D	Fluoride, total	mg/L	12/07/2015 - 09/21/2023	21	4.8	CB around T-S line	0.0831	4.0	MCL/HBL	No Exceedance
MW-6	UA	A6	Lead, total	mg/L	12/07/2015 - 03/15/2023	18	89	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-6	UA	A6D	Lead, total	mg/L	12/07/2015 - 09/21/2023	19	89	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-6	UA	A6	Lithium, total	mg/L	12/07/2015 - 03/15/2023	18	44	CI around median	0.00936	0.04	MCL/HBL	No Exceedance
MW-6	UA	A6D	Lithium, total	mg/L	12/07/2015 - 09/21/2023	19	42	CB around linear reg	-0.0158	0.04	MCL/HBL	No Exceedance
MW-6	UA	A6	Mercury, total	mg/L	12/07/2015 - 03/15/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-6	UA	A6D	Mercury, total	mg/L	12/07/2015 - 09/21/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-6	UA	A6	Molybdenum, total	mg/L	12/07/2015 - 03/15/2023	20	0	CB around linear reg	0.0432	0.1	MCL/HBL	No Exceedance
MW-6	UA	A6D	Molybdenum, total	mg/L	12/07/2015 - 09/21/2023	21	0	CB around linear reg	0.0272	0.1	MCL/HBL	No Exceedance
MW-6	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/07/2015 - 03/15/2023	19	0	CI around mean	0.435	5	MCL/HBL	No Exceedance
MW-6	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/07/2015 - 09/21/2023	20	0	CI around mean	0.411	5	MCL/HBL	No Exceedance
MW-6	UA	A6	Selenium, total	mg/L	12/07/2015 - 03/15/2023	18	94	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-6	UA	A6D	Selenium, total	mg/L	12/07/2015 - 09/21/2023	19	95	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-6	UA	A6	Thallium, total	mg/L	12/07/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-6	UA	A6D	Thallium, total	mg/L	12/07/2015 - 09/21/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-8	UA	A6	Antimony, total	mg/L	12/09/2015 - 03/13/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-8	UA	A6D	Antimony, total	mg/L	12/09/2015 - 09/22/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-8	UA	A6	Arsenic, total	mg/L	12/09/2015 - 03/13/2023	19	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-8	UA	A6D	Arsenic, total	mg/L	12/09/2015 - 09/22/2023	20	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-8	UA	A6	Barium, total	mg/L	12/09/2015 - 03/13/2023	19	5.3	CI around median	0.0348	2.0	MCL/HBL	No Exceedance
MW-8	UA	A6D	Barium, total	mg/L	12/09/2015 - 09/22/2023	20	5.0	CI around median	0.0348	2.0	MCL/HBL	No Exceedance
MW-8	UA	A6	Beryllium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-8	UA	A6D	Beryllium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-8	UA	A6	Cadmium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-8	UA	A6D	Cadmium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-8	UA	A6	Chromium, total	mg/L	12/09/2015 - 03/13/2023	19	89	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-8	UA	A6D	Chromium, total	mg/L	12/09/2015 - 09/22/2023	20	90	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-8	UA	A6	Cobalt, total	mg/L	12/09/2015 - 03/13/2023	18	94	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-8	UA	A6D	Cobalt, total	mg/L	12/09/2015 - 09/22/2023	19	95	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-8	UA	A6	Fluoride, total	mg/L	12/09/2015 - 03/13/2023	20	55	CI around median	0.197	4.0	MCL/HBL	No Exceedance
MW-8	UA	A6D	Fluoride, total	mg/L	12/09/2015 - 09/22/2023	21	52	CI around median	0.2	4.0	MCL/HBL	No Exceedance
MW-8	UA	A6	Lead, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.015	MCL/HBL	No Exceedance
MW-8	UA	A6D	Lead, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.015	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-8	UA	A6	Lithium, total	mg/L	12/09/2015 - 03/13/2023	18	44	CI around median	0.0153	0.04	MCL/HBL	No Exceedance
MW-8	UA	A6D	Lithium, total	mg/L	12/09/2015 - 09/22/2023	19	42	CB around linear reg	-0.00696	0.04	MCL/HBL	No Exceedance
MW-8	UA	A6	Mercury, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-8	UA	A6D	Mercury, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-8	UA	A6	Molybdenum, total	mg/L	12/09/2015 - 03/13/2023	19	11	CI around median	0.00656	0.1	MCL/HBL	No Exceedance
MW-8	UA	A6D	Molybdenum, total	mg/L	12/09/2015 - 09/22/2023	20	10	CI around median	0.00656	0.1	MCL/HBL	No Exceedance
MW-8	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 03/13/2023	19	0	CI around geomean	0.406	5	MCL/HBL	No Exceedance
MW-8	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 09/22/2023	20	0	CI around mean	0.484	5	MCL/HBL	No Exceedance
MW-8	UA	A6	Selenium, total	mg/L	12/09/2015 - 03/13/2023	18	89	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-8	UA	A6D	Selenium, total	mg/L	12/09/2015 - 09/22/2023	19	84	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-8	UA	A6	Thallium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-8	UA	A6D	Thallium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-9	UA	A6	Antimony, total	mg/L	12/09/2015 - 03/13/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-9	UA	A6D	Antimony, total	mg/L	12/09/2015 - 09/22/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-9	UA	A6	Arsenic, total	mg/L	12/09/2015 - 03/13/2023	19	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-9	UA	A6D	Arsenic, total	mg/L	12/09/2015 - 09/22/2023	20	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-9	UA	A6	Barium, total	mg/L	12/09/2015 - 03/13/2023	19	5.3	CB around linear reg	0.0591	2.0	MCL/HBL	No Exceedance
MW-9	UA	A6D	Barium, total	mg/L	12/09/2015 - 09/22/2023	20	5.0	CB around linear reg	0.0569	2.0	MCL/HBL	No Exceedance
MW-9	UA	A6	Beryllium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-9	UA	A6D	Beryllium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-9	UA	A6	Cadmium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-9	UA	A6D	Cadmium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-9	UA	A6	Chromium, total	mg/L	12/09/2015 - 03/13/2023	19	89	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-9	UA	A6D	Chromium, total	mg/L	12/09/2015 - 09/22/2023	20	90	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-9	UA	A6	Cobalt, total	mg/L	12/09/2015 - 03/13/2023	18	89	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-9	UA	A6D	Cobalt, total	mg/L	12/09/2015 - 09/22/2023	19	89	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-9	UA	A6	Fluoride, total	mg/L	12/09/2015 - 03/13/2023	20	55	CI around median	0.352	4.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-9	UA	A6D	Fluoride, total	mg/L	12/09/2015 - 09/22/2023	21	52	CB around T-S line	-0.0461	4.0	MCL/HBL	No Exceedance
MW-9	UA	A6	Lead, total	mg/L	12/09/2015 - 03/13/2023	18	94	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-9	UA	A6D	Lead, total	mg/L	12/09/2015 - 09/22/2023	19	95	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-9	UA	A6	Lithium, total	mg/L	12/09/2015 - 03/13/2023	18	50	CB around linear reg	-0.0156	0.04	MCL/HBL	No Exceedance
MW-9	UA	A6D	Lithium, total	mg/L	12/09/2015 - 09/22/2023	19	47	CB around linear reg	-0.0155	0.04	MCL/HBL	No Exceedance
MW-9	UA	A6	Mercury, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-9	UA	A6D	Mercury, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-9	UA	A6	Molybdenum, total	mg/L	12/09/2015 - 03/13/2023	19	0	CB around linear reg	0.0364	0.1	MCL/HBL	No Exceedance
MW-9	UA	A6D	Molybdenum, total	mg/L	12/09/2015 - 09/22/2023	20	0	CB around linear reg	0.0348	0.1	MCL/HBL	No Exceedance
MW-9	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 03/13/2023	19	0	CI around median	0.227	5	MCL/HBL	No Exceedance
MW-9	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 09/22/2023	20	0	CI around median	0.227	5	MCL/HBL	No Exceedance
MW-9	UA	A6	Selenium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-9	UA	A6D	Selenium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-9	UA	A6	Thallium, total	mg/L	12/09/2015 - 03/13/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-9	UA	A6D	Thallium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-10	UA	A6	Antimony, total	mg/L	12/09/2015 - 03/14/2023	16	94	CB around T-S line	0.002	0.006	MCL/HBL	No Exceedance
MW-10	UA	A6D	Antimony, total	mg/L	12/09/2015 - 09/22/2023	17	94	CB around T-S line	0.002	0.006	MCL/HBL	No Exceedance
MW-10	UA	A6	Arsenic, total	mg/L	12/09/2015 - 03/14/2023	19	0	CI around mean	0.0158	0.010	MCL/HBL	Determined
MW-10	UA	A6D	Arsenic, total	mg/L	12/09/2015 - 09/22/2023	20	0	CI around mean	0.0156	0.010	MCL/HBL	Determined
MW-10	UA	A6	Barium, total	mg/L	12/09/2015 - 03/14/2023	19	5.3	CB around linear reg	-0.0672	2.0	MCL/HBL	No Exceedance
MW-10	UA	A6D	Barium, total	mg/L	12/09/2015 - 09/22/2023	20	5.0	CB around linear reg	-0.0673	2.0	MCL/HBL	No Exceedance
MW-10	UA	A6	Beryllium, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-10	UA	A6D	Beryllium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-10	UA	A6	Cadmium, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-10	UA	A6D	Cadmium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-10	UA	A6	Chromium, total	mg/L	12/09/2015 - 03/14/2023	19	89	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-10	UA	A6D	Chromium, total	mg/L	12/09/2015 - 09/22/2023	20	90	CI around median	0.002	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-10	UA	A6	Cobalt, total	mg/L	12/09/2015 - 03/14/2023	18	67	CI around median	0.002	0.006	MCL/HBL	No Exceedance
MW-10	UA	A6D	Cobalt, total	mg/L	12/09/2015 - 09/22/2023	19	68	CI around median	0.002	0.006	MCL/HBL	No Exceedance
MW-10	UA	A6	Fluoride, total	mg/L	12/09/2015 - 03/14/2023	20	55	CI around median	0.227	4.0	MCL/HBL	No Exceedance
MW-10	UA	A6D	Fluoride, total	mg/L	12/09/2015 - 09/22/2023	21	52	CI around median	0.229	4.0	MCL/HBL	No Exceedance
MW-10	UA	A6	Lead, total	mg/L	12/09/2015 - 03/14/2023	18	89	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-10	UA	A6D	Lead, total	mg/L	12/09/2015 - 09/22/2023	19	89	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-10	UA	A6	Lithium, total	mg/L	12/09/2015 - 03/14/2023	18	67	CB around T-S line	-0.0331	0.04	MCL/HBL	No Exceedance
MW-10	UA	A6D	Lithium, total	mg/L	12/09/2015 - 09/22/2023	19	68	CB around T-S line	-0.043	0.04	MCL/HBL	No Exceedance
MW-10	UA	A6	Mercury, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-10	UA	A6D	Mercury, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-10	UA	A6	Molybdenum, total	mg/L	12/09/2015 - 03/14/2023	19	63	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-10	UA	A6D	Molybdenum, total	mg/L	12/09/2015 - 09/22/2023	20	60	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-10	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 03/14/2023	19	0	CI around mean	0.709	5	MCL/HBL	No Exceedance
MW-10	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 09/22/2023	20	0	CI around mean	0.736	5	MCL/HBL	No Exceedance
MW-10	UA	A6	Selenium, total	mg/L	12/09/2015 - 03/14/2023	18	94	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-10	UA	A6D	Selenium, total	mg/L	12/09/2015 - 09/22/2023	19	95	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-10	UA	A6	Thallium, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-10	UA	A6D	Thallium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-11	UA	A6	Antimony, total	mg/L	12/09/2015 - 03/14/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-11	UA	A6D	Antimony, total	mg/L	12/09/2015 - 09/22/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-11	UA	A6	Arsenic, total	mg/L	12/09/2015 - 03/14/2023	19	0	CI around median	0.00894	0.010	MCL/HBL	No Exceedance
MW-11	UA	A6D	Arsenic, total	mg/L	12/09/2015 - 09/22/2023	20	0	CI around median	0.00884	0.010	MCL/HBL	No Exceedance
MW-11	UA	A6	Barium, total	mg/L	12/09/2015 - 03/14/2023	19	0	CB around linear reg	0.0933	2.0	MCL/HBL	No Exceedance
MW-11	UA	A6D	Barium, total	mg/L	12/09/2015 - 09/22/2023	20	0	CB around linear reg	0.0957	2.0	MCL/HBL	No Exceedance
MW-11	UA	A6	Beryllium, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-11	UA	A6D	Beryllium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-11	UA	A6	Cadmium, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-11	UA	A6D	Cadmium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-11	UA	A6	Chromium, total	mg/L	12/09/2015 - 03/14/2023	19	74	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-11	UA	A6D	Chromium, total	mg/L	12/09/2015 - 09/22/2023	20	75	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-11	UA	A6	Cobalt, total	mg/L	12/09/2015 - 03/14/2023	18	44	CI around mean	0.00103	0.006	MCL/HBL	No Exceedance
MW-11	UA	A6D	Cobalt, total	mg/L	12/09/2015 - 09/22/2023	19	47	CI around geomean	0.000853	0.006	MCL/HBL	No Exceedance
MW-11	UA	A6	Fluoride, total	mg/L	12/09/2015 - 03/14/2023	20	60	CI around median	0.19	4.0	MCL/HBL	No Exceedance
MW-11	UA	A6D	Fluoride, total	mg/L	12/09/2015 - 09/22/2023	21	57	CB around T-S line	-0.327	4.0	MCL/HBL	No Exceedance
MW-11	UA	A6	Lead, total	mg/L	12/09/2015 - 03/14/2023	18	67	CI around median	0.001	0.015	MCL/HBL	No Exceedance
MW-11	UA	A6D	Lead, total	mg/L	12/09/2015 - 09/22/2023	19	68	CI around median	0.001	0.015	MCL/HBL	No Exceedance
MW-11	UA	A6	Lithium, total	mg/L	12/09/2015 - 03/14/2023	18	56	CB around T-S line	-0.0323	0.04	MCL/HBL	No Exceedance
MW-11	UA	A6D	Lithium, total	mg/L	12/09/2015 - 09/22/2023	19	53	CB around T-S line	-0.0412	0.04	MCL/HBL	No Exceedance
MW-11	UA	A6	Mercury, total	mg/L	12/09/2015 - 03/14/2023	18	94	CI around median	0.0002	0.002	MCL/HBL	No Exceedance
MW-11	UA	A6D	Mercury, total	mg/L	12/09/2015 - 09/22/2023	19	95	CI around median	0.0002	0.002	MCL/HBL	No Exceedance
MW-11	UA	A6	Molybdenum, total	mg/L	12/09/2015 - 03/14/2023	19	74	CB around T-S line	0.00398	0.1	MCL/HBL	No Exceedance
MW-11	UA	A6D	Molybdenum, total	mg/L	12/09/2015 - 09/22/2023	20	75	CB around T-S line	0.00398	0.1	MCL/HBL	No Exceedance
MW-11	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 03/14/2023	19	0	CI around mean	0.72	5	MCL/HBL	No Exceedance
MW-11	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/09/2015 - 09/22/2023	20	0	CI around mean	0.759	5	MCL/HBL	No Exceedance
MW-11	UA	A6	Selenium, total	mg/L	12/09/2015 - 03/14/2023	18	94	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-11	UA	A6D	Selenium, total	mg/L	12/09/2015 - 09/22/2023	19	95	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-11	UA	A6	Thallium, total	mg/L	12/09/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-11	UA	A6D	Thallium, total	mg/L	12/09/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-12	UA	A6	Antimony, total	mg/L	12/07/2015 - 03/14/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-12	UA	A6D	Antimony, total	mg/L	12/07/2015 - 09/22/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-12	UA	A6	Arsenic, total	mg/L	12/07/2015 - 03/14/2023	19	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-12	UA	A6D	Arsenic, total	mg/L	12/07/2015 - 09/22/2023	20	95	CI around median	0.001	0.010	MCL/HBL	No Exceedance
MW-12	UA	A6	Barium, total	mg/L	12/07/2015 - 03/14/2023	19	21	CB around T-S line	0.00479	2.0	MCL/HBL	No Exceedance
MW-12	UA	A6D	Barium, total	mg/L	12/07/2015 - 09/22/2023	20	20	CB around T-S line	0.0077	2.0	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-12	UA	A6	Beryllium, total	mg/L	12/07/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-12	UA	A6D	Beryllium, total	mg/L	12/07/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-12	UA	A6	Cadmium, total	mg/L	12/07/2015 - 03/14/2023	18	11	CI around mean	0.00131	0.005	MCL/HBL	No Exceedance
MW-12	UA	A6D	Cadmium, total	mg/L	12/07/2015 - 09/22/2023	19	11	CB around linear reg	2.52e-06	0.005	MCL/HBL	No Exceedance
MW-12	UA	A6	Chromium, total	mg/L	12/07/2015 - 03/14/2023	18	78	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-12	UA	A6D	Chromium, total	mg/L	12/07/2015 - 09/22/2023	19	79	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-12	UA	A6	Cobalt, total	mg/L	12/07/2015 - 03/14/2023	20	5.0	CB around linear reg	0.00256	0.006	MCL/HBL	No Exceedance
MW-12	UA	A6D	Cobalt, total	mg/L	12/07/2015 - 09/22/2023	21	4.8	CB around linear reg	0.00265	0.006	MCL/HBL	No Exceedance
MW-12	UA	A6	Fluoride, total	mg/L	12/07/2015 - 03/14/2023	20	90	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-12	UA	A6D	Fluoride, total	mg/L	12/07/2015 - 09/22/2023	21	90	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-12	UA	A6	Lead, total	mg/L	12/07/2015 - 03/14/2023	18	94	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-12	UA	A6D	Lead, total	mg/L	12/07/2015 - 09/22/2023	19	95	CB around T-S line	0.001	0.015	MCL/HBL	No Exceedance
MW-12	UA	A6	Lithium, total	mg/L	12/07/2015 - 03/14/2023	18	44	CB around linear reg	-0.0234	0.04	MCL/HBL	No Exceedance
MW-12	UA	A6D	Lithium, total	mg/L	12/07/2015 - 09/22/2023	19	42	CB around linear reg	-0.0239	0.04	MCL/HBL	No Exceedance
MW-12	UA	A6	Mercury, total	mg/L	12/07/2015 - 03/14/2023	18	50	CB around T-S line	0.00042	0.002	MCL/HBL	No Exceedance
MW-12	UA	A6D	Mercury, total	mg/L	12/07/2015 - 09/22/2023	19	47	CB around T-S line	0.000356	0.002	MCL/HBL	No Exceedance
MW-12	UA	A6	Molybdenum, total	mg/L	12/07/2015 - 03/14/2023	20	95	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-12	UA	A6D	Molybdenum, total	mg/L	12/07/2015 - 09/22/2023	21	95	CI around median	0.005	0.1	MCL/HBL	No Exceedance
MW-12	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/07/2015 - 03/14/2023	19	0	CI around mean	0.28	5	MCL/HBL	No Exceedance
MW-12	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/07/2015 - 09/22/2023	20	0	CI around mean	0.292	5	MCL/HBL	No Exceedance
MW-12	UA	A6	Selenium, total	mg/L	12/07/2015 - 03/14/2023	18	94	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-12	UA	A6D	Selenium, total	mg/L	12/07/2015 - 09/22/2023	19	95	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-12	UA	A6	Thallium, total	mg/L	12/07/2015 - 03/14/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-12	UA	A6D	Thallium, total	mg/L	12/07/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-13	UA	A6	Antimony, total	mg/L	12/08/2015 - 03/15/2023	16	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-13	UA	A6D	Antimony, total	mg/L	12/08/2015 - 09/22/2023	17	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-13	UA	A6	Arsenic, total	mg/L	12/08/2015 - 03/15/2023	20	10	CB around linear reg	0.0132	0.010	MCL/HBL	Determined

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-13	UA	A6D	Arsenic, total	mg/L	12/08/2015 - 09/22/2023	21	9.5	CB around linear reg	0.0114	0.010	MCL/HBL	Determined
MW-13	UA	A6	Barium, total	mg/L	12/08/2015 - 03/15/2023	19	5.3	CB around linear reg	0.156	2.0	MCL/HBL	No Exceedance
MW-13	UA	A6D	Barium, total	mg/L	12/08/2015 - 09/22/2023	20	5.0	CB around linear reg	0.156	2.0	MCL/HBL	No Exceedance
MW-13	UA	A6	Beryllium, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-13	UA	A6D	Beryllium, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-13	UA	A6	Cadmium, total	mg/L	12/08/2015 - 03/15/2023	18	67	CI around median	0.001	0.005	MCL/HBL	No Exceedance
MW-13	UA	A6D	Cadmium, total	mg/L	12/08/2015 - 09/22/2023	19	68	CI around median	0.001	0.005	MCL/HBL	No Exceedance
MW-13	UA	A6	Chromium, total	mg/L	12/08/2015 - 03/15/2023	18	78	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-13	UA	A6D	Chromium, total	mg/L	12/08/2015 - 09/22/2023	19	74	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-13	UA	A6	Cobalt, total	mg/L	12/08/2015 - 03/15/2023	20	70	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-13	UA	A6D	Cobalt, total	mg/L	12/08/2015 - 09/22/2023	21	71	CI around median	0.0005	0.006	MCL/HBL	No Exceedance
MW-13	UA	A6	Fluoride, total	mg/L	12/08/2015 - 03/15/2023	20	70	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-13	UA	A6D	Fluoride, total	mg/L	12/08/2015 - 09/22/2023	21	67	CI around median	0.158	4.0	MCL/HBL	No Exceedance
MW-13	UA	A6	Lead, total	mg/L	12/08/2015 - 03/15/2023	18	89	CI around median	0.001	0.015	MCL/HBL	No Exceedance
MW-13	UA	A6D	Lead, total	mg/L	12/08/2015 - 09/22/2023	19	89	CI around median	0.001	0.015	MCL/HBL	No Exceedance
MW-13	UA	A6	Lithium, total	mg/L	12/08/2015 - 03/15/2023	18	39	CB around linear reg	-0.0244	0.04	MCL/HBL	No Exceedance
MW-13	UA	A6D	Lithium, total	mg/L	12/08/2015 - 09/22/2023	19	37	CB around linear reg	-0.0243	0.04	MCL/HBL	No Exceedance
MW-13	UA	A6	Mercury, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-13	UA	A6D	Mercury, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-13	UA	A6	Molybdenum, total	mg/L	12/08/2015 - 03/15/2023	20	30	CB around linear reg	0.0103	0.1	MCL/HBL	No Exceedance
MW-13	UA	A6D	Molybdenum, total	mg/L	12/08/2015 - 09/22/2023	21	29	CB around linear reg	0.0106	0.1	MCL/HBL	No Exceedance
MW-13	UA	A6	Radium 226 + Radium 228, total	pCi/L	12/08/2015 - 03/15/2023	19	0	CI around geomean	0.505	5	MCL/HBL	No Exceedance
MW-13	UA	A6D	Radium 226 + Radium 228, total	pCi/L	12/08/2015 - 09/22/2023	20	0	CI around geomean	0.527	5	MCL/HBL	No Exceedance
MW-13	UA	A6	Selenium, total	mg/L	12/08/2015 - 03/15/2023	18	94	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-13	UA	A6D	Selenium, total	mg/L	12/08/2015 - 09/22/2023	19	95	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-13	UA	A6	Thallium, total	mg/L	12/08/2015 - 03/15/2023	18	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-13	UA	A6D	Thallium, total	mg/L	12/08/2015 - 09/22/2023	19	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-14	UA	A6	Antimony, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-14	UA	A6D	Antimony, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-14	UA	A6	Arsenic, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.002	0.010	MCL/HBL	No Exceedance
MW-14	UA	A6D	Arsenic, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.010	MCL/HBL	No Exceedance
MW-14	UA	A6	Barium, total	mg/L	09/15/2020 - 03/15/2023	10	0	CI around mean	0.0394	2.0	MCL/HBL	No Exceedance
MW-14	UA	A6D	Barium, total	mg/L	09/15/2020 - 09/22/2023	11	0	CI around mean	0.0397	2.0	MCL/HBL	No Exceedance
MW-14	UA	A6	Beryllium, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-14	UA	A6D	Beryllium, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-14	UA	A6	Cadmium, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-14	UA	A6D	Cadmium, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-14	UA	A6	Chromium, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.002	0.1	MCL/HBL	No Exceedance
MW-14	UA	A6D	Chromium, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.1	MCL/HBL	No Exceedance
MW-14	UA	A6	Cobalt, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
MW-14	UA	A6D	Cobalt, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.006	MCL/HBL	No Exceedance
MW-14	UA	A6	Fluoride, total	mg/L	09/15/2020 - 03/15/2023	10	60	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-14	UA	A6D	Fluoride, total	mg/L	09/15/2020 - 09/22/2023	11	64	CI around median	0.15	4.0	MCL/HBL	No Exceedance
MW-14	UA	A6	Lead, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.002	0.015	MCL/HBL	No Exceedance
MW-14	UA	A6D	Lead, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.015	MCL/HBL	No Exceedance
MW-14	UA	A6	Lithium, total	mg/L	09/15/2020 - 03/15/2023	10	0	CI around mean	0.00379	0.04	MCL/HBL	No Exceedance
MW-14	UA	A6D	Lithium, total	mg/L	09/15/2020 - 09/22/2023	11	0	CI around mean	0.00377	0.04	MCL/HBL	No Exceedance
MW-14	UA	A6	Mercury, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-14	UA	A6D	Mercury, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-14	UA	A6	Molybdenum, total	mg/L	09/15/2020 - 03/15/2023	10	0	CI around mean	0.00577	0.1	MCL/HBL	No Exceedance
MW-14	UA	A6D	Molybdenum, total	mg/L	09/15/2020 - 09/22/2023	11	0	CI around mean	0.00578	0.1	MCL/HBL	No Exceedance
MW-14	UA	A6	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 03/15/2023	7	0	CI around mean	-0.108	5	MCL/HBL	No Exceedance
MW-14	UA	A6D	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 09/22/2023	8	0	CI around mean	0.0236	5	MCL/HBL	No Exceedance
MW-14	UA	A6	Selenium, total	mg/L	09/15/2020 - 03/15/2023	10	90	CI around median	0.002	0.05	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-14	UA	A6D	Selenium, total	mg/L	09/15/2020 - 09/22/2023	11	91	CI around median	0.002	0.05	MCL/HBL	No Exceedance
MW-14	UA	A6	Thallium, total	mg/L	09/15/2020 - 03/15/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-14	UA	A6D	Thallium, total	mg/L	09/15/2020 - 09/22/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-15	UA	A6	Antimony, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-15	UA	A6D	Antimony, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-15	UA	A6	Arsenic, total	mg/L	09/15/2020 - 03/14/2023	10	90	CI around median	0.002	0.010	MCL/HBL	No Exceedance
MW-15	UA	A6D	Arsenic, total	mg/L	09/15/2020 - 09/21/2023	11	91	CI around median	0.002	0.010	MCL/HBL	No Exceedance
MW-15	UA	A6	Barium, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around mean	0.0809	2.0	MCL/HBL	No Exceedance
MW-15	UA	A6D	Barium, total	mg/L	09/15/2020 - 09/21/2023	11	0	CB around linear reg	0.0671	2.0	MCL/HBL	No Exceedance
MW-15	UA	A6	Beryllium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-15	UA	A6D	Beryllium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-15	UA	A6	Cadmium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-15	UA	A6D	Cadmium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-15	UA	A6	Chromium, total	mg/L	09/15/2020 - 03/14/2023	10	80	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-15	UA	A6D	Chromium, total	mg/L	09/15/2020 - 09/21/2023	11	82	CI around median	0.002	0.1	MCL/HBL	No Exceedance
MW-15	UA	A6	Cobalt, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around mean	0.00289	0.006	MCL/HBL	No Exceedance
MW-15	UA	A6D	Cobalt, total	mg/L	09/15/2020 - 09/21/2023	11	0	CI around mean	0.0028	0.006	MCL/HBL	No Exceedance
MW-15	UA	A6	Fluoride, total	mg/L	09/15/2020 - 03/14/2023	10	10	CI around mean	0.169	4.0	MCL/HBL	No Exceedance
MW-15	UA	A6D	Fluoride, total	mg/L	09/15/2020 - 09/21/2023	11	9.1	CI around mean	0.169	4.0	MCL/HBL	No Exceedance
MW-15	UA	A6	Lead, total	mg/L	09/15/2020 - 03/14/2023	10	90	CI around median	0.002	0.015	MCL/HBL	No Exceedance
MW-15	UA	A6D	Lead, total	mg/L	09/15/2020 - 09/21/2023	11	91	CI around median	0.002	0.015	MCL/HBL	No Exceedance
MW-15	UA	A6	Lithium, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around mean	0.00623	0.04	MCL/HBL	No Exceedance
MW-15	UA	A6D	Lithium, total	mg/L	09/15/2020 - 09/21/2023	11	0	CI around mean	0.00625	0.04	MCL/HBL	No Exceedance
MW-15	UA	A6	Mercury, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-15	UA	A6D	Mercury, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-15	UA	A6	Molybdenum, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around mean	0.0232	0.1	MCL/HBL	No Exceedance
MW-15	UA	A6D	Molybdenum, total	mg/L	09/15/2020 - 09/21/2023	11	0	CI around mean	0.0236	0.1	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-15	UA	A6	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 03/14/2023	7	0	CI around mean	-0.0231	5	MCL/HBL	No Exceedance
MW-15	UA	A6D	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 09/21/2023	8	0	CI around mean	0.0541	5	MCL/HBL	No Exceedance
MW-15	UA	A6	Selenium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-15	UA	A6D	Selenium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-15	UA	A6	Thallium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-15	UA	A6D	Thallium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-16	UA	A6	Antimony, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-16	UA	A6D	Antimony, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.004	0.006	MCL/HBL	No Exceedance
MW-16	UA	A6	Arsenic, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.010	MCL/HBL	No Exceedance
MW-16	UA	A6D	Arsenic, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.010	MCL/HBL	No Exceedance
MW-16	UA	A6	Barium, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around mean	0.0811	2.0	MCL/HBL	No Exceedance
MW-16	UA	A6D	Barium, total	mg/L	09/15/2020 - 09/21/2023	11	0	CI around mean	0.0794	2.0	MCL/HBL	No Exceedance
MW-16	UA	A6	Beryllium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-16	UA	A6D	Beryllium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.004	MCL/HBL	No Exceedance
MW-16	UA	A6	Cadmium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-16	UA	A6D	Cadmium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.001	0.005	MCL/HBL	No Exceedance
MW-16	UA	A6	Chromium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.1	MCL/HBL	No Exceedance
MW-16	UA	A6D	Chromium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.1	MCL/HBL	No Exceedance
MW-16	UA	A6	Cobalt, total	mg/L	09/15/2020 - 03/14/2023	10	60	CI around median	0.002	0.006	MCL/HBL	No Exceedance
MW-16	UA	A6D	Cobalt, total	mg/L	09/15/2020 - 09/21/2023	11	64	CI around median	0.002	0.006	MCL/HBL	No Exceedance
MW-16	UA	A6	Fluoride, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.15	4.0	MCL/HBL	No Exceedance
MW-16	UA	A6D	Fluoride, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.15	4.0	MCL/HBL	No Exceedance
MW-16	UA	A6	Lead, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.015	MCL/HBL	No Exceedance
MW-16	UA	A6D	Lead, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.015	MCL/HBL	No Exceedance
MW-16	UA	A6	Lithium, total	mg/L	09/15/2020 - 03/14/2023	10	0	CI around mean	0.011	0.04	MCL/HBL	No Exceedance
MW-16	UA	A6D	Lithium, total	mg/L	09/15/2020 - 09/21/2023	11	0	CI around mean	0.0109	0.04	MCL/HBL	No Exceedance
MW-16	UA	A6	Mercury, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance

TABLE 6
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	HSU	Event ID	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	SSL Type
MW-16	UA	A6D	Mercury, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.0002	0.002	MCL/HBL	No Exceedance
MW-16	UA	A6	Molybdenum, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.005	0.1	MCL/HBL	No Exceedance
MW-16	UA	A6D	Molybdenum, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.005	0.1	MCL/HBL	No Exceedance
MW-16	UA	A6	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 03/14/2023	7	0	CI around mean	-0.109	5	MCL/HBL	No Exceedance
MW-16	UA	A6D	Radium 226 + Radium 228, total	pCi/L	09/15/2020 - 09/21/2023	8	0	CI around mean	7.58e-05	5	MCL/HBL	No Exceedance
MW-16	UA	A6	Selenium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-16	UA	A6D	Selenium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.05	MCL/HBL	No Exceedance
MW-16	UA	A6	Thallium, total	mg/L	09/15/2020 - 03/14/2023	10	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance
MW-16	UA	A6D	Thallium, total	mg/L	09/15/2020 - 09/21/2023	11	100	All ND - Last	0.002	0.002	MCL/HBL	No Exceedance

Notes:
Only SSLs determined in 2023 (see Table A) for 40 C.F.R. § 257 are included
– = no data available
Statistically Significant Level (SSL) Type:

No Exceedance: No exceedance of the GWPS and no resample was collected.
Determined: An exceedance was determined without comparison to a resample.
Confirmed: An exceedance was determined with comparison to a resample. If a determined exceedance is confirmed by resample, both the sample and resample are noted as confirmed.

GWPS = Groundwater Protection Standard
GWPS Source:

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

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

ID = identification
mg/L = milligrams per liter
ND = non-detect
pCi/L = picocuries per liter
R = resample
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 T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

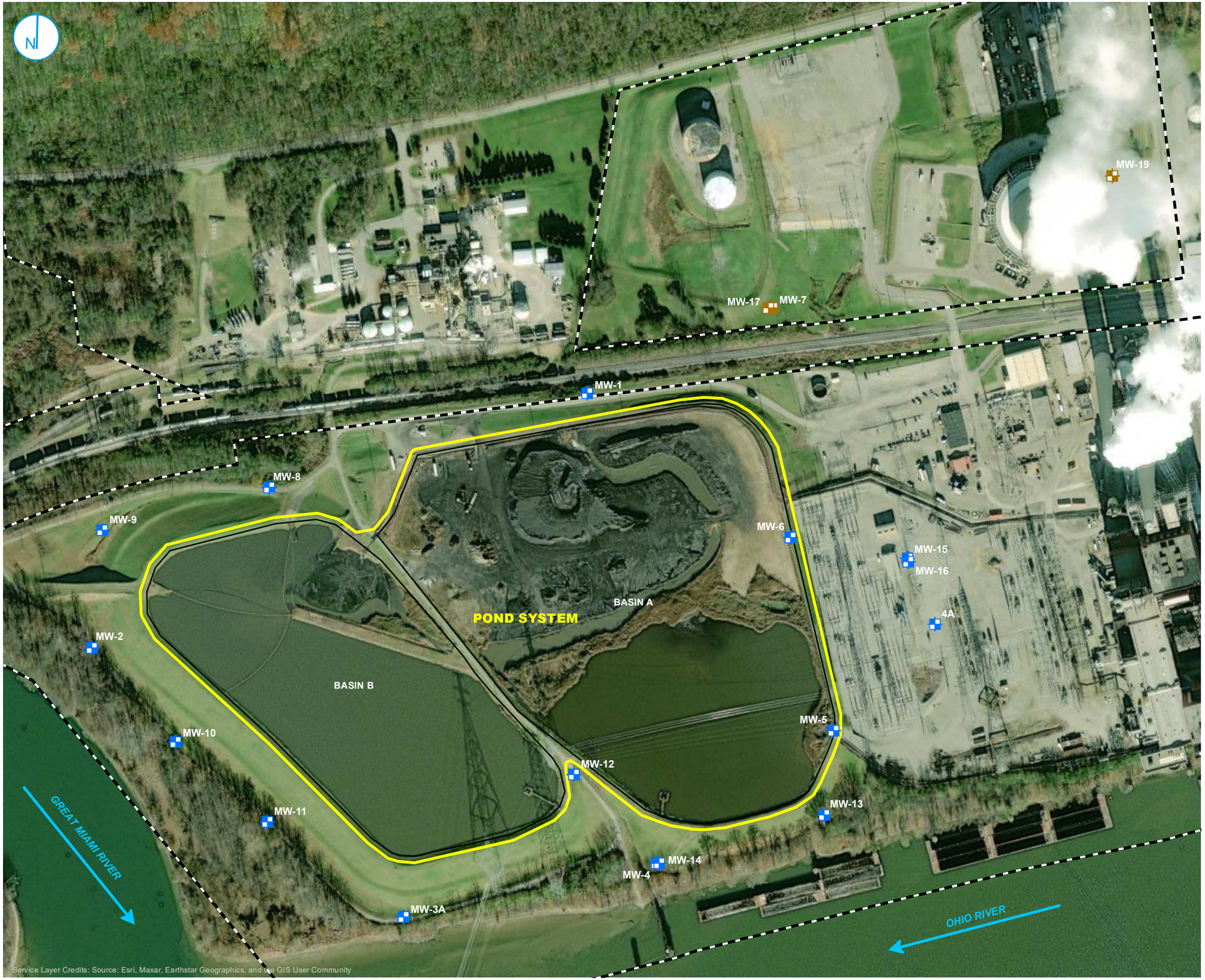
CI around mean = Confidence interval around the mean

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

Generated 2024-01-22 10:55:56.037632 by banoffra

FIGURES



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

0 150 300 Feet

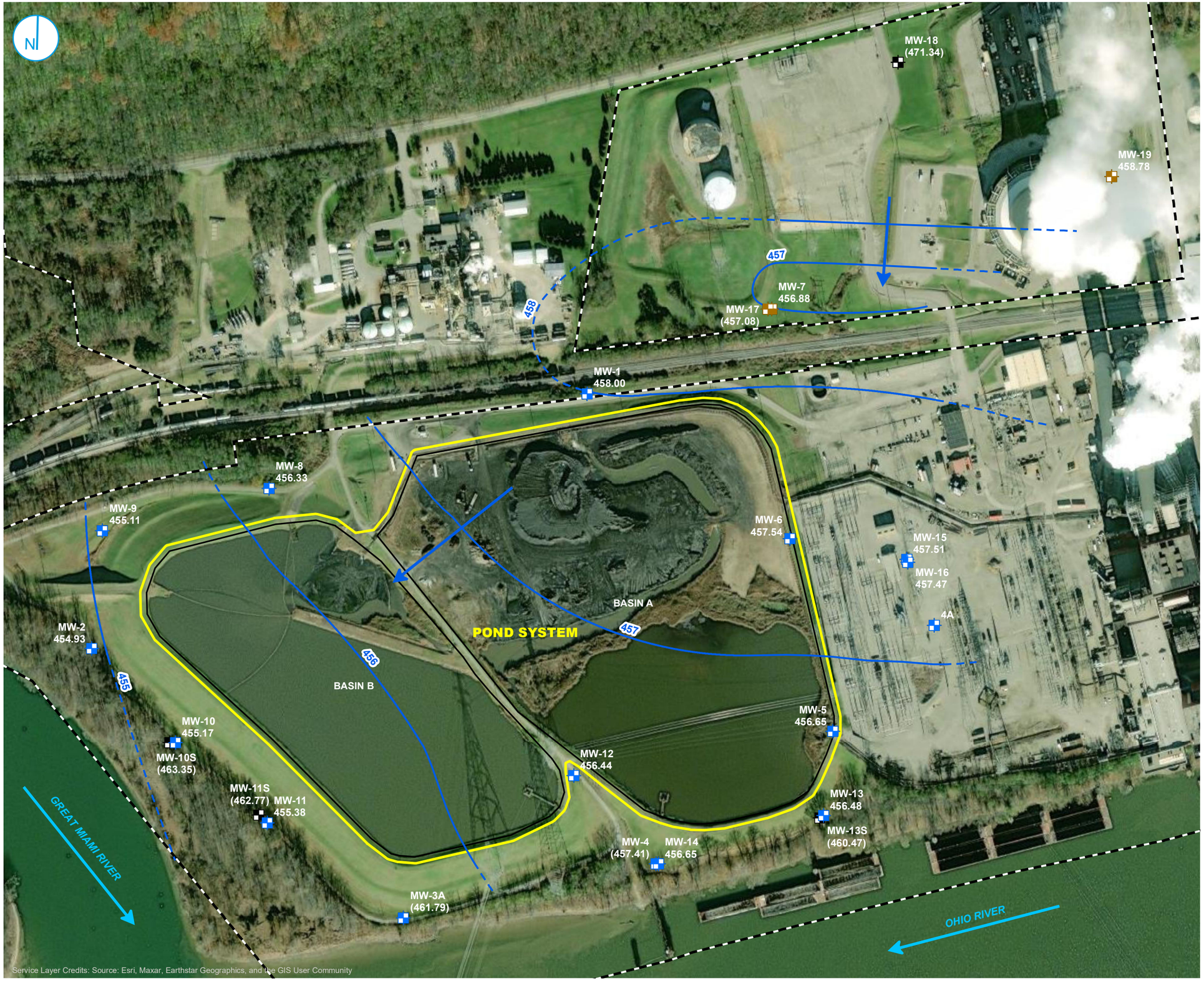
MONITORING WELL LOCATION MAP

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
POND SYSTEM
MIAMI FORT POWER PLANT
NORTH BEND, OHIO

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL



COMPLIANCE MONITORING WELL
BACKGROUND MONITORING WELL
MONITORING WELL
GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
INFERRED GROUNDWATER ELEVATION CONTOUR
GROUNDWATER FLOW DIRECTION
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)

0 150 300
Feet

POTENTIOMETRIC SURFACE MAP MARCH 13, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
POND SYSTEM
MIAMI FORT POWER PLANT
NORTH BEND, OHIO

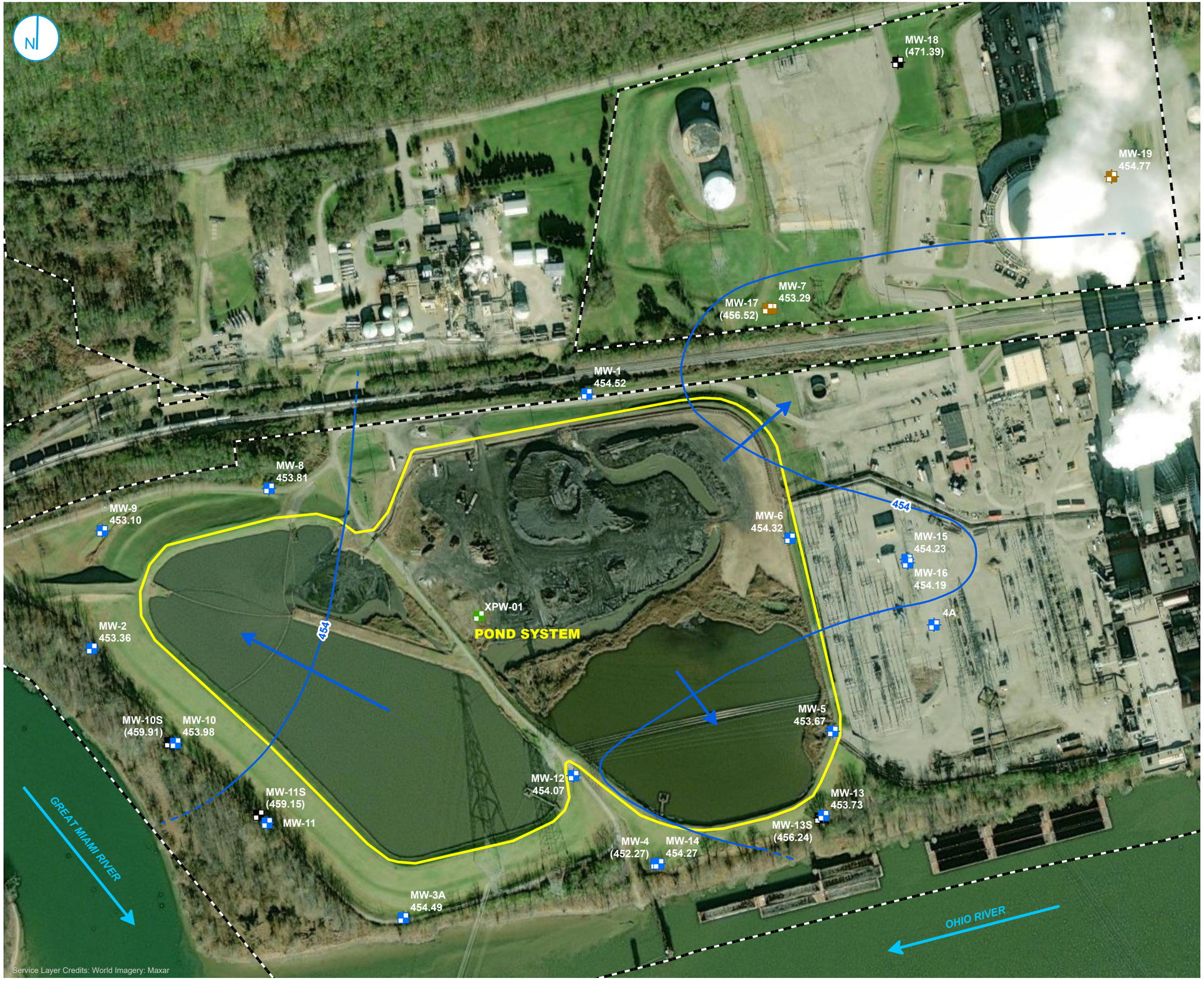
FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\22\2285\MXD\GW_ContoursRound_2023\Miami_Fort\PS_115\MF PS 115 Pot Surface 20230313.mxd

PROJECT: 169000XXXX | DATED: 6/1/2023 | DESIGNER: egreaves



- COMPLIANCE MONITORING WELL
- BACKGROUND MONITORING WELL
- MONITORING WELL
- PORE WATER WELL
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- REGULATED UNIT (SUBJECT UNIT)
- 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)

0 150 300 Feet

POTENTIOMETRIC SURFACE MAP SEPTEMBER 21, 2023

2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
POND SYSTEM
MIAMI FORT POWER PLANT
NORTH BEND, OHIO

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\22\22885\MXD\GW_Contours\Round_2023\Miami_Fort\PS_115\MF PS 115 Pot Map 2023.aprx

PROJECT: 169000XXXX | DATED: 11/27/2023 | DESIGNER: egreaves

APPENDICES

APPENDIX A
LABORATORY REPORTS AND FIELD DATA SHEETS

Pace Analytical®

ANALYTICAL REPORT

March 23, 2023

S&ME - Nashville, TN

Sample Delivery Group:	L1595400
Samples Received:	03/16/2023
Project Number:	7217-17-003D
Description:	Miami Fort Station - North Bend, OH
Site:	MFS UNIT 115
Report To:	Vince Epps 862 East Crescentville Road Cincinnati, OH 45246

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

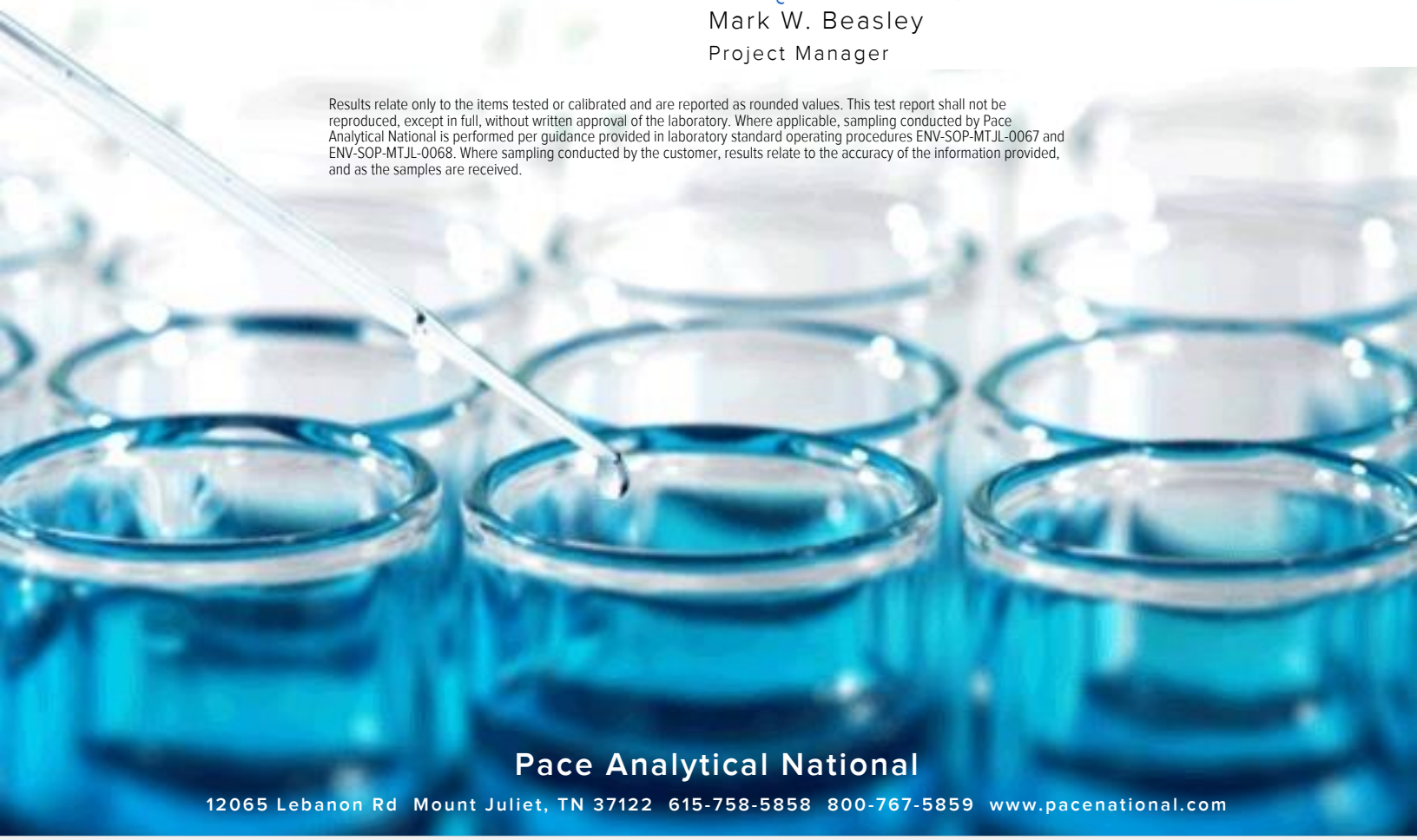


TABLE OF CONTENTS

SAMPLE SUMMARY

4A L1595400-01 GW

Collected by	Collected date/time	Received date/time
Carter Harlan	03/14/23 15:05	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:17	03/21/23 14:17	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 17:53	03/21/23 17:53	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	5	03/21/23 18:53	03/21/23 18:53	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024657	1	03/17/23 13:03	03/18/23 14:59	LAS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:21	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	50	03/19/23 18:20	03/21/23 12:16	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 22:18	LD	Mt. Juliet, TN

A-1 POND L1595400-02 GW

Collected by	Collected date/time	Received date/time
Carter Harlan	03/15/23 13:45	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:22	03/21/23 14:22	ARD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:24	JPD	Mt. Juliet, TN

B-1 POND L1595400-03 GW

Collected by	Collected date/time	Received date/time
Carter Harlan	03/15/23 13:25	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:28	03/21/23 14:28	ARD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:28	JPD	Mt. Juliet, TN

MW-01 L1595400-04 GW

Collected by	Collected date/time	Received date/time
Carter Harlan	03/14/23 14:40	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:34	03/21/23 14:34	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 19:06	03/21/23 19:06	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	5	03/21/23 19:19	03/21/23 19:19	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:25	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:31	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	10	03/19/23 18:20	03/21/23 12:20	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 22:47	LD	Mt. Juliet, TN

MW-02 L1595400-05 GW

Collected by	Collected date/time	Received date/time
Carter Harlan	03/13/23 16:00	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026084	1	03/19/23 15:20	03/19/23 16:15	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:39	03/21/23 14:39	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 19:33	03/21/23 19:33	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:31	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:41	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	10	03/19/23 18:20	03/21/23 12:33	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 22:50	LD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-03A L1595400-06 GW

Collected by: Carter Harlan | Collected date/time: 03/15/23 10:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:44	03/21/23 14:44	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 19:46	03/21/23 19:46	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:38	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:44	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 12:36	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 22:54	LD	Mt. Juliet, TN

MW-04 L1595400-07 GW

Collected by: Carter Harlan | Collected date/time: 03/15/23 11:30 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:49	03/21/23 14:49	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 20:00	03/21/23 20:00	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	20	03/21/23 20:13	03/21/23 20:13	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:40	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:47	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	10	03/19/23 18:20	03/21/23 12:39	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 22:57	LD	Mt. Juliet, TN

MW-05 L1595400-08 GW

Collected by: Carter Harlan | Collected date/time: 03/15/23 11:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 14:53	03/21/23 14:53	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 13:06	03/21/23 13:06	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	10	03/21/23 13:18	03/21/23 13:18	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:51	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:08	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	100	03/19/23 18:20	03/21/23 12:02	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 22:04	LD	Mt. Juliet, TN

MW-06 L1595400-09 GW

Collected by: Carter Harlan | Collected date/time: 03/15/23 10:10 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:12	03/21/23 15:12	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 20:51	03/21/23 20:51	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	5	03/21/23 21:03	03/21/23 21:03	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:53	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:51	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	100	03/19/23 18:20	03/21/23 12:43	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:00	LD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-07 L1595400-10 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 13:45 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:17	03/21/23 15:17	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 21:16	03/21/23 21:16	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:56	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:54	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	10	03/19/23 18:20	03/21/23 12:47	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:04	LD	Mt. Juliet, TN

MW-08 L1595400-11 GW

Collected by: Carter Harlan | Collected date/time: 03/13/23 13:50 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026084	1	03/19/23 15:20	03/19/23 16:15	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:22	03/21/23 15:22	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 21:28	03/21/23 21:28	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	5	03/21/23 21:46	03/21/23 21:46	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 16:58	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 10:57	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	10	03/19/23 18:20	03/21/23 12:50	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:07	LD	Mt. Juliet, TN

MW-09 L1595400-12 GW

Collected by: Carter Harlan | Collected date/time: 03/13/23 14:45 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026084	1	03/19/23 15:20	03/19/23 16:15	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:28	03/21/23 15:28	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 21:59	03/21/23 21:59	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	5	03/21/23 22:13	03/21/23 22:13	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:00	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:00	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	20	03/19/23 18:20	03/21/23 12:53	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:10	LD	Mt. Juliet, TN

MW-10 L1595400-13 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 15:30 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:34	03/21/23 15:34	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 22:26	03/21/23 22:26	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:02	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:04	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 12:57	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:13	LD	Mt. Juliet, TN

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

SAMPLE SUMMARY

MW-11 L1595400-14 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 16:25 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:40	03/21/23 15:40	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 22:40	03/21/23 22:40	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:05	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:07	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 13:06	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:17	LD	Mt. Juliet, TN

MW-12 L1595400-15 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 16:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 15:54	03/21/23 15:54	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027034	1	03/21/23 22:53	03/21/23 22:53	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:07	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:10	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	50	03/19/23 18:20	03/21/23 13:09	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:27	LD	Mt. Juliet, TN

MW-13 L1595400-16 GW

Collected by: Carter Harlan | Collected date/time: 03/15/23 12:15 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 16:08	03/21/23 16:08	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 18:53	03/21/23 18:53	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:13	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:20	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 13:19	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:30	LD	Mt. Juliet, TN

MW-14 L1595400-17 GW

Collected by: Carter Harlan | Collected date/time: 03/15/23 12:25 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 16:13	03/21/23 16:13	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 19:09	03/21/23 19:09	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:16	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:23	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 13:23	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:33	LD	Mt. Juliet, TN

MW-15 L1595400-18 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 11:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 16:18	03/21/23 16:18	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 19:25	03/21/23 19:25	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	5	03/21/23 19:41	03/21/23 19:41	GEB	Mt. Juliet, TN

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

SAMPLE SUMMARY

MW-15 L1595400-18 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 11:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:18	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:27	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	10	03/19/23 18:20	03/21/23 13:26	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:36	LD	Mt. Juliet, TN

MW-16 L1595400-19 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 10:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027119	1	03/21/23 16:24	03/21/23 16:24	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 19:57	03/21/23 19:57	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	5	03/21/23 20:13	03/21/23 20:13	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:04	03/19/23 17:20	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:30	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 13:29	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:40	LD	Mt. Juliet, TN

MW-17 L1595400-20 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 13:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 20:29	03/21/23 20:29	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:05	03/19/23 17:22	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	1	03/19/23 18:20	03/21/23 11:33	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024819	5	03/19/23 18:20	03/21/23 13:32	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2027158	1	03/21/23 16:56	03/21/23 23:43	LD	Mt. Juliet, TN

MW-19 L1595400-21 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 12:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 21:01	03/21/23 21:01	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:05	03/19/23 17:24	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024820	1	03/17/23 13:32	03/20/23 16:10	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024820	1	03/17/23 13:32	03/21/23 10:29	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2026878	1	03/21/23 10:48	03/21/23 16:26	LD	Mt. Juliet, TN

DUP-1 031423 L1595400-22 GW

Collected by: Carter Harlan | Collected date/time: 03/14/23 00:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027125	1	03/22/23 09:33	03/22/23 09:33	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 21:17	03/21/23 21:17	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	5	03/21/23 22:05	03/21/23 22:05	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:05	03/19/23 17:27	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024820	1	03/17/23 13:32	03/20/23 15:26	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024820	5	03/17/23 13:32	03/21/23 10:33	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2026878	1	03/21/23 10:48	03/21/23 16:39	LD	Mt. Juliet, TN

SAMPLE SUMMARY

DUP-2 031423 L1595400-23 GW

Collected by	Collected date/time	Received date/time
Carter Harlan	03/14/23 00:00	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2026256	1	03/20/23 15:18	03/21/23 06:01	AS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2027125	1	03/22/23 09:37	03/22/23 09:37	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	1	03/21/23 22:21	03/21/23 22:21	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2027218	5	03/21/23 22:37	03/21/23 22:37	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2024645	1	03/18/23 12:05	03/19/23 17:29	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024820	1	03/17/23 13:32	03/20/23 15:29	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2024820	5	03/17/23 13:32	03/21/23 10:36	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2026878	1	03/21/23 10:48	03/21/23 16:43	LD	Mt. Juliet, TN

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 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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1210000		20000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	263000		8450	20000	1	03/21/2023 14:17	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:17	WG2027119

Sample Narrative:

L1595400-01 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	191000		379	1000	1	03/21/2023 17:53	WG2027034
Fluoride	165		64.0	150	1	03/21/2023 17:53	WG2027034
Sulfate	431000		2970	25000	5	03/21/2023 18:53	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	03/18/2023 14:59	WG2024657

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:21	WG2024819
Arsenic	5.93		0.180	2.00	1	03/21/2023 10:21	WG2024819
Barium	86.4		0.381	2.00	1	03/21/2023 10:21	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:21	WG2024819
Boron	7400		482	1500	50	03/21/2023 12:16	WG2024819
Cadmium	0.338	J	0.150	1.00	1	03/21/2023 10:21	WG2024819
Calcium	175000		93.6	1000	1	03/21/2023 10:21	WG2024819
Chromium	1.89	J	1.24	2.00	1	03/21/2023 10:21	WG2024819
Cobalt	10.7		0.0596	2.00	1	03/21/2023 10:21	WG2024819
Lead	5.01		0.849	2.00	1	03/21/2023 10:21	WG2024819
Magnesium	107000		73.5	1000	1	03/21/2023 10:21	WG2024819
Molybdenum	14.3		0.348	5.00	1	03/21/2023 10:21	WG2024819
Potassium	5600		108	2000	1	03/21/2023 10:21	WG2024819
Selenium	0.357	J	0.300	2.00	1	03/21/2023 10:21	WG2024819
Sodium	44700		376	2000	1	03/21/2023 10:21	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:21	WG2024819
Lithium	8.37		0.695	2.00	1	03/21/2023 22:18	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	401000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	114000		8450	20000	1	03/21/2023 14:22	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:22	WG2027119

Sample Narrative:

L1595400-02 WG2027119: Endpoint pH 4.5 Headspace

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Magnesium	24300		73.5	1000	1	03/21/2023 10:24	WG2024819
Potassium	3750		108	2000	1	03/21/2023 10:24	WG2024819
Sodium	24400		376	2000	1	03/21/2023 10:24	WG2024819

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	721000		13300	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	110000		8450	20000	1	03/21/2023 14:28	WG2027119
Alkalinity,Carbonate	8660	J	8450	20000	1	03/21/2023 14:28	WG2027119

Sample Narrative:

L1595400-03 WG2027119: Endpoint pH 4.5 Headspace

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Magnesium	89200		73.5	1000	1	03/21/2023 10:28	WG2024819
Potassium	4360		108	2000	1	03/21/2023 10:28	WG2024819
Sodium	28200		376	2000	1	03/21/2023 10:28	WG2024819

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	584000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	200000		8450	20000	1	03/21/2023 14:34	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:34	WG2027119

Sample Narrative:

L1595400-04 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	47200		379	1000	1	03/21/2023 19:06	WG2027034
Fluoride	492		64.0	150	1	03/21/2023 19:06	WG2027034
Sulfate	209000		2970	25000	5	03/21/2023 19:19	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.124	J	0.100	0.200	1	03/19/2023 16:25	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:31	WG2024819
Arsenic	0.342	J	0.180	2.00	1	03/21/2023 10:31	WG2024819
Barium	37.8		0.381	2.00	1	03/21/2023 10:31	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:31	WG2024819
Boron	644		96.3	300	10	03/21/2023 12:20	WG2024819
Cadmium	0.606	J	0.150	1.00	1	03/21/2023 10:31	WG2024819
Calcium	116000		93.6	1000	1	03/21/2023 10:31	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:31	WG2024819
Cobalt	0.0983	J	0.0596	2.00	1	03/21/2023 10:31	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:31	WG2024819
Magnesium	22400		73.5	1000	1	03/21/2023 10:31	WG2024819
Molybdenum	79.8		0.348	5.00	1	03/21/2023 10:31	WG2024819
Potassium	7450		108	2000	1	03/21/2023 10:31	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 10:31	WG2024819
Sodium	34000		376	2000	1	03/21/2023 10:31	WG2024819
Thallium	0.221	J	0.121	2.00	1	03/21/2023 10:31	WG2024819
Lithium	31.0		0.695	2.00	1	03/21/2023 22:47	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	620000		13300	1	03/19/2023 16:15	WG2026084

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	617000		8450	20000	1	03/21/2023 14:39	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:39	WG2027119

Sample Narrative:

L1595400-05 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31700		379	1000	1	03/21/2023 19:33	WG2027034
Fluoride	135	J	64.0	150	1	03/21/2023 19:33	WG2027034
Sulfate	14100		594	5000	1	03/21/2023 19:33	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.113	J	0.100	0.200	1	03/19/2023 16:31	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:41	WG2024819
Arsenic	35.3		0.180	2.00	1	03/21/2023 10:41	WG2024819
Barium	439		3.81	20.0	10	03/21/2023 12:33	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:41	WG2024819
Boron	503		96.3	300	10	03/21/2023 12:33	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 10:41	WG2024819
Calcium	139000		93.6	1000	1	03/21/2023 10:41	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:41	WG2024819
Cobalt	0.264	J	0.0596	2.00	1	03/21/2023 10:41	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:41	WG2024819
Magnesium	63300		73.5	1000	1	03/21/2023 10:41	WG2024819
Molybdenum	0.389	J	0.348	5.00	1	03/21/2023 10:41	WG2024819
Potassium	963	J	108	2000	1	03/21/2023 10:41	WG2024819
Selenium	0.568	J	0.300	2.00	1	03/21/2023 10:41	WG2024819
Sodium	17200		376	2000	1	03/21/2023 10:41	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:41	WG2024819
Lithium	0.969	J	0.695	2.00	1	03/21/2023 22:50	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	241000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	199000		8450	20000	1	03/21/2023 14:44	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:44	WG2027119

Sample Narrative:

L1595400-06 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24300		379	1000	1	03/21/2023 19:46	WG2027034
Fluoride	176		64.0	150	1	03/21/2023 19:46	WG2027034
Sulfate	7150		594	5000	1	03/21/2023 19:46	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.126	J	0.100	0.200	1	03/19/2023 16:38	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:44	WG2024819
Arsenic	8.45		0.180	2.00	1	03/21/2023 10:44	WG2024819
Barium	126		0.381	2.00	1	03/21/2023 10:44	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:44	WG2024819
Boron	62.8	J	48.2	150	5	03/21/2023 12:36	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 10:44	WG2024819
Calcium	50300		93.6	1000	1	03/21/2023 10:44	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:44	WG2024819
Cobalt	0.0649	J	0.0596	2.00	1	03/21/2023 10:44	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:44	WG2024819
Magnesium	13900		73.5	1000	1	03/21/2023 10:44	WG2024819
Molybdenum	1.27	J	0.348	5.00	1	03/21/2023 10:44	WG2024819
Potassium	2290		108	2000	1	03/21/2023 10:44	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 10:44	WG2024819
Sodium	19100		376	2000	1	03/21/2023 10:44	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:44	WG2024819
Lithium	1.27	J	0.695	2.00	1	03/21/2023 22:54	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1660000		20000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	131000		8450	20000	1	03/21/2023 14:49	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:49	WG2027119

Sample Narrative:

L1595400-07 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24400		379	1000	1	03/21/2023 20:00	WG2027034
Fluoride	138	J	64.0	150	1	03/21/2023 20:00	WG2027034
Sulfate	999000		11900	100000	20	03/21/2023 20:13	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.133	J	0.100	0.200	1	03/19/2023 16:40	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:47	WG2024819
Arsenic	1.91	J	0.180	2.00	1	03/21/2023 10:47	WG2024819
Barium	19.0		0.381	2.00	1	03/21/2023 10:47	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:47	WG2024819
Boron	492		96.3	300	10	03/21/2023 12:39	WG2024819
Cadmium	0.740	J	0.150	1.00	1	03/21/2023 10:47	WG2024819
Calcium	296000		93.6	1000	1	03/21/2023 10:47	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:47	WG2024819
Cobalt	14.1		0.0596	2.00	1	03/21/2023 10:47	WG2024819
Lead	1.34	J	0.849	2.00	1	03/21/2023 10:47	WG2024819
Magnesium	92300		73.5	1000	1	03/21/2023 10:47	WG2024819
Molybdenum	0.654	J	0.348	5.00	1	03/21/2023 10:47	WG2024819
Potassium	966	J	108	2000	1	03/21/2023 10:47	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 10:47	WG2024819
Sodium	24100		376	2000	1	03/21/2023 10:47	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:47	WG2024819
Lithium	5.59		0.695	2.00	1	03/21/2023 22:57	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2170000		50000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	263000		8450	20000	1	03/21/2023 14:53	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 14:53	WG2027119

Sample Narrative:

L1595400-08 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	649000		3790	10000	10	03/21/2023 13:18	WG2027034
Fluoride	64.3	J	64.0	150	1	03/21/2023 13:06	WG2027034
Sulfate	765000		5940	50000	10	03/21/2023 13:18	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.111	J	0.100	0.200	1	03/19/2023 16:51	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:08	WG2024819
Arsenic	0.313	J	0.180	2.00	1	03/21/2023 10:08	WG2024819
Barium	73.4		0.381	2.00	1	03/21/2023 10:08	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:08	WG2024819
Boron	28900		963	3000	100	03/21/2023 12:02	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 10:08	WG2024819
Calcium	426000	V	93.6	1000	1	03/21/2023 10:08	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:08	WG2024819
Cobalt	0.235	J	0.0596	2.00	1	03/21/2023 10:08	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:08	WG2024819
Magnesium	164000	V	73.5	1000	1	03/21/2023 10:08	WG2024819
Molybdenum	16.6		0.348	5.00	1	03/21/2023 10:08	WG2024819
Potassium	7390		108	2000	1	03/21/2023 10:08	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 10:08	WG2024819
Sodium	76400	V	376	2000	1	03/21/2023 10:08	WG2024819
Thallium	0.236	J	0.121	2.00	1	03/21/2023 10:08	WG2024819
Lithium	10.9		0.695	2.00	1	03/21/2023 22:04	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1470000		50000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	629000		8450	20000	1	03/21/2023 15:12	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:12	WG2027119

Sample Narrative:

L1595400-09 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	568000		1900	5000	5	03/21/2023 21:03	WG2027034
Fluoride	765		64.0	150	1	03/21/2023 20:51	WG2027034
Sulfate	161000		594	5000	1	03/21/2023 20:51	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	03/19/2023 16:53	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:51	WG2024819
Arsenic	16.0		0.180	2.00	1	03/21/2023 10:51	WG2024819
Barium	160		0.381	2.00	1	03/21/2023 10:51	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:51	WG2024819
Boron	21200		963	3000	100	03/21/2023 12:43	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 10:51	WG2024819
Calcium	108000		93.6	1000	1	03/21/2023 10:51	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:51	WG2024819
Cobalt	4.86		0.0596	2.00	1	03/21/2023 10:51	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:51	WG2024819
Magnesium	285000		73.5	1000	1	03/21/2023 10:51	WG2024819
Molybdenum	151		0.348	5.00	1	03/21/2023 10:51	WG2024819
Potassium	6570		108	2000	1	03/21/2023 10:51	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 10:51	WG2024819
Sodium	77600		376	2000	1	03/21/2023 10:51	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:51	WG2024819
Lithium	10.4		0.695	2.00	1	03/21/2023 23:00	WG2027158

MW-07 SAMPLE RESULTS - 10

Collected date/time: 03/14/23 13:45 L1595400

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	465000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	385000		8450	20000	1	03/21/2023 15:17	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:17	WG2027119

Sample Narrative:

L1595400-10 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6670		379	1000	1	03/21/2023 21:16	WG2027034
Fluoride	115	J	64.0	150	1	03/21/2023 21:16	WG2027034
Sulfate	46000		594	5000	1	03/21/2023 21:16	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.108	J	0.100	0.200	1	03/19/2023 16:56	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:54	WG2024819
Arsenic	0.271	J	0.180	2.00	1	03/21/2023 10:54	WG2024819
Barium	104		0.381	2.00	1	03/21/2023 10:54	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:54	WG2024819
Boron	130	J	96.3	300	10	03/21/2023 12:47	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 10:54	WG2024819
Calcium	113000		93.6	1000	1	03/21/2023 10:54	WG2024819
Chromium	1.51	J	1.24	2.00	1	03/21/2023 10:54	WG2024819
Cobalt	0.328	J	0.0596	2.00	1	03/21/2023 10:54	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:54	WG2024819
Magnesium	36100		73.5	1000	1	03/21/2023 10:54	WG2024819
Molybdenum	0.698	J	0.348	5.00	1	03/21/2023 10:54	WG2024819
Potassium	1310	J	108	2000	1	03/21/2023 10:54	WG2024819
Selenium	0.876	J	0.300	2.00	1	03/21/2023 10:54	WG2024819
Sodium	4030		376	2000	1	03/21/2023 10:54	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:54	WG2024819
Lithium	4.28		0.695	2.00	1	03/21/2023 23:04	WG2027158

MW-08

Collected date/time: 03/13/23 13:50

L1595400

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	743000		13300	1	03/19/2023 16:15	WG2026084

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	203000		8450	20000	1	03/21/2023 15:22	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:22	WG2027119

Sample Narrative:

L1595400-11 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	41800		379	1000	1	03/21/2023 21:28	WG2027034
Fluoride	213		64.0	150	1	03/21/2023 21:28	WG2027034
Sulfate	335000		2970	25000	5	03/21/2023 21:46	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.104	J	0.100	0.200	1	03/19/2023 16:58	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 10:57	WG2024819
Arsenic	0.218	J	0.180	2.00	1	03/21/2023 10:57	WG2024819
Barium	39.3		0.381	2.00	1	03/21/2023 10:57	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 10:57	WG2024819
Boron	1830		96.3	300	10	03/21/2023 12:50	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 10:57	WG2024819
Calcium	145000		93.6	1000	1	03/21/2023 10:57	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 10:57	WG2024819
Cobalt	0.0871	J	0.0596	2.00	1	03/21/2023 10:57	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 10:57	WG2024819
Magnesium	38500		73.5	1000	1	03/21/2023 10:57	WG2024819
Molybdenum	7.20		0.348	5.00	1	03/21/2023 10:57	WG2024819
Potassium	5770		108	2000	1	03/21/2023 10:57	WG2024819
Selenium	1.84	J	0.300	2.00	1	03/21/2023 10:57	WG2024819
Sodium	28800		376	2000	1	03/21/2023 10:57	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 10:57	WG2024819
Lithium	15.3		0.695	2.00	1	03/21/2023 23:07	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	904000		13300	1	03/19/2023 16:15	WG2026084

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	213000		8450	20000	1	03/21/2023 15:28	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:28	WG2027119

Sample Narrative:

L1595400-12 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	67800		379	1000	1	03/21/2023 21:59	WG2027034
Fluoride	340		64.0	150	1	03/21/2023 21:59	WG2027034
Sulfate	393000		2970	25000	5	03/21/2023 22:13	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.113	J	0.100	0.200	1	03/19/2023 17:00	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:00	WG2024819
Arsenic	0.288	J	0.180	2.00	1	03/21/2023 11:00	WG2024819
Barium	65.8		0.381	2.00	1	03/21/2023 11:00	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:00	WG2024819
Boron	2950		193	600	20	03/21/2023 12:53	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:00	WG2024819
Calcium	174000		93.6	1000	1	03/21/2023 11:00	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:00	WG2024819
Cobalt	0.159	J	0.0596	2.00	1	03/21/2023 11:00	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:00	WG2024819
Magnesium	41500		73.5	1000	1	03/21/2023 11:00	WG2024819
Molybdenum	42.8		0.348	5.00	1	03/21/2023 11:00	WG2024819
Potassium	6030		108	2000	1	03/21/2023 11:00	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:00	WG2024819
Sodium	35500		376	2000	1	03/21/2023 11:00	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:00	WG2024819
Lithium	9.29		0.695	2.00	1	03/21/2023 23:10	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	309000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	224000		8450	20000	1	03/21/2023 15:34	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:34	WG2027119

Sample Narrative:

L1595400-13 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	46700		379	1000	1	03/21/2023 22:26	WG2027034
Fluoride	235		64.0	150	1	03/21/2023 22:26	WG2027034
Sulfate	21200		594	5000	1	03/21/2023 22:26	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.114	J	0.100	0.200	1	03/19/2023 17:02	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:04	WG2024819
Arsenic	16.2		0.180	2.00	1	03/21/2023 11:04	WG2024819
Barium	149		0.381	2.00	1	03/21/2023 11:04	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:04	WG2024819
Boron	77.5	J	48.2	150	5	03/21/2023 12:57	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:04	WG2024819
Calcium	60600		93.6	1000	1	03/21/2023 11:04	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:04	WG2024819
Cobalt	U		0.0596	2.00	1	03/21/2023 11:04	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:04	WG2024819
Magnesium	21800		73.5	1000	1	03/21/2023 11:04	WG2024819
Molybdenum	4.57	J	0.348	5.00	1	03/21/2023 11:04	WG2024819
Potassium	3470		108	2000	1	03/21/2023 11:04	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:04	WG2024819
Sodium	23600		376	2000	1	03/21/2023 11:04	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:04	WG2024819
Lithium	1.83	J	0.695	2.00	1	03/21/2023 23:13	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	257000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	174000		8450	20000	1	03/21/2023 15:40	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:40	WG2027119

Sample Narrative:

L1595400-14 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	24000		379	1000	1	03/21/2023 22:40	WG2027034
Fluoride	191		64.0	150	1	03/21/2023 22:40	WG2027034
Sulfate	37300		594	5000	1	03/21/2023 22:40	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.110	J	0.100	0.200	1	03/19/2023 17:05	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:07	WG2024819
Arsenic	8.31		0.180	2.00	1	03/21/2023 11:07	WG2024819
Barium	199		0.381	2.00	1	03/21/2023 11:07	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:07	WG2024819
Boron	68.2	J	48.2	150	5	03/21/2023 13:06	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:07	WG2024819
Calcium	48100		93.6	1000	1	03/21/2023 11:07	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:07	WG2024819
Cobalt	0.507	J	0.0596	2.00	1	03/21/2023 11:07	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:07	WG2024819
Magnesium	15300		73.5	1000	1	03/21/2023 11:07	WG2024819
Molybdenum	4.75	J	0.348	5.00	1	03/21/2023 11:07	WG2024819
Potassium	3020		108	2000	1	03/21/2023 11:07	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:07	WG2024819
Sodium	22200		376	2000	1	03/21/2023 11:07	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:07	WG2024819
Lithium	2.73		0.695	2.00	1	03/21/2023 23:17	WG2027158

SAMPLE RESULTS - 15

MW-12 L1595400-15

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	810000		20000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	76800		8450	20000	1	03/21/2023 15:54	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 15:54	WG2027119

Sample Narrative:

L1595400-15 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31400		379	1000	1	03/21/2023 22:53	WG2027034
Fluoride	122	J	64.0	150	1	03/21/2023 22:53	WG2027034
Sulfate	14300		594	5000	1	03/21/2023 22:53	WG2027034

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.814		0.100	0.200	1	03/19/2023 17:07	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:10	WG2024819
Arsenic	0.208	J	0.180	2.00	1	03/21/2023 11:10	WG2024819
Barium	14.6		0.381	2.00	1	03/21/2023 11:10	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:10	WG2024819
Boron	5890		482	1500	50	03/21/2023 13:09	WG2024819
Cadmium	1.17		0.150	1.00	1	03/21/2023 11:10	WG2024819
Calcium	155000		93.6	1000	1	03/21/2023 11:10	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:10	WG2024819
Cobalt	2.71		0.0596	2.00	1	03/21/2023 11:10	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:10	WG2024819
Magnesium	51500		73.5	1000	1	03/21/2023 11:10	WG2024819
Molybdenum	0.604	J	0.348	5.00	1	03/21/2023 11:10	WG2024819
Potassium	754	J	108	2000	1	03/21/2023 11:10	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:10	WG2024819
Sodium	41400		376	2000	1	03/21/2023 11:10	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:10	WG2024819
Lithium	3.16		0.695	2.00	1	03/21/2023 23:27	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	237000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	130000		8450	20000	1	03/21/2023 16:08	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 16:08	WG2027119

Sample Narrative:

L1595400-16 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28500		379	1000	1	03/21/2023 18:53	WG2027218
Fluoride	185		64.0	150	1	03/21/2023 18:53	WG2027218
Sulfate	43800		594	5000	1	03/21/2023 18:53	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.118	J	0.100	0.200	1	03/19/2023 17:13	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:20	WG2024819
Arsenic	12.5		0.180	2.00	1	03/21/2023 11:20	WG2024819
Barium	176		0.381	2.00	1	03/21/2023 11:20	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:20	WG2024819
Boron	70.0	J	48.2	150	5	03/21/2023 13:19	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:20	WG2024819
Calcium	43200		93.6	1000	1	03/21/2023 11:20	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:20	WG2024819
Cobalt	0.316	J	0.0596	2.00	1	03/21/2023 11:20	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:20	WG2024819
Magnesium	12400		73.5	1000	1	03/21/2023 11:20	WG2024819
Molybdenum	11.1		0.348	5.00	1	03/21/2023 11:20	WG2024819
Potassium	2390		108	2000	1	03/21/2023 11:20	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:20	WG2024819
Sodium	21000		376	2000	1	03/21/2023 11:20	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:20	WG2024819
Lithium	4.44		0.695	2.00	1	03/21/2023 23:30	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	250000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	121000		8450	20000	1	03/21/2023 16:13	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 16:13	WG2027119

Sample Narrative:

L1595400-17 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28900		379	1000	1	03/21/2023 19:09	WG2027218
Fluoride	135	J	64.0	150	1	03/21/2023 19:09	WG2027218
Sulfate	49100		594	5000	1	03/21/2023 19:09	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	03/19/2023 17:16	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:23	WG2024819
Arsenic	0.761	J	0.180	2.00	1	03/21/2023 11:23	WG2024819
Barium	44.1		0.381	2.00	1	03/21/2023 11:23	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:23	WG2024819
Boron	62.8	J	48.2	150	5	03/21/2023 13:23	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:23	WG2024819
Calcium	43200		93.6	1000	1	03/21/2023 11:23	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:23	WG2024819
Cobalt	0.493	J	0.0596	2.00	1	03/21/2023 11:23	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:23	WG2024819
Magnesium	11800		73.5	1000	1	03/21/2023 11:23	WG2024819
Molybdenum	6.08		0.348	5.00	1	03/21/2023 11:23	WG2024819
Potassium	2660		108	2000	1	03/21/2023 11:23	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:23	WG2024819
Sodium	21700		376	2000	1	03/21/2023 11:23	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:23	WG2024819
Lithium	3.89		0.695	2.00	1	03/21/2023 23:33	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	708000		20000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	336000		8450	20000	1	03/21/2023 16:18	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 16:18	WG2027119

Sample Narrative:

L1595400-18 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	244000		1900	5000	5	03/21/2023 19:41	WG2027218
Fluoride	251		64.0	150	1	03/21/2023 19:25	WG2027218
Sulfate	3600	J	594	5000	1	03/21/2023 19:25	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	03/19/2023 17:18	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:27	WG2024819
Arsenic	0.731	J	0.180	2.00	1	03/21/2023 11:27	WG2024819
Barium	82.4		0.381	2.00	1	03/21/2023 11:27	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:27	WG2024819
Boron	514		96.3	300	10	03/21/2023 13:26	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:27	WG2024819
Calcium	123000		93.6	1000	1	03/21/2023 11:27	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:27	WG2024819
Cobalt	2.60		0.0596	2.00	1	03/21/2023 11:27	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:27	WG2024819
Magnesium	37800		73.5	1000	1	03/21/2023 11:27	WG2024819
Molybdenum	22.9		0.348	5.00	1	03/21/2023 11:27	WG2024819
Potassium	3510		108	2000	1	03/21/2023 11:27	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:27	WG2024819
Sodium	81000		376	2000	1	03/21/2023 11:27	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:27	WG2024819
Lithium	7.00		0.695	2.00	1	03/21/2023 23:36	WG2027158

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	856000		20000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	451000		8450	20000	1	03/21/2023 16:24	WG2027119
Alkalinity,Carbonate	U		8450	20000	1	03/21/2023 16:24	WG2027119

Sample Narrative:

L1595400-19 WG2027119: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	106000		379	1000	1	03/21/2023 19:57	WG2027218
Fluoride	106	J	64.0	150	1	03/21/2023 19:57	WG2027218
Sulfate	206000		2970	25000	5	03/21/2023 20:13	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.121	J	0.100	0.200	1	03/19/2023 17:20	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/21/2023 11:30	WG2024819
Arsenic	0.327	J	0.180	2.00	1	03/21/2023 11:30	WG2024819
Barium	81.5		0.381	2.00	1	03/21/2023 11:30	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:30	WG2024819
Boron	66.4	J	48.2	150	5	03/21/2023 13:29	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:30	WG2024819
Calcium	177000		93.6	1000	1	03/21/2023 11:30	WG2024819
Chromium	U		1.24	2.00	1	03/21/2023 11:30	WG2024819
Cobalt	1.05	J	0.0596	2.00	1	03/21/2023 11:30	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:30	WG2024819
Magnesium	58800		73.5	1000	1	03/21/2023 11:30	WG2024819
Molybdenum	U		0.348	5.00	1	03/21/2023 11:30	WG2024819
Potassium	4820		108	2000	1	03/21/2023 11:30	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:30	WG2024819
Sodium	39800		376	2000	1	03/21/2023 11:30	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:30	WG2024819
Lithium	10.8		0.695	2.00	1	03/21/2023 23:40	WG2027158

MW-17

SAMPLE RESULTS - 20

Collected date/time: 03/14/23 13:00 L1595400

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l		date / time	
Dissolved Solids	615000		13300	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Chloride	66800		379	1000	1	03/21/2023 20:29	WG2027218
Fluoride	193		64.0	150	1	03/21/2023 20:29	WG2027218
Sulfate	84800		594	5000	1	03/21/2023 20:29	WG2027218

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Mercury	0.122	J	0.100	0.200	1	03/19/2023 17:22	WG2024645

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Analyte	ug/l		ug/l	ug/l		date / time	
Antimony	U		1.03	4.00	1	03/21/2023 11:33	WG2024819
Arsenic	0.380	J	0.180	2.00	1	03/21/2023 11:33	WG2024819
Barium	53.2		0.381	2.00	1	03/21/2023 11:33	WG2024819
Beryllium	U		0.190	2.00	1	03/21/2023 11:33	WG2024819
Boron	52.0	J	48.2	150	5	03/21/2023 13:32	WG2024819
Cadmium	U		0.150	1.00	1	03/21/2023 11:33	WG2024819
Calcium	137000		93.6	1000	1	03/21/2023 11:33	WG2024819
Chromium	2.74		1.24	2.00	1	03/21/2023 11:33	WG2024819
Cobalt	1.61	J	0.0596	2.00	1	03/21/2023 11:33	WG2024819
Lead	U		0.849	2.00	1	03/21/2023 11:33	WG2024819
Molybdenum	2.81	J	0.348	5.00	1	03/21/2023 11:33	WG2024819
Selenium	U		0.300	2.00	1	03/21/2023 11:33	WG2024819
Thallium	U		0.121	2.00	1	03/21/2023 11:33	WG2024819
Lithium	9.44		0.695	2.00	1	03/21/2023 23:43	WG2027158

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 ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	572000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	37900		379	1000	1	03/21/2023 21:01	WG2027218
Fluoride	90.6	J	64.0	150	1	03/21/2023 21:01	WG2027218
Sulfate	44100		594	5000	1	03/21/2023 21:01	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.105	J	0.100	0.200	1	03/19/2023 17:24	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/20/2023 16:10	WG2024820
Arsenic	0.300	J	0.180	2.00	1	03/20/2023 16:10	WG2024820
Barium	128		0.381	2.00	1	03/20/2023 16:10	WG2024820
Beryllium	U		0.190	2.00	1	03/20/2023 16:10	WG2024820
Boron	89.5		9.63	30.0	1	03/21/2023 10:29	WG2024820
Cadmium	U		0.150	1.00	1	03/20/2023 16:10	WG2024820
Calcium	140000		93.6	1000	1	03/20/2023 16:10	WG2024820
Chromium	U		1.24	2.00	1	03/20/2023 16:10	WG2024820
Cobalt	0.474	J	0.0596	2.00	1	03/20/2023 16:10	WG2024820
Lead	U		0.849	2.00	1	03/20/2023 16:10	WG2024820
Molybdenum	2.68	J	0.348	5.00	1	03/20/2023 16:10	WG2024820
Selenium	U		0.300	2.00	1	03/20/2023 16:10	WG2024820
Thallium	U		0.121	2.00	1	03/20/2023 16:10	WG2024820
Lithium	6.89		0.695	2.00	1	03/21/2023 16:26	WG2026878

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	666000		20000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	337000		8450	20000	1	03/22/2023 09:33	WG2027125
Alkalinity,Carbonate	U		8450	20000	1	03/22/2023 09:33	WG2027125

Sample Narrative:

L1595400-22 WG2027125: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	243000		1900	5000	5	03/21/2023 22:05	WG2027218
Fluoride	243		64.0	150	1	03/21/2023 21:17	WG2027218
Sulfate	4430	J	594	5000	1	03/21/2023 21:17	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.100	J	0.100	0.200	1	03/19/2023 17:27	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/20/2023 15:26	WG2024820
Arsenic	0.801	J	0.180	2.00	1	03/20/2023 15:26	WG2024820
Barium	83.8		0.381	2.00	1	03/20/2023 15:26	WG2024820
Beryllium	U		0.190	2.00	1	03/20/2023 15:26	WG2024820
Boron	531		48.2	150	5	03/21/2023 10:33	WG2024820
Cadmium	U		0.150	1.00	1	03/20/2023 15:26	WG2024820
Calcium	128000		93.6	1000	1	03/20/2023 15:26	WG2024820
Chromium	U		1.24	2.00	1	03/20/2023 15:26	WG2024820
Cobalt	2.54		0.0596	2.00	1	03/20/2023 15:26	WG2024820
Lead	U		0.849	2.00	1	03/20/2023 15:26	WG2024820
Magnesium	40000		73.5	1000	1	03/20/2023 15:26	WG2024820
Molybdenum	23.3		0.348	5.00	1	03/20/2023 15:26	WG2024820
Potassium	3400		108	2000	1	03/20/2023 15:26	WG2024820
Selenium	U		0.300	2.00	1	03/20/2023 15:26	WG2024820
Sodium	84900		376	2000	1	03/20/2023 15:26	WG2024820
Thallium	U		0.121	2.00	1	03/20/2023 15:26	WG2024820
Lithium	7.48		0.695	2.00	1	03/21/2023 16:39	WG2026878

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	583000		10000	1	03/21/2023 06:01	WG2026256

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	199000		8450	20000	1	03/22/2023 09:37	WG2027125
Alkalinity,Carbonate	U		8450	20000	1	03/22/2023 09:37	WG2027125

Sample Narrative:

L1595400-23 WG2027125: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	47300		379	1000	1	03/21/2023 22:21	WG2027218
Fluoride	549		64.0	150	1	03/21/2023 22:21	WG2027218
Sulfate	210000		2970	25000	5	03/21/2023 22:37	WG2027218

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.125	J	0.100	0.200	1	03/19/2023 17:29	WG2024645

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	03/20/2023 15:29	WG2024820
Arsenic	0.339	J	0.180	2.00	1	03/20/2023 15:29	WG2024820
Barium	39.3		0.381	2.00	1	03/20/2023 15:29	WG2024820
Beryllium	U		0.190	2.00	1	03/20/2023 15:29	WG2024820
Boron	731		48.2	150	5	03/21/2023 10:36	WG2024820
Cadmium	U		0.150	1.00	1	03/20/2023 15:29	WG2024820
Calcium	122000		93.6	1000	1	03/20/2023 15:29	WG2024820
Chromium	U		1.24	2.00	1	03/20/2023 15:29	WG2024820
Cobalt	0.0826	J	0.0596	2.00	1	03/20/2023 15:29	WG2024820
Lead	U		0.849	2.00	1	03/20/2023 15:29	WG2024820
Magnesium	24800		73.5	1000	1	03/20/2023 15:29	WG2024820
Molybdenum	81.6		0.348	5.00	1	03/20/2023 15:29	WG2024820
Potassium	7390		108	2000	1	03/20/2023 15:29	WG2024820
Selenium	U		0.300	2.00	1	03/20/2023 15:29	WG2024820
Sodium	36700		376	2000	1	03/20/2023 15:29	WG2024820
Thallium	0.230	J	0.121	2.00	1	03/20/2023 15:29	WG2024820
Lithium	33.3		0.695	2.00	1	03/21/2023 16:43	WG2026878

L1595400-05,11,12

Method Blank (MB)

(MB) R3903778-1 03/19/23 16:15

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

L1594455-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1594455-01 03/19/23 16:15 • (DUP) R3903778-3 03/19/23 16:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	2030000	2120000	1	4.10		5

L1595400-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-05 03/19/23 16:15 • (DUP) R3903778-4 03/19/23 16:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	620000	641000	1	3.38		5

Laboratory Control Sample (LCS)

(LCS) R3903778-2 03/19/23 16:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8230000	93.5	77.3-123	

Method Blank (MB)

(MB) R3904341-1 03/21/23 06:01

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

L1595400-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-01 03/21/23 06:01 • (DUP) R3904341-3 03/21/23 06:01

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1210000	1220000	1	1.15		5

L1595400-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-10 03/21/23 06:01 • (DUP) R3904341-4 03/21/23 06:01

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	465000	468000	1	0.643		5

Laboratory Control Sample (LCS)

(LCS) R3904341-2 03/21/23 06:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	7890000	89.7	77.3-123	

Method Blank (MB)

(MB) R3903789-2 03/21/23 14:09

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

L1595400-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-08 03/21/23 14:53 • (DUP) R3903789-3 03/21/23 15:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	263000	264000	1	0.391		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1595400-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-14 03/21/23 15:40 • (DUP) R3903789-4 03/21/23 15:47

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	174000	175000	1	0.583		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) R3904125-2 03/22/23 09:21

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

L1595481-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1595481-03 03/22/23 10:38 • (DUP) R3904125-3 03/22/23 10:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	446000	449000	1	0.859		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1596272-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1596272-01 03/22/23 11:19 • (DUP) R3904125-4 03/22/23 11:23

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	749000	757000	1	0.970		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) R3904619-1 03/21/23 09:58

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

L1595400-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-08 03/21/23 13:06 • (DUP) R3904619-3 03/21/23 13:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Fluoride	64.3	67.8	1	5.30	J	15

L1595400-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-08 03/21/23 13:18 • (DUP) R3904619-4 03/21/23 13:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	649000	649000	10	0.0926		15
Sulfate	765000	763000	10	0.253		15

L1595400-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1595400-15 03/21/23 22:53 • (DUP) R3904619-7 03/21/23 23:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	31400	31100	1	1.06		15
Fluoride	122	139	1	12.8	J	15
Sulfate	14300	14300	1	0.553		15

Laboratory Control Sample (LCS)

(LCS) R3904619-2 03/21/23 10:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39300	98.3	80.0-120	
Fluoride	8000	8060	101	80.0-120	
Sulfate	40000	39100	97.9	80.0-120	

L1595400-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595400-08 03/21/23 13:06 • (MS) R3904619-5 03/21/23 13:56 • (MSD) R3904619-6 03/21/23 14:08

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	647000	663000	664000	32.1	33.3	1	80.0-120	E V	E V	0.0901	15
Fluoride	5000	64.3	4440	4430	87.6	87.3	1	80.0-120			0.367	15
Sulfate	50000	758000	785000	786000	54.6	57.0	1	80.0-120	E V	E V	0.155	15

L1595400-15 Original Sample (OS) • Matrix Spike (MS)

(OS) L1595400-15 03/21/23 22:53 • (MS) R3904619-8 03/22/23 00:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	31400	79400	95.9	1	80.0-120	
Fluoride	5000	122	4950	96.6	1	80.0-120	
Sulfate	50000	14300	63900	99.1	1	80.0-120	

Method Blank (MB)

(MB) R3904510-1 03/21/23 09:58

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

L1595136-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1595136-01 03/21/23 16:46 • (DUP) R3904510-3 03/21/23 17:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	4130	4140	1	0.133		15
Fluoride	72.4	73.6	1	1.64	J	15
Sulfate	9170	9140	1	0.279		15

L1595468-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1595468-07 03/22/23 02:04 • (DUP) R3904510-6 03/22/23 02:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	49000	49100	1	0.325		15
Fluoride	173	176	1	1.43		15
Sulfate	44300	44500	1	0.482		15

Laboratory Control Sample (LCS)

(LCS) R3904510-2 03/21/23 10:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40100	100	80.0-120	
Fluoride	8000	8260	103	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1595136-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23

L1595136-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595136-01 03/21/23 16:46 • (MS) R3904510-4 03/21/23 17:18 • (MSD) R3904510-5 03/21/23 17:34

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	4130	53800	54000	99.4	99.8	1	80.0-120			0.343	15
Fluoride	5000	72.4	5250	5280	104	104	1	80.0-120			0.535	15
Sulfate	50000	9170	58900	59000	99.4	99.6	1	80.0-120			0.163	15

L1595468-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1595468-07 03/22/23 02:04 • (MS) R3904510-7 03/22/23 02:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	49000	97000	96.0	1	80.0-120	
Fluoride	5000	173	5350	103	1	80.0-120	
Sulfate	50000	44300	95400	102	1	80.0-120	

APPENDIX A:
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 1, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

Method Blank (MB)

(MB) R3902761-4 03/19/23 16:45

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

Laboratory Control Sample (LCS)

(LCS) R3902761-1 03/19/23 16:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	2.92	97.3	80.0-120	

L1595400-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595400-04 03/19/23 16:25 • (MS) R3902761-2 03/19/23 16:27 • (MSD) R3902761-3 03/19/23 16:29

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 %
Mercury	3.00	0.124	3.16	3.18	101	102	1	75.0-125			0.631	20

Method Blank (MB)

(MB) R3902600-1 03/18/23 13:39

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

Laboratory Control Sample (LCS)

(LCS) R3902600-2 03/18/23 13:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	3.40	113	80.0-120	

L1595316-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595316-01 03/18/23 13:44 • (MS) R3902600-3 03/18/23 13:46 • (MSD) R3902600-4 03/18/23 13:48

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	3.45	3.38	115	113	1	75.0-125			2.05	20

Method Blank (MB)

(MB) R3903448-1 03/21/23 10:01

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
Selenium	U		0.300	2.00
Sodium	U		376	2000
Thallium	U		0.121	2.00

Method Blank (MB)

(MB) R3903575-1 03/21/23 11:55

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) R3903448-2 03/21/23 10:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	46.3	92.7	80.0-120	
Arsenic	50.0	45.7	91.4	80.0-120	
Barium	50.0	45.9	91.7	80.0-120	
Beryllium	50.0	44.6	89.1	80.0-120	
Cadmium	50.0	48.4	96.8	80.0-120	
Calcium	5000	4740	94.9	80.0-120	
Chromium	50.0	48.2	96.4	80.0-120	
Cobalt	50.0	47.9	95.9	80.0-120	
Lead	50.0	46.1	92.2	80.0-120	
Magnesium	5000	4720	94.4	80.0-120	
Molybdenum	50.0	47.8	95.6	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3903448-2 03/21/23 10:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Potassium	5000	4740	94.8	80.0-120	
Selenium	50.0	50.6	101	80.0-120	
Sodium	5000	4700	94.0	80.0-120	
Thallium	50.0	46.3	92.6	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3903575-2 03/21/23 11:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	50.0	48.5	96.9	80.0-120	

L1595400-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595400-08 03/21/23 10:08 • (MS) R3903448-4 03/21/23 10:15 • (MSD) R3903448-5 03/21/23 10:18

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	49.3	48.5	98.7	97.0	1	75.0-125			1.72	20
Arsenic	50.0	0.313	45.9	46.7	91.2	92.9	1	75.0-125			1.80	20
Barium	50.0	73.4	122	123	96.2	98.5	1	75.0-125			0.942	20
Beryllium	50.0	U	44.4	44.7	88.8	89.4	1	75.0-125			0.689	20
Cadmium	50.0	U	48.9	48.2	97.8	96.4	1	75.0-125			1.42	20
Calcium	5000	426000	423000	423000	0.000	0.000	1	75.0-125	V	V	0.0334	20
Chromium	50.0	U	46.2	46.3	92.4	92.6	1	75.0-125			0.234	20
Cobalt	50.0	0.235	45.0	45.0	89.6	89.5	1	75.0-125			0.179	20
Lead	50.0	U	48.6	48.4	97.2	96.7	1	75.0-125			0.482	20
Magnesium	5000	164000	169000	168000	89.0	69.3	1	75.0-125		V	0.587	20
Molybdenum	50.0	16.6	65.9	67.1	98.6	101	1	75.0-125			1.84	20
Potassium	5000	7390	11900	11900	91.2	89.8	1	75.0-125			0.619	20
Selenium	50.0	U	53.2	51.5	106	103	1	75.0-125			3.42	20
Sodium	5000	76400	81000	78100	92.9	35.3	1	75.0-125		V	3.62	20
Thallium	50.0	0.236	48.4	47.8	96.4	95.2	1	75.0-125			1.26	20

L1595400-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595400-08 03/21/23 12:02 • (MS) R3903575-4 03/21/23 12:09 • (MSD) R3903575-5 03/21/23 12:12

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	50.0	28900	29400	30400	915	2920	100	75.0-125	V	V	3.36	20

Method Blank (MB)

(MB) R3903178-1 03/20/23 14:49

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	0.754	J	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
Selenium	U		0.300	2.00
Sodium	U		376	2000
Thallium	U		0.121	2.00

Method Blank (MB)

(MB) R3903484-1 03/21/23 10:10

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) R3903178-2 03/20/23 14:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	46.2	92.4	80.0-120	
Arsenic	50.0	50.0	100	80.0-120	
Barium	50.0	48.8	97.6	80.0-120	
Beryllium	50.0	47.9	95.8	80.0-120	
Cadmium	50.0	54.3	109	80.0-120	
Calcium	5000	5210	104	80.0-120	
Chromium	50.0	52.7	105	80.0-120	
Cobalt	50.0	53.1	106	80.0-120	
Lead	50.0	50.9	102	80.0-120	
Magnesium	5000	5260	105	80.0-120	
Molybdenum	50.0	48.5	97.0	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3903178-2 03/20/23 14:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Potassium	5000	5060	101	80.0-120	
Selenium	50.0	53.0	106	80.0-120	
Sodium	5000	5340	107	80.0-120	
Thallium	50.0	51.0	102	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3903484-6 03/21/23 11:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	50.0	57.0	114	80.0-120	

L1595468-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595468-04 03/20/23 14:57 • (MS) R3903178-4 03/20/23 15:03 • (MSD) R3903178-5 03/20/23 15:07

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	49.5	49.4	99.1	98.8	1	75.0-125			0.338	20
Arsenic	50.0	0.497	51.2	52.2	101	103	1	75.0-125			2.09	20
Barium	50.0	123	172	172	98.3	98.6	1	75.0-125			0.0963	20
Beryllium	50.0	U	49.5	49.4	99.1	98.8	1	75.0-125			0.291	20
Cadmium	50.0	U	55.6	55.6	111	111	1	75.0-125			0.0770	20
Calcium	5000	118000	124000	125000	109	140	1	75.0-125		V	1.26	20
Chromium	50.0	U	52.2	53.3	104	107	1	75.0-125			2.00	20
Cobalt	50.0	U	51.5	52.9	103	106	1	75.0-125			2.68	20
Lead	50.0	U	51.1	51.9	102	104	1	75.0-125			1.52	20
Magnesium	5000	33700	39700	40100	120	129	1	75.0-125		V	1.16	20
Molybdenum	50.0	0.673	52.1	53.1	103	105	1	75.0-125			1.86	20
Potassium	5000	3040	8130	8120	102	102	1	75.0-125			0.0809	20
Selenium	50.0	0.440	55.4	54.9	110	109	1	75.0-125			0.840	20
Sodium	5000	9640	15400	15100	114	110	1	75.0-125			1.50	20
Thallium	50.0	U	51.3	52.6	103	105	1	75.0-125			2.49	20

APPENDIX A:
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 1, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MES 257-15

L1595400-21,22,23

L1595468-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595468-04 03/21/23 10:16 • (MS) R3903484-4 03/21/23 10:23 • (MSD) R3903484-5 03/21/23 10:26

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	50.0	65.8	119	118	106	104	1	75.0-125			0.878	20

Method Blank (MB)

(MB) R3903683-1 03/21/23 16:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Lithium	U		0.695	2.00

Laboratory Control Sample (LCS)

(LCS) R3903683-2 03/21/23 16:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lithium	50.0	48.3	96.5	80.0-120	

L1595400-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595400-21 03/21/23 16:26 • (MS) R3903683-4 03/21/23 16:33 • (MSD) R3903683-5 03/21/23 16:36

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 %
Lithium	50.0	6.89	55.0	55.0	96.2	96.1	1	75.0-125			0.0213	20

Method Blank (MB)

(MB) R3903750-1 03/21/23 21:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Lithium	U		0.695	2.00

Laboratory Control Sample (LCS)

(LCS) R3903750-2 03/21/23 22:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lithium	50.0	44.3	88.6	80.0-120	

L1595400-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595400-08 03/21/23 22:04 • (MS) R3903750-4 03/21/23 22:11 • (MSD) R3903750-5 03/21/23 22:14

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 %
Lithium	50.0	10.9	54.7	53.9	87.5	86.0	1	75.0-125			1.41	20

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

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
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
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.
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	LAO000356
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.

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 1, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

Company Name/Address: S&ME - Cincinnati
862 E. Crescentville Rd.
Cincinnati. OH 45246

Unit 115

Billing Information: Accounts Payable
AP@smeinc.com

Page 1

Report to: Vince Epps

Email To: vepps@smeinc.com

Project Description: Miami Fort Station

City/State Collected: North Bend, OH

Please Circle: PT MT CT ET

Phone: 513-771-8471

Client Project # 7217-17-003D

Lab Project # LITEGNTN-MIAMI

Collected by (print): Carter Harlan

Site/Facility ID # MFS Unit 115

P.O. #

Collected by (signature): Carter Harlan

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

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bi/Ca, Cl, F, SO4 125mlHDPE-NonPres	CCR Metals, Li, K, Na, Mg 250mlHDPE HNO	CCR Metals, Li 250mlHDPE HNO3	Cl, F, SO4 125mlHDP-NonPres	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Alk Bi/Ca 125mlHDPE-NonPres	Remarks	Sample # (lab only)
4A	Grab	WW		3/14/23	1505	5	X	X				X	X			-01
A-1 Pond		WW		3/15/23	1345	3					X		X	X		-02
B-1 Pond		WW		3/15/23	1325	3					X		X	X		-03
MW-01		GW		3/14/23	1410	5	X	X				X	X			-04
MW-02				3/13/23	1600		X	X				X	X			-05
MW-03A				3/15/23	1005		X	X				X	X			-06
MW-04				3/15/23	1130		X	X				X	X			-07
MW-05				3/15/23	1105		X	X				X	X			-08
MW-06				3/15/23	1010		X	X				X	X			-09
MW-07				3/14/23	1345		X	X				X	X			-10

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier __ _____

Tracking # 6357 9917 5198

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 # L1595100

1045

Acctnum: LITEGNTN

Template:

Prelogin:

PM: 134

PB:

Shipped Via:

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)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Carter Harlan	3/15/23	1500	FedEx		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NS+6°C .7+0=.7 Bottles Received: 12	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/16/23 Time: 0845	Hold: Condition: NCF / OK

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 1, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

Company Name/Address: S&ME Cincinnati, 862 E. Crescentville Rd., Cincinnati. OH 45246 — Unit 115

Invoice Information: Accounts Payable, AP@smeinc.com — Page 2

Pres Chk

Report to: Vince Epps

Email To: vepps@smeinc.com

Project Description: Miami Fort Station

City/State Collected: North Bend, OH

Please Circle: PT MT CT ET

Phone: 513-771-8471

Client Project # 7217-17-003D

Lab Project # LITEGNTN-MIAMI

Collected by (print): Carter Hurley

Site/Facility ID # MFS Unit 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

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bi/Ca, Cl, F, SO4 125mlHDPE-NonPres	CCR Metals,Li, K, Na, Mg 250mlHDPE HNC	CCR Metals, Li 250mlHDPE HNO3	Cl, F, SO4 125mlHDP-NonPres	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Remarks	Sample # (lab only)
MW-08	Grab	GW		3/13/23	1350	5	X	X				X	X		-11
MW-09				3/13/23	1445		X	X				X	X		-12
MW-10				~~3/14/23~~	~~1605~~		X	X				X	X		-13
MW-11				3/14/23	1625		X	X				X	X		-14
MW-12				3/14/23	1605		X	X				X	X		-15
MW-13				3/15/23	1215		X	X				X	X		-16
MW-14				~~3/14/23~~	~~1100~~		X	X				X	X		-17
MW-15				3/14/23	1100		X	X				X	X		-18
MW-16				3/14/23	1000		X	X				X	X		-19
MW-17				3/14/23	1300				X	X		X	X		-20

Chain of Custody Page ___ of ___

Pace — PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 # LF595400

Table #

Acctnum: LITEGNTN

Template:

Prelogin:

PM: 134

PB:

Shipped Via:

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

Remarks: MW-10: Date - 3/14/23, Time - 1530
MW-14: Date - 3/15/23, Time - 1225

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

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)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	3/15/23	1500	FedEx	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ~~0.6~~ 0.7 °C Bottles Received: 112
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/16/23 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address: SME - Cincinnati, 862 E. Crescentville Rd., Cincinnati. OH 45246

Invoice Information: Accounts Payable, AP@smeinc.com

Pres Chk

Report to: Vince Epps

Email To: vepps@smeinc.com

Project Description: Miami Fort Station

City/State Collected: North Bend, OH

Please Circle: PT MT CT ET

Phone: 513-771-8471

Client Project # 7217-17-003D

Lab Project # LITEGNTN-MIAMI

Collected by (print):

Site/Facility ID # MFS Unit 115

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

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

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Alk Bi/Ca, Cl, F, SO4 125mlHDPE-NonPres	CCR Metals, Li, K, Na, Mg 250mlHDPE HN0	CCR Metals, Li 250mlHDPE HNO3	Cl, F, SO4 125mlHDP-NonPres	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Remarks	Sample # (lab only)
MW-19	Grab	GW	1	3/14/23	1200			X	X		X	X		-21
DUP-1 - 03142023				3/14/23	—	X	X					X		-22
DUP-2 - 03142023				3/14/23	—	X	X					X		-23
Matrix Spike				3/15/22	1120	X	X				X	X		

Chain of Custody Page ___ of ___

Pace PEOPLE ADVANCING SCIENCE
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 # L1595400

Table #

Acctnum: LITEGNTN

Template:

Prelogin:

PM: 134

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: Y NP 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)	Date:	Time:	Received by: (Signature)
Cathy Helm	3/15/23	1500	FedEx
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 4.5+6 °C Bottles Received: 12
.7+0=.7

If preservation required by Login: Date/Time

Date: 3/16/23 Time: 0845

Hold:

Condition: NCF / OK

UF95400

Tracking Numbers	NSAS Temperature
~~6357~~ 6357 9917 5198	1.1 +0 = 1.1
6357 9917 5176	3.7 +0 = 3.7
6357 9917 6580	.4 +0 = .4
6357 9917 6829	.7 +0 = .7

3/16-NCF-L1595400/L1595409 LITENGNTN

R5

Time estimate: oh **Time spent:** oh

Members

Hailey Melson (responsible) MB Mark Beasley

Due on *20 March 2023 8:00 AM* for target *Done*

- [x] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:_____
- [ ] If no COC: Date/Time:_____
- [ ] If no COC: Temp./Cont.Rec./pH:_____
- [ ] If no COC: Carrier:_____
- [ ] If no COC: Tracking #:_____
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____3/16/23_____
- [ ] PM initials:____MB_____
- [ ] Client Contact:__Carter Harlan_____

Comments

Hailey Melson — *16 March 2023 1:08 PM*

Which ID need to have the Matrix Spike?

Mark Beasley — *16 March 2023 1:37 PM*

MW-5 is the MS/MSD

Hailey Melson — *16 March 2023 1:57 PM*

Done

Pace Analytical®

ANALYTICAL REPORT

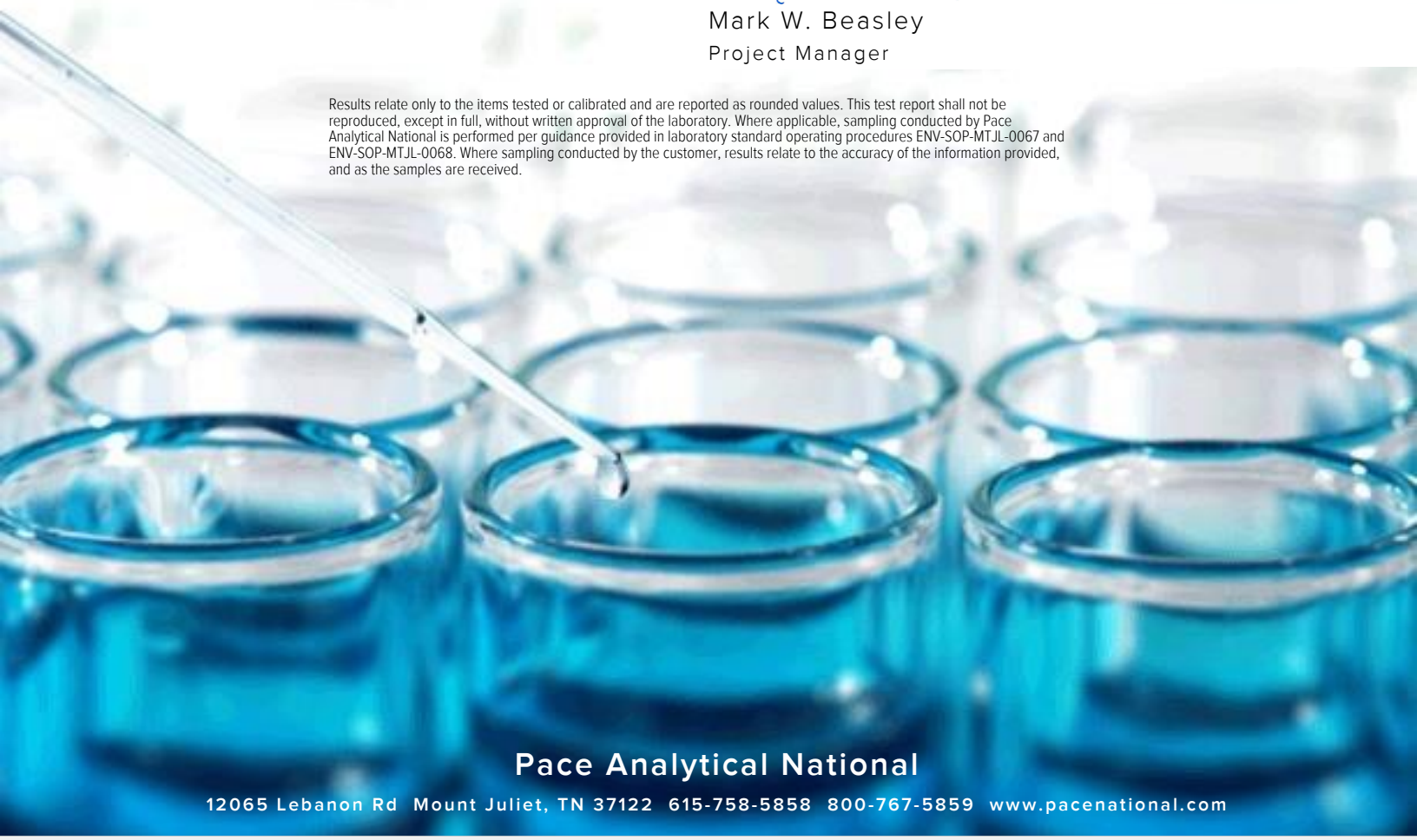
April 19, 2023

S&ME - Nashville, TN

Sample Delivery Group:	L1595409
Samples Received:	03/16/2023
Project Number:	7217-17-003D
Description:	Miami Fort Station - North Bend, OH
Site:	MFS UNIT 115
Report To:	Vince Epps 862 East Crescentville Road Cincinnati, OH 45246

Entire Report Reviewed By:

Mark W. Beasley
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

4A L1595409-01 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 15:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039249	1	04/10/23 17:04	04/12/23 15:25	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-01 L1595409-02 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 14:40 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-02 L1595409-03 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/13/23 16:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-03A L1595409-04 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/15/23 10:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-04 L1595409-05 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/15/23 11:30 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-05 L1595409-06 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/15/23 11:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-06 L1595409-07 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/15/23 10:10 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-07 L1595409-08 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 13:45 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-08 L1595409-09 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/13/23 13:50 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-09 L1595409-10 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/13/23 14:45 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-10 L1595409-11 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 15:30 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-11 L1595409-12 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 16:25 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-12 L1595409-13 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 16:05 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-13 L1595409-14 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/15/23 12:15 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-14 L1595409-15 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/15/23 12:25 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-15 L1595409-16 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 11:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-16 L1595409-17 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 10:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

MW-17 L1595409-18 Non-Potable Water

Collected by: Carter Harlan | Collected date/time: 03/14/23 13:00 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-19 L1595409-19 Non-Potable Water

Collected by	Collected date/time	Received date/time
Carter Harlan	03/14/23 12:00	03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2039312	1	04/11/23 17:13	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2030889	1	04/11/23 10:52	04/14/23 17:48	SWM	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2030889	1	04/11/23 10:52	04/12/23 17:45	RGT	Mt. Juliet, TN

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

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.438	J	0.341	0.605	04/12/2023 15:25	WG2039249
(T) Barium	*94.2*			*30.0-143*	*04/12/2023 15:25*	WG2039249
(T) Yttrium	*84.3*			*30.0-136*	*04/12/2023 15:25*	WG2039249

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.987		0.555	0.795	04/12/2023 17:45	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.549		0.438	0.515	04/12/2023 17:45	WG2030889
(T) Barium-133	*55.9*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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 pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.138	U	0.284	0.524	04/14/2023 17:48	WG2039312
(T) Barium	*83.2*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*105*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.0534	U	0.397	0.719	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0534	U	0.277	0.493	04/12/2023 17:45	WG2030889
(T) Barium-133	*62.7*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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

MW-02

SAMPLE RESULTS - 03

Collected date/time: 03/13/23 16:00 L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.814		0.338	0.594	04/14/2023 17:48	WG2039312
(T) Barium	*86.2*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*97.9*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.67		0.585	0.747	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.858		0.478	0.453	04/12/2023 17:45	WG2030889
(T) Barium-133	*70.3*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.137	U	0.282	0.516	04/14/2023 17:48	WG2039312
(T) Barium	*96.7*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*107*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.395	J	0.452	0.680	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.395	J	0.353	0.443	04/12/2023 17:45	WG2030889
(T) Barium-133	*71.7*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-04

SAMPLE RESULTS - 05

Collected date/time: 03/15/23 11:30

L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.742		0.390	0.691	04/14/2023 17:48	WG2039312
(T) Barium	*80.4*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*93.0*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.914		0.441	0.747	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.172	J	0.206	0.284	04/12/2023 17:45	WG2030889
(T) Barium-133	*80.4*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.465	J	0.303	0.541	04/14/2023 17:48	WG2039312
(T) Barium	*86.1*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*91.2*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.494	J	0.328	0.596	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0288	U	0.126	0.250	04/12/2023 17:45	WG2030889
(T) Barium-133	*87.9*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.403	J	0.274	0.489	04/14/2023 17:48	WG2039312
(T) Barium	*90.2*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*93.1*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.834		0.405	0.583	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.431		0.298	0.317	04/12/2023 17:45	WG2030889
(T) Barium-133	*89.7*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-07

Collected date/time: 03/14/23 13:45

SAMPLE RESULTS - 08

L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.536	U	0.237	0.452	04/14/2023 17:48	WG2039312
(T) Barium	*90.8*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*105*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.393	J	0.362	0.531	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.393		0.274	0.279	04/12/2023 17:45	WG2030889
(T) Barium-133	*76.4*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-08

SAMPLE RESULTS - 09

Collected date/time: 03/13/23 13:50

L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.347	J	0.208	0.371	04/14/2023 17:48	WG2039312
(T) Barium	*89.9*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*104*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.850		0.355	0.440	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.504		0.288	0.237	04/12/2023 17:45	WG2030889
(T) Barium-133	*90.7*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-09

SAMPLE RESULTS - 10

Collected date/time: 03/13/23 14:45 L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.472	U	0.401	0.745	04/14/2023 17:48	WG2039312
(T) Barium	*90.4*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*103*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.000	U	0.415	0.786	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0200	U	0.105	0.252	04/12/2023 17:45	WG2030889
(T) Barium-133	*86.3*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-10

Collected date/time: 03/14/23 15:30

L1595409

SAMPLE RESULTS - 11

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0143	U	0.286	0.526	04/14/2023 17:48	WG2039312
(T) Barium	*76.9*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*104*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.519	J	0.432	0.614	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.505		0.324	0.316	04/12/2023 17:45	WG2030889
(T) Barium-133	*72.6*			*30.0-143*	*04/12/2023 17:45*	WG2030889

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.206	U	0.271	0.489	04/14/2023 17:48	WG2039312
(T) Barium	*88.6*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*96.6*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.371	J	0.376	0.627	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.165	J	0.260	0.393	04/12/2023 17:45	WG2030889
(T) Barium-133	*71.4*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-12

Collected date/time: 03/14/23 16:05

L1595409

SAMPLE RESULTS - 13

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.185	U	0.314	0.580	04/14/2023 17:48	WG2039312
(T) Barium	*84.2*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*98.9*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.300	J	0.435	0.699	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.300	J	0.301	0.390	04/12/2023 17:45	WG2030889
(T) Barium-133	*82.6*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.461	J	0.265	0.472	04/14/2023 17:48	WG2039312
(T) Barium	*92.0*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*99.8*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.611		0.344	0.576	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.150	J	0.219	0.330	04/12/2023 17:45	WG2030889
(T) Barium-133	*75.3*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-14 SAMPLE RESULTS - 15

Sample Delivery Group: L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.161	U	0.269	0.500	04/14/2023 17:48	WG2039312
(T) Barium	*85.7*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*107*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.139	U	0.363	0.633	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.139	U	0.243	0.388	04/12/2023 17:45	WG2030889
(T) Barium-133	*70.4*			*30.0-143*	*04/12/2023 17:45*	WG2030889

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.396	J	0.224	0.399	04/14/2023 17:48	WG2039312
(T) Barium	*97.2*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*102*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.537	J	0.332	0.552	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.142	J	0.245	0.382	04/12/2023 17:45	WG2030889
(T) Barium-133	*71.4*			*30.0-143*	*04/12/2023 17:45*	WG2030889

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.339	U	0.347	0.648	04/14/2023 17:48	WG2039312
(T) Barium	*79.3*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*98.0*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.275	U	0.441	0.735	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.275	J	0.272	0.347	04/12/2023 17:45	WG2030889
(T) Barium-133	*81.2*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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 pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.721		0.272	0.476	04/14/2023 17:48	WG2039312
(T) Barium	*89.7*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*108*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.980		0.428	0.665	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.259	J	0.330	0.464	04/12/2023 17:45	WG2030889
(T) Barium-133	*70.1*			*30.0-143*	*04/12/2023 17:45*	WG2030889

MW-19

SAMPLE RESULTS - 19

Collected date/time: 03/14/23 12:00

L1595409

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.319	U	0.217	0.414	04/14/2023 17:48	WG2039312
(T) Barium	*95.0*			*30.0-143*	*04/14/2023 17:48*	WG2039312
(T) Yttrium	*105*			*30.0-136*	*04/14/2023 17:48*	WG2039312

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.113	U	0.258	0.457	04/14/2023 17:48	WG2030889

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.113	J	0.140	0.193	04/12/2023 17:45	WG2030889
(T) Barium-133	*85.4*			*30.0-143*	*04/12/2023 17:45*	WG2030889

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

Method Blank (MB)

(MB) R3912719-1 04/12/23 15:25

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / - pCi/l	MB MDA pCi/l
Radium-228	0.292		0.150	0.264
(T) Barium	*109*		*109*	
(T) Yttrium	*93.9*		*93.9*	

L1595141-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1595141-04 04/12/23 15:25 • (DUP) R3912719-5 04/12/23 15:25

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	0.133	0.319	0.571	-0.401	0.359	0.571	1	200	1.11	U	20	3
(T) Barium	*111*			*120*	*120*							
(T) Yttrium	*95.6*			*112*	*112*							

Laboratory Control Sample (LCS)

(LCS) R3912719-2 04/12/23 15:25

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.42	108	80.0-120	
(T) Barium			*105*		
(T) Yttrium			*97.1*		

L1595141-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595141-02 04/12/23 15:25 • (MS) R3912719-3 04/12/23 15:25 • (MSD) R3912719-4 04/12/23 15:25

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	-0.265	16.7	16.4	100	98.3	1	70.0-130			1.81		20
(T) Barium		*109*			*114*	*111*							
(T) Yttrium		*106*			*100*	*97.5*							

Method Blank (MB)

(MB) R3914009-1 04/14/23 17:48

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / - pCi/l	MB MDA pCi/l
Radium-228	0.0672	U	0.159	0.292
(T) Barium	*95.3*		*95.3*	
(T) Yttrium	*86.6*		*86.6*	

L1595409-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1595409-10 04/14/23 17:48 • (DUP) R3914009-5 04/14/23 17:48

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	-0.472	0.401	0.745	0.395	0.428	0.745	1	200	1.48	J	20	3
(T) Barium	*90.4*			*88.6*	*88.6*							
(T) Yttrium	*103*			*91.7*	*91.7*							

Laboratory Control Sample (LCS)

(LCS) R3914009-2 04/14/23 17:48

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.99	99.7	80.0-120	
(T) Barium			*94.8*		
(T) Yttrium			*92.3*		

L1595409-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595409-06 04/14/23 17:48 • (MS) R3914009-3 04/14/23 17:48 • (MSD) R3914009-4 04/14/23 17:48

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	0.465	10.5	12.4	101	119	1	70.0-130			16.3		20
(T) Barium		*86.1*			*90.9*	*72.6*							
(T) Yttrium		*91.2*			*92.1*	*91.8*							

Method Blank (MB)

(MB) R3913133-1 04/12/23 17:45

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / -	MB MDA pCi/l
Radium-226	-0.00841	U	0.0345	0.0823
(T) Barium-133	*80.2*		*80.2*	

L1595409-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1595409-17 04/12/23 17:45 • (DUP) R3913133-5 04/12/23 17:45

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	0.275	0.272	0.347	0.00791	0.266	0.347	1	189	0.701	U	20	3
(T) Barium-133	*81.2*			*74.7*	*74.7*							

Laboratory Control Sample (LCS)

(LCS) R3913133-2 04/12/23 17:45

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.01	5.28	105	80.0-120	
(T) Barium-133			*87.6*		

L1595409-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1595409-06 04/12/23 17:45 • (MS) R3913133-3 04/12/23 17:45 • (MSD) R3913133-4 04/12/23 17:45

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	0.0288	21.0	20.6	105	103	1	75.0-125			1.92		20
(T) Barium-133		*87.9*			*81.4*	*82.4*							

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.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

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	LAO000356
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.

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 1, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

Company Name/Address: SME Cincinnati, 862 E. Crescentville Rd., Cincinnati. OH 45246 — Unit 115

Billing Information: Accounts Payable, AP@smeinc.com — Page 1

Pres Chk

Report to: Vince Epps

Email To: vepps@smeinc.com

Project Description: Miami Fort Station

City/State Collected: North Bend, OH

Please Circle: PT MT CT ET

Phone: 513-771-8471

Client Project # 7217-17-003D

Lab Project # LITEGNTN-MIAMI

Collected by (print): Carter Harlan

Site/Facility ID # MFS Unit 115

P.O. #

Collected by (signature): Carter Harlan

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

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bi/Ca, Cl, F, SO4 125mlHDPE-NonPres	CCR Metals, Li, K, Na, Mg 250mlHDPE HNO	CCR Metals, Li 250mlHDPE HNO3	Cl, F, SO4 125mlHDP-NonPres	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Alk Bi/Ca 125mlHDPE-NonPres	Remarks	Sample # (lab only)
4A	Grab	WW		3/14/23	1505	5	X	X				X	X			-01
A-1 Pond		WW		3/15/23	1345	3					X		X	X		
B-1 Pond		WW		3/15/23	1325	3					X		X	X		-
MW-01		GW		3/14/23	1410	5	X	X				X	X			-02
MW-02				3/13/23	1600		X	X				X	X			-03
MW-03A				3/15/23	1005		X	X				X	X			-04
MW-04				3/15/23	1130		X	X				X	X			-05
MW-05				3/15/23	1105		X	X				X	X			-06
MW-06				3/15/23	1010		X	X				X	X			-07
MW-07				3/14/23	1345		X	X				X	X			-08

Chain of Custody Page ___ of ___

Pace — PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 # L595409 1045

Acctnum: LITEGNTN

Template:

Prelogin:

PM: 134

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier __ _____

Tracking # 6357 9917 5198

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)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
Carter Harlan	3/15/23	1500	FedEx		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NS 4.6°C Bottles Received: 7+6=.7 12	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/16/23 Time: 0845	Hold: Condition: NCF / OK

S&ME - Cincinnati
862 E. Crescentville Rd.
Cincinnati. OH 45246
Unit 115

Accounts Payable
AP@smeinc.com
Page 2

Report to: Vince Epps
Email To: vepps@smeinc.com

Project Description: Miami Fort Station
City/State Collected: North Bend, OH
Please Circle: PT MT CT ET

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

Collected by (print): Carter Harlan
Site/Facility ID # MFS Unit 115
P.O. #

Collected by (signature): Carter Harlan
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

Chain of Custody Page ___ of ___

Pace® PEOPLE ADVANCING SCIENCE
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
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 # L1595409
Table #
Acctnum: LITEGNTN
Template:
Prelogin:
PM: 134
PB:
Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bi/Ca, Cl, F, SO4 125mlHDPE-NonPres	CCR Metals,Li, K, Na, Mg 250mlHDPE HNC	CCR Metals, Li 250mlHDPE HNO3 (<2)	Cl, F, SO4 125mlHDP-NonPres	K, Na, Mg 250mlHDPE-HNO3 (<2)	RA-226/228COMB 1L-HPE-HNO3 (<2)	TDS 250mlHDPE-NonPres			Remarks	Sample # (lab only)
MW-08	Grab	GW		3/13/23	1350	5	X	X				X	X				-09
MW-09	↓	↓		3/13/23	1415	↓	X	X				X	X				-10
MW-10				~~3/14/23~~	~~1605~~		X	X				X	X				-11
MW-11				3/14/23	1625		X	X				X	X				-12
MW-12				3/14/23	1605		X	X				X	X				-13
MW-13				3/15/23	1215		X	X				X	X				-14
MW-14				~~3/14/23~~	~~1100~~		X	X				X	X				-15
MW-15				3/14/23	1100		X	X				X	X				-16
MW-16				3/14/23	1000		X	X				X	X				-17
MW-17	↓	↓		3/14/23	1300	↓			X	X		X	X				-18

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

Remarks: MW-10: Date - 3/14/23, Time - 1530
MW-14: Date - 3/15/23, Time - 1225

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier __ ______

Tracking #

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)	Date:	Time:	Received by: (Signature)		
Carter Harlan	3/15/23	1500	FedEx	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C .7+0=.7 Bottles Received: 112	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 3/16/23 Time: 0845	Hold: Condition: NCF / OK

Company Name/Address:
SME - Cincinnati
862 E. Crescentville Rd.
Cincinnati. OH 45246

Un. + 115

Billing Information:
Accounts Payable
AP@smeinc.com

Page 3

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace®
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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

Report to: Vince Epps

Email To: vepps@smeinc.com

Project Description: Miami Fort Station

City/State Collected: North Bend, OH

Please Circle: PT MT CT ET

Phone: 513-771-8471

Client Project # 7217-17-003D

Lab Project # LITEGNTN-MIAMI

Collected by (print):

Site/Facility ID # MFS Unit 115

P.O. #

Collected by (signature):

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 ___

SDG # L1595409

Table #

Acctnum: LITEGNTN
Template:
Prelogin:
PM: 134
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bi/Ca, Cl, F, SO4 125mlHDPE-NonPres	CCR Metals, Li, K, Na, Mg 250mlHDPE HNO	CCR Metals, Li 250mlHDPE HNO3 (22)	Cl, F, SO4 125mlHDP-NonPres	K, Na, Mg 250mlHDPE-HNO3 (22)	RA-226/228COMB 1L-HPE-HNO3 (42)	TDS 250mlHDPE-NonPres				Remarks	Sample # (lab only)
MW-19	Grab	GW		3/14/23	1200				X	X		X	X					-19
DUP-1 - 031423	↓	↓		3/14/23	—		X	X					X					
DUP-2 - 031423				3/14/23	—		X	X					X					
Matrix Spike	↓	↓		3/15/22	1120		X	X				X	X					-06

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

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier __ ______

Tracking #

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)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
[signature]	3/15/23	1500	FedEx		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NS46 °C .7+0=.7	Bottles Received: 112
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 3/16/23	Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

LF595409

Tracking Numbers	Temperature
~~6357~~ 6357 9917 5198	1.1 to = 1.1
6357 9917 5176	3.7 to = 3.7
6357 9917 6588	.4 to = .4
6357 9917 6529	.7 to = .7

3/16-NCF-L1595400/L1595409 LITENGNTN

R5

Time estimate: oh **Time spent:** oh

Members

Hailey Melson (responsible) MB Mark Beasley

Due on *20 March 2023 8:00 AM* for target *Done*

- [x] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:_____
- [ ] If no COC: Date/Time:_____
- [ ] If no COC: Temp./Cont.Rec./pH:_____
- [ ] If no COC: Carrier:_____
- [ ] If no COC: Tracking #:_____
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____3/16/23_____
- [ ] PM initials:____MB_____
- [ ] Client Contact:__Carter Harlan_____

Comments

Hailey Melson *16 March 2023 1:08 PM*

Which ID need to have the Matrix Spike?

Mark Beasley *16 March 2023 1:37 PM*

MW-5 is the MS/MSD

Hailey Melson *16 March 2023 1:57 PM*

Done

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-01	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	14:40
Weather:	Overcast	Air Temp:	34F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				46.95	ft-TOC
Total Well Depth:				62.76	ft-TOC
Height of Water Column:				15.81	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.6	Gal
3 * Well Volume	7.74	Gal
5 * Well Volume	12.90	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	14:10	End Time:	14:35
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		2.0		Gallons	Duplicate sample collected (DUP-2-031423)		
Final Volume Purge Rate:		300		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	14:10	0.0	---	---	---	---	---	---	---	---	Start Purging
	14:15	0.4	300	46.94	12.0	7.6	0.723	4.0	88	1.05	Clear, no odor
	14:20	0.8	300	46.95	21.5	7.1	0.849	2.3	87	0.66	Clear, no odor
	14:25	1.2	300	46.95	27.6	7.0	0.814	0.6	85	0.34	Clear, no odor
	14:30	1.6	300	46.95	29.2	7.0	0.809	0.4	83	0.20	Clear, no odor
	14:35	2.0	300	46.95	26.5	7.0	0.804	0.3	83	0.23	Clear, no odor
Final:	14:35	2.0	300	46.95	26.5	7.0	0.804	0.3	83	0.2	End of Purging

Sample Method: Bladder Pump Sample Start Time: 14:40 Sample End Time: 15:00

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes: Dup 2 collected

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 13, 2023
Source Well:	MW-02	Purge Time:	40 Minutes
Locked?:	Yes	Sample Date:	March 13, 2023
Sampled By:	Carter Harlan	Sample Time:	16:00
Weather:		Air Temp:	

Water Level & Well Data

			Measuring Point:	Top of Casing	
			Depth to Water:	17.30	ft-TOC
			Total Well Depth:	39.96	ft-TOC
			Height of Water Column:	22.66	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.7	Gal
3 * Well Volume	11.09	Gal
5 * Well Volume	18.49	Gal

Well Purging Information

		Purge Method:	Bladder Pump	Start Time:	15:15	End Time:	15:55	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
	Pump Intake Depth from Top of Casing:			ft-TOC				
	Water Column Above Pump Intake:			feet		Flow Through Cell Vol:	200	mL
	DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC		**Comments:**		
	Final Volume Purged:		2.3	Gallons				
	Final Volume Purge Rate:		200	mL/min				
	Well Purged Dry?:		No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:15	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:20	0.5	350	18.39	10.1	6.7	1.283	0.7	144	46.3	Clear, no odor
	15:25	0.7	200	18.63	10.7	6.7	1.266	0.5	154	49.3	Clear, no odor
	15:30	1.0	200	18.81	11.2	6.7	1.270	0.5	168	33.4	Clear, no odor
	15:35	1.3	200	18.96	11.5	6.7	1.266	0.5	175	23.2	Clear, no odor
	15:40	1.5	200	19.09	11.7	6.7	1.265	0.4	182	18.7	Clear, no odor
	15:45	1.8	200	19.12	11.7	6.7	1.264	0.4	188	16.0	Clear, no odor
	15:50	2.0	200	19.17	11.7	6.7	1.261	0.4	187	16.2	Clear, no odor
	15:55	2.3	200	19.21	11.9	6.7	1.257	0.3	188	17.2	Clear, no odor
Final:	15:55	2.3	200	19.21	11.9	6.7	1.257	0.3	188	17.2	End of Purging

Sample Method: Bladder Pump Sample Start Time: 16:00 Sample End Time: 16:15

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	MW-03A	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	March 15, 2023
Sampled By:	Jamie Bailey	Sample Time:	10:05
Weather:	Sunny	Air Temp:	30F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				17.57	ft-TOC
Total Well Depth:				52.04	ft-TOC
Height of Water Column:				34.47	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	5.6	Gal
3 * Well Volume	16.88	Gal
5 * Well Volume	28.13	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	9:40	End Time:	10:05
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		1.3		Gallons			
Final Volume Purge Rate:		200		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:40	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:45	0.3	200	17.57	13.9	9.3	0.456	1.1	-189	3.18	Clear, no odor
	09:50	0.5	200	17.57	14.0	8.6	0.453	0.8	-195	1.36	Clear, no odor
	09:55	0.8	200	17.57	14.1	8.5	0.450	0.8	-195	0.95	Clear, no odor
	10:00	1.1	200	17.57	14.1	8.5	0.449	0.8	-194	1.68	Clear, no odor
	10:05	1.3	200	17.57	14.1	8.4	0.445	0.7	-196	1.05	Clear, no odor
Final:	10:05	1.3	200	17.57	14.1	8.4	0.445	0.7	-196	1.1	End of Purging

Sample Method: Bladder Pump Sample Start Time: 10:05 Sample End Time: 10:25

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	MW-04	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	March 15, 2023
Sampled By:	Jamie Bailey	Sample Time:	11:30
Weather:	Sunny	Air Temp:	35F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				21.89	ft-TOC
Total Well Depth:				45.00	ft-TOC
Height of Water Column:				23.11	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.8	Gal
3 * Well Volume	11.31	Gal
5 * Well Volume	18.86	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	10:55	End Time:	11:30
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		1.8		Gallons			
Final Volume Purge Rate:		200		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	10:55	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:00	0.3	200	21.89	16.5	7.3	1.950	1.5	4	145	Cloudy, no odor
	11:05	0.5	200	21.89	16.4	7.1	2.210	1.1	18	113	Cloudy, no odor
	11:10	0.8	200	21.89	16.4	6.9	2.160	1.1	17	80.5	Cloudy, no odor
	11:15	1.1	200	21.89	16.4	7.0	2.090	0.6	12	62.6	Cloudy, no odor
	11:20	1.3	200	21.89	16.3	7.0	2.010	0.5	9	62.3	Cloudy, no odor
	11:25	1.6	200	21.89	16.2	7.0	1.950	0.5	6	63.3	Cloudy, no odor
	11:30	1.8	200	21.89	16.3	6.9	1.870	0.5	2	68.3	Cloudy, no odor
Final:	11:30	1.8	200	21.89	16.3	6.9	1.870	0.5	2	68.3	End of Purging

Sample Method: Bladder Pump Sample Start Time: 11:30 Sample End Time: 11:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-04A	Purge Time:	0 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	15:05
Weather:	Sunny	Air Temp:	36F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				NA	ft-TOC
Total Well Depth:				45.00	ft-TOC
Height of Water Column:				#VALUE!	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	#VALUE!	Gal
3 * Well Volume	#VALUE!	Gal
5 * Well Volume	#VALUE!	Gal

Well Purging Information

Purge Method:				Start Time:	15:05	End Time:	15:05	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:				Gallons	Production Well - ran for 2 hours prior to sampling			
Final Volume Purge Rate:				mL/min				
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:05			na	20.6	7.2	0.924	5.5	158	0.45	
Final:	15:05			#N/A	20.6	7.2	0.924	5.5	158	0.5	End of Purging

Sample Method: Bailer Sample Start Time: 15:05 Sample End Time: 15:15

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes: Plant production well, grab sample

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	MW-05	Purge Time:	30 Minutes
Locked?:	No	Sample Date:	March 15, 2023
Sampled By:	Carter Harlan	Sample Time:	11:05
Weather:	Sunny	Air Temp:	38F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				53.88	ft-TOC
Total Well Depth:				75.41	ft-TOC
Height of Water Column:				21.53	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.5	Gal
3 * Well Volume	10.54	Gal
5 * Well Volume	17.57	Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	10:30	End Time:	11:00	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:			2.5	Gallons	Matrix Spike sample collected from MW-05 at			
Final Volume Purge Rate:			350	mL/min	11:20.			
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	10:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	10:35	0.4	300	53.87	14.5	7.0	2.742	4.1	88	2.47	Clear, no odor
	10:40	0.8	300	53.88	17.3	6.9	2.903	2.3	88	18.3	Clear, no odor
	10:45	1.2	300	53.88	18.7	6.8	3.242	1.1	87	15.1	Clear, no odor
	10:50	1.6	300	53.88	19.3	6.8	3.244	0.3	86	8.58	Clear, no odor
	10:55	2.0	350	53.88	19.9	6.8	3.150	0.2	86	4.14	Clear, no odor
	11:00	2.5	350	53.89	19.7	6.8	3.190	0.2	86	2.58	Clear, no odor
Final:	11:00	2.5	350	53.89	19.7	6.8	3.190	0.2	86	2.6	End of Purging

Sample Method: Bladder Pump Sample Start Time: 11:05 Sample End Time: 11:20

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes: Matrix Spike sample collected from MW-05 at 11:20.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	MW-06	Purge Time:	30 Minutes
Locked?:	No	Sample Date:	March 15, 2023
Sampled By:	Carter Harlan	Sample Time:	10:10
Weather:	Sunny	Air Temp:	30F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				51.51	ft-TOC
Total Well Depth:				74.99	ft-TOC
Height of Water Column:				23.48	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.8	Gal
3 * Well Volume	11.49	Gal
5 * Well Volume	19.16	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	9:35	End Time:	10:05
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200 mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		2.4		Gallons			
Final Volume Purge Rate:		300		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:40	0.4	300	51.51	12.2	7.9	2.273	6.9	81	3.48	Clear, no odor
	09:45	0.8	300	51.48	15.8	7.2	2.533	3.3	81	7.50	Clear, no odor
	09:50	1.2	300	51.48	16.0	7.2	2.638	1.4	84	4.19	Clear, no odor
	09:55	1.6	300	51.48	16.1	7.2	2.702	0.3	85	1.24	Clear, no odor
	10:00	2.0	300	51.48	16.2	7.2	2.737	0.2	86	0.80	Clear, no odor
	10:05	2.4	300	51.48	16.1	7.2	2.747	0.2	86	0.71	Clear, no odor
Final:	10:05	2.4	300	51.48	16.1	7.2	2.747	0.2	86	0.7	End of Purging

Sample Method: Bladder Pump Sample Start Time: 10:10 Sample End Time: 10:25

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-07	Purge Time:	20 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	13:45
Weather:	Overcast	Air Temp:	34F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				53.65	ft-TOC
Total Well Depth:				64.24	ft-TOC
Height of Water Column:				10.59	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.7	Gal
3 * Well Volume	5.18	Gal
5 * Well Volume	8.64	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	13:20	End Time:	13:40
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		1.3		Gallons			
Final Volume Purge Rate:		250		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:25	0.3	250	53.66	12.5	6.9	0.634	3.7	90	6.32	Clear, no odor
	13:30	0.7	250	53.67	12.9	6.9	0.678	3.5	91	3.61	Clear, no odor
	13:35	1.0	250	53.66	13.0	6.9	0.684	3.5	91	2.54	Clear, no odor
	13:40	1.3	250	53.66	13.4	6.9	0.690	3.5	91	1.21	Clear, no odor
Final:	13:40	1.3	250	53.66	13.4	6.9	0.690	3.5	91	1.2	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:45 Sample End Time: 14:00

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 13, 2023
Source Well:	MW-08	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	March 13, 2023
Sampled By:	Carter Harlan	Sample Time:	13:50
Weather:		Air Temp:	38F

Water Level & Well Data

			Measuring Point:	Top of Casing	
			Depth to Water:	37.10	ft-TOC
			Total Well Depth:	47.16	ft-TOC
			Height of Water Column:	10.06	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.6	Gal
3 * Well Volume	4.93	Gal
5 * Well Volume	8.21	Gal

Well Purging Information

	Purge Method:	Bladder Pump		Start Time:	13:20	End Time:	13:45
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
	Pump Intake Depth from Top of Casing:			ft-TOC			
	Water Column Above Pump Intake:			feet	Flow Through Cell Vol:	200	mL
	DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**		
	Final Volume Purged:	2.0		Gallons			
	Final Volume Purge Rate:	300		mL/min			
	Well Purged Dry?:	No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:25	0.4	300	37.10	23.4	7.1	1.124	3.1	79	1.32	Clear, no odor
	13:30	0.8	300	37.10	23.7	7.1	1.128	2.9	80	0.85	Clear, no odor
	13:35	1.2	300	37.10	24.2	7.1	1.124	2.7	80	0.55	Clear, no odor
	13:40	1.6	300	37.10	24.3	7.1	1.127	2.7	80	0.58	Clear, no odor
	13:45	2.0	300	37.10	24.8	7.1	1.128	2.7	81	0.61	Clear, no odor
Final:	13:45	2.0	300	37.10	24.8	7.1	1.128	2.7	81	0.6	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:50 Sample End Time: 14:05

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 13, 2023
Source Well:	MW-09	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	March 13, 2023
Sampled By:	Carter Harlan	Sample Time:	14:45
Weather:	Overcast	Air Temp:	38F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				17.94	ft-TOC
Total Well Depth:				29.55	ft-TOC
Height of Water Column:				11.61	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.9	Gal
3 * Well Volume	5.68	Gal
5 * Well Volume	9.47	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	14:15	End Time:	14:40	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:		1.9		Gallons				
Final Volume Purge Rate:		300		mL/min				
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	14:15	0.0	---	---	---	---	---	---	---	---	Start Purging
	14:20	0.3	250	17.91	20.2	7.0	1.298	2.2	80	2.50	Clear, no odor
	14:25	0.7	300	17.91	20.7	7.0	1.297	1.4	81	1.44	Clear, no odor
	14:30	1.1	300	17.91	22.1	7.0	1.302	0.5	81	1.02	Clear, no odor
	14:35	1.5	300	17.91	21.8	7.0	1.300	0.4	82	0.65	Clear, no odor
	14:40	1.9	300	17.92	21.7	7.0	1.302	0.3	82	0.69	Clear, no odor
Final:	14:40	1.9	300	17.92	21.7	7.0	1.302	0.3	82	0.7	End of Purging

Sample Method: Bladder Pump Sample Start Time: 14:45 Sample End Time: 15:00

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-10	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Jamie Bailey	Sample Time:	15:30
Weather:	Sunny	Air Temp:	35F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				18.46	ft-TOC
Total Well Depth:				29.78	ft-TOC
Height of Water Column:				11.32	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.8	Gal
3 * Well Volume	5.54	Gal
5 * Well Volume	9.24	Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	15:05	End Time:	15:30	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:			1.3	Gallons				
Final Volume Purge Rate:			200	mL/min				
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:10	0.3	200	18.46	13.6	7.6	0.564	0.0	-53	10.8	Clear, no odor
	15:15	0.5	200	18.46	13.6	7.7	0.583	-0.1	-107	3.22	Clear, no odor
	15:20	0.8	200	18.46	14.1	7.7	0.585	-0.2	-121	1.77	Clear, no odor
	15:25	1.1	200	18.46	13.8	7.7	0.587	-0.2	-129	1.69	Clear, no odor
	15:30	1.3	200	18.46	13.8	7.7	0.586	-0.2	-133	1.47	Clear, no odor
Final:	15:30	1.3	200	18.46	13.8	7.7	0.586	-0.2	-133	1.5	End of Purging

Sample Method: Bladder Pump Sample Start Time: 15:30 Sample End Time: 15:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-11	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Jamie Bailey	Sample Time:	16:25
Weather:	Sunny	Air Temp:	35F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				19.45	ft-TOC
Total Well Depth:				29.78	ft-TOC
Height of Water Column:				10.33	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.7	Gal
3 * Well Volume	5.06	Gal
5 * Well Volume	8.43	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	16:00	End Time:	16:25
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		1.3		Gallons			
Final Volume Purge Rate:		200		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	16:00	0.0	---	---	---	---	---	---	---	---	Start Purging
	16:05	0.3	200	19.45	14.3	7.7	0.469	0.2	-79	47.0	Clear, no odor
	16:10	0.5	200	19.45	13.9	7.7	0.464	0.1	-88	9.59	Clear, no odor
	16:15	0.8	200	19.45	14.0	7.7	0.465	0.0	-95	2.25	Clear, no odor
	16:20	1.1	200	19.45	13.8	7.7	0.461	0.0	-99	1.68	Clear, no odor
	16:25	1.3	200	19.45	13.8	7.7	0.462	0.0	-100	1.25	Clear, no odor
Final:	16:25	1.3	200	19.45	13.8	7.7	0.462	0.0	-100	1.3	End of Purging

Sample Method: Bladder Pump Sample Start Time: 16:25 Sample End Time: 16:45

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-12	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	16:05
Weather:	Sunny	Air Temp:	37F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				52.42	ft-TOC
Total Well Depth:				65.17	ft-TOC
Height of Water Column:				12.75	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.1	Gal
3 * Well Volume	6.24	Gal
5 * Well Volume	10.40	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	15:30	End Time:	16:00
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		1.6		Gallons			
Final Volume Purge Rate:		200		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:35	0.3	200	52.40	13.1	6.2	1.242	3.2	82	1.53	Clear, no odor
	15:40	0.5	200	52.42	14.6	5.8	1.233	3.0	83	0.84	Clear, no odor
	15:45	0.8	200	52.42	15.1	5.7	1.230	0.7	83	1.51	Clear, no odor
	15:50	1.1	200	52.42	15.3	5.7	1.231	0.5	84	2.17	Clear, no odor
	15:55	1.3	200	52.42	15.8	5.7	1.228	0.4	84	1.73	Clear, no odor
	16:00	1.6	200	52.42	15.9	5.7	1.220	0.3	84	0.78	Clear, no odor
Final:	16:00	1.6	200	52.42	15.9	5.7	1.220	0.3	84	0.8	End of Purging

Sample Method: Bladder Pump Sample Start Time: 16:05 Sample End Time: 16:20

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	MW-13	Purge Time:	40 Minutes
Locked?:	Yes	Sample Date:	March 15, 2023
Sampled By:	Carter Harlan	Sample Time:	12:15
Weather:	Sunny	Air Temp:	42F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				24.39	ft-TOC
Total Well Depth:				34.26	ft-TOC
Height of Water Column:				9.87	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.6	Gal
3 * Well Volume	4.83	Gal
5 * Well Volume	8.05	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	11:30	End Time:	12:10
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		2.6		Gallons			
Final Volume Purge Rate:		250		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:35	0.3	200	24.34	12.0	7.5	0.395	3.2	93	23.0	Clear, no odor
	11:40	0.6	250	24.33	13.4	7.7	0.400	2.1	112	37.4	Clear, no odor
	11:45	0.9	250	24.33	14.0	7.8	0.400	1.7	112	30.3	Clear, no odor
	11:50	1.3	250	24.33	14.2	7.7	0.400	0.6	89	15.8	Clear, no odor
	11:55	1.6	250	24.33	14.4	7.8	0.398	0.3	89	21.4	Clear, no odor
	12:00	1.9	250	24.33	14.6	7.8	0.399	0.2	89	11.2	Clear, no odor
	12:05	2.2	250	24.33	14.6	7.8	0.399	0.2	89	7.00	Clear, no odor
	12:10	2.6	250	24.34	14.8	7.8	0.399	0.2	89	5.00	Clear, no odor
Final:	12:10	2.6	250	24.34	14.8	7.8	0.399	0.2	89	5.0	End of Purging

Sample Method: Bladder Pump Sample Start Time: 12:15 Sample End Time: 12:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	MW-14	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	March 15, 2023
Sampled By:	Jamie Bailey	Sample Time:	12:25
Weather:	Sunny	Air Temp:	42F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				23.54	ft-TOC
Total Well Depth:				34.26	ft-TOC
Height of Water Column:				10.72	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.7	Gal
3 * Well Volume	5.25	Gal
5 * Well Volume	8.75	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	11:55	End Time:	12:25	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:		1.6		Gallons				
Final Volume Purge Rate:		200		mL/min				
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:55	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:00	0.3	200	23.54	16.4	8.1	0.374	0.8	68	61.3	Clear, no odor
	12:05	0.5	200	23.54	16.3	8.1	0.374	0.7	-75	3.76	Clear, no odor
	12:10	0.8	200	23.54	15.9	8.2	0.375	0.6	-83	2.66	Clear, no odor
	12:15	1.1	200	23.54	15.6	8.2	0.371	0.6	-79	2.14	Clear, no odor
	12:20	1.3	200	23.54	16.1	8.3	0.374	0.6	-84	1.71	Clear, no odor
	12:25	1.6	200	23.54	16.1	8.3	0.374	0.6	-83	1.85	Clear, no odor
Final:	12:25	1.6	200	23.54	16.1	8.3	0.374	0.6	-83	1.9	End of Purging

Sample Method: Bladder Pump Sample Start Time: 12:25 Sample End Time: 12:45

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-15	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	11:00
Weather:	Overcast	Air Temp:	32F

Water Level & Well Data

			Measuring Point:	Top of Casing	
			Depth to Water:	40.13	ft-TOC
			Total Well Depth:		ft-TOC
			Height of Water Column:		feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

	Purge Method:	Bladder Pump		Start Time:	10:20	End Time:	10:55
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
	Pump Intake Depth from Top of Casing:			ft-TOC			
	Water Column Above Pump Intake:			feet	Flow Through Cell Vol:	200	mL
	DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**		
	Final Volume Purged:	1.8		Gallons	Duplicate sample (DUP-1-031423)		
	Final Volume Purge Rate:	200		mL/min			
	Well Purged Dry?:	No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	10:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	10:25	0.3	200	40.13	11.0	7.4	1.011	4.1	95	3.73	Clear, no odor
	10:30	0.5	200	40.10	11.4	7.2	1.098	2.5	95	11.7	Clear, no odor
	10:35	0.8	200	40.08	12.1	7.1	1.113	1.1	94	6.63	Clear, no odor
	10:40	1.1	200	40.03	12.4	7.0	1.153	0.7	94	4.27	Clear, no odor
	10:45	1.3	200	40.02	12.8	7.0	1.162	0.5	93	2.61	Clear, no odor
	10:50	1.6	200	40.01	13.1	7.0	1.171	0.5	92	1.52	Clear, no odor
	10:55	1.8	200	40.00	13.5	7.0	1.175	0.4	92	1.58	Clear, no odor
Final:	10:55	1.8	200	40.00	13.5	7.0	1.175	0.4	92	1.6	End of Purging

Sample Method: Bladder Pump Sample Start Time: 11:00 Sample End Time: 11:20

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes: Duplicte sample (DUP-1)

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-16	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	10:00
Weather:	Overcast	Air Temp:	31F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				40.19	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	9:25	End Time:	9:55	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:			2.2	Gallons				
Final Volume Purge Rate:			250	mL/min				
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:25	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:30	0.4	300	40.11	11.5	7.4	1.063	3.5	84	3.39	Clear, no odor
	09:35	0.8	300	40.09	14.1	6.9	1.256	2.4	87	11.9	Clear, no odor
	09:40	1.2	300	40.09	14.2	6.8	1.280	1.3	88	26.4	Clear, no odor
	09:45	1.6	300	40.09	12.6	6.8	1.276	1.1	91	23.0	Clear, no odor
	09:50	1.9	250	40.08	12.7	6.8	1.272	1.0	92	22.1	Clear, no odor
	09:55	2.2	250	40.08	12.9	6.8	1.270	0.9	93	21.8	Clear, no odor
Final:	09:55	2.2	250	40.08	12.9	6.8	1.270	0.9	93	21.8	End of Purging

Sample Method: Bladder Pump Sample Start Time: 10:00 Sample End Time: 10:15

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-17	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	13:00
Weather:	Overcast	Air Temp:	33F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				54.12	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump		Start Time:	12:20	End Time:	12:55
(If Used)	Bladder Pump Control Settings:		On (sec):	3.5	Off (sec):	3.5	Pressure:	55 psi
Pump Intake Depth from Top of Casing:					ft-TOC			
Water Column Above Pump Intake:					feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:					ft-TOC	**Comments:**		
Final Volume Purged:			1.8		Gallons			
Final Volume Purge Rate:			200		mL/min			
Well Purged Dry?:			No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	12:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:25	0.3	200	54.12	11.7	7.3	0.760	3.0	95	1.45	Clear, no odor
	12:30	0.5	200	54.12	13.1	7.0	0.884	1.1	93	11.3	Clear, no odor
	12:35	0.8	200	54.11	12.8	7.0	0.905	0.8	93	7.16	Clear, no odor
	12:40	1.1	200	54.11	12.4	7.0	0.872	0.8	92	7.35	Clear, no odor
	12:45	1.3	200	54.10	12.7	7.0	0.887	0.6	92	2.89	Clear, no odor
	12:50	1.6	200	54.10	12.2	6.9	0.887	0.6	92	1.80	Clear, no odor
	12:55	1.8	200	54.10	11.9	7.0	0.891	0.7	92	1.00	Clear, no odor
Final:	12:55	1.8	200	54.10	11.9	7.0	0.891	0.7	92	1.0	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:00 Sample End Time: 13:15

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 14, 2023
Source Well:	MW-19	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	March 14, 2023
Sampled By:	Carter Harlan	Sample Time:	12:00
Weather:	Overcast	Air Temp:	32F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				42.85	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	11:25	End Time:	11:55	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:			2.0	Gallons				
Final Volume Purge Rate:			250	mL/min				
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:25	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:30	0.3	250	42.87	13.8	6.8	0.787	2.6	94	1.66	Clear, no odor
	11:35	0.7	250	42.88	14.7	6.8	0.835	1.0	94	6.95	Clear, no odor
	11:40	1.0	250	42.88	14.3	6.8	0.854	0.7	92	3.69	Clear, no odor
	11:45	1.3	250	42.91	14.5	6.8	0.848	0.5	92	1.86	Clear, no odor
	11:50	1.7	250	42.91	14.6	6.8	0.855	0.4	92	0.98	Clear, no odor
	11:55	2.0	250	42.92	14.8	6.8	0.856	0.4	93	0.70	Clear, no odor
Final:	11:55	2.0	250	42.92	14.8	6.8	0.856	0.4	93	0.7	End of Purging

Sample Method: Bladder Pump Sample Start Time: 12:00 Sample End Time: 12:15

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	Basin A Source	Purge Time:	15 Minutes
Locked?:	No	Sample Date:	March 15, 2023
Sampled By:	Jamie Bailey	Sample Time:	13:45
Weather:	Sunny	Air Temp:	45F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				NA	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter		inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	13:30	End Time:	13:45	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:		2.0		Gallons				
Final Volume Purge Rate:		500		mL/min				
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:35	0.7	500	N/A	25.0	8.5	0.580	6.7	8	46.2	Clear
	13:40	1.3	500	N/A	26.2	8.4	0.560	6.5	6	44.5	Clear
	13:45	2.0	500	N/A	26.3	8.4	0.560	6.4	6	45.4	Clear
Final:	13:45	2.0	500	#N/A	26.3	8.4	0.560	6.4	6	45.4	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 13:45 Sample End Time: 13:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	March 15, 2023
Source Well:	Basin B Source	Purge Time:	15 Minutes
Locked?:	No	Sample Date:	March 15, 2023
Sampled By:	Jamie Bailey	Sample Time:	13:25
Weather:	Sunny	Air Temp:	45F

Water Level & Well Data

			Measuring Point:	Top of Casing	
			Depth to Water:	NA	ft-TOC
			Total Well Depth:		ft-TOC
			Height of Water Column:		feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter		inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

		Purge Method:	Peristaltic Pump		Start Time:	13:10	End Time:	13:25	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5		Off (sec):	3.5	Pressure:	100	psi
	Pump Intake Depth from Top of Casing:				ft-TOC				
	Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200	mL
	DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
	Final Volume Purged:		0.8		Gallons				
	Final Volume Purge Rate:		200		mL/min				
	Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:10	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:15	0.3	200		14.4	7.8	1.100	12.8	5	13.8	Clear
	13:20	0.5	200		14.4	8.6	1.101	11.1	8	13.7	Clear
	13:25	0.8	200		14.3	8.9	1.100	10.9	10	13.4	Clear
Final:	13:25	0.8	200		14.3	8.9	1.100	10.9	10	13.4	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 13:25 Sample End Time: 13:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

Miami Fort Station				
Well ID	**Date**	**Time**	**Depth to Water**	
Basin A and B Combined - Unit 115				**TOC**
MW-01	3/13/2023	10:27	46.49	504.49
MW-02	3/13/2023	10:53	17.30	472.23
MW-03A	3/13/2023	11:30	11.44	473.23
MW-04	3/13/2023	12:33	20.48	477.89
MW-05	3/13/2023	11:55	53.31	509.96
MW-06	3/13/2023	12:05	50.80	508.34
MW-07	3/13/2023	10:20	53.29	510.17
MW-08	3/13/2023	10:36	37.10	493.43
MW-09	3/13/2023	10:45	17.94	473.05
MW-10S	3/13/2023	11:05	10.16	
MW-10	3/13/2023	11:00	18.18	473.51
MW-11S	3/13/2023	11:17	10.87	
MW-11	3/13/2023	11:11	19.07	473.64
MW-12	3/13/2023	11:40	52.00	508.44
MW-13	3/13/2023	12:15	24.22	479.88
MW-13S	3/13/2023	12:20	19.41	
MW-14	3/13/2023	12:25	23.24	
MW-15	3/13/2023	9:42	40.01	
MW-16	3/13/2023	9:45	39.82	
MW-17	3/13/2023	10:16	54.74	
MW-18	3/13/2023	10:07	55.12	
MW-19	3/13/2023	10:10	42.60	
Gypsum Recycle Pond - Former Unit 114				
MW-GP1	3/13/2023	9:45	19.23	483.09
MW-GP2	3/13/2023	9:48	14.50	475.91
MW-GP3	3/13/2023	9:53	29.62	489.87
MW-GP4	3/13/2023	-	Would not open	489.73
MW-GP5	3/13/2023	9:57	22.89	489.49

Well I.D.	Date	Time	Depth	Temp	pH	Spec. Cond.	Dissolved Oxygen	ORP*	Turbidity
MW-01	3/14/2023	14:40	46.49	26.5	7.01	0.804	0.34	82.7	0.23
MW-02	3/13/2023	16:00	17.30	11.9	6.68	1.257	0.33	188	17.2
MW-03A	3/15/2023	10:05	17.57	14.1	8.39	0.445	0.71	-196	1.05
MW-04	3/15/2023	11:30	21.89	16.3	6.94	1.87	0.45	2.4	68.3
MW-05	3/15/2023	11:05	53.31	19.7	6.78	3.19	0.23	85.6	2.58
MW-06	3/15/2023	10:10	50.80	16.1	7.16	2.747	0.22	85.7	0.71
MW-07	3/14/2023	13:45	53.29	13.4	6.88	0.69	3.45	91	1.21
MW-08	3/13/2023	13:50	37.10	24.8	7.07	1.128	2.68	80.5	0.61
MW-09	3/13/2023	14:45	17.94	21.7	6.98	1.302	0.29	81.9	0.69
MW-10	3/14/2023	15:30	18.46	13.8	7.67	0.586	-0.16	-133.3	1.47
MW-11	3/14/2023	16:25	19.45	13.8	7.71	0.4616	0	-100.4	1.25
MW-12	3/14/2023	16:05	52.00	15.9	5.69	1.22	0.28	84.1	0.78
MW-13	3/15/2023	12:15	24.22	14.8	7.79	0.3986	0.15	88.8	5
MW-14	3/15/2023	12:25	23.54	16.1	8.26	0.374	0.58	-83.3	1.85
MW-15	3/14/2023	11:00	40.01	13.5	7	1.175	0.39	92	1.58
MW-16	3/14/2023	10:00	39.82	12.9	6.76	1.27	0.9	92.6	21.8
MW-17	3/14/2023	13:00	54.74	11.9	6.95	0.891	0.65	91.8	1
MW-19	3/14/2023	12:00	42.60	14.8	6.76	0.856	0.4	92.7	0.7

Pace Analytical®

ANALYTICAL REPORT

October 24, 2023

Revised Report

S&ME - Nashville, TN

Sample Delivery Group:	L1659083
Samples Received:	09/23/2023
Project Number:	7217-17-003D
Description:	Miami Fort Station - North Bend, OH
Site:	MFS UNIT 115 (PLANT)
Report To:	Vince Epps 862 East Crescentville Road Cincinnati, OH 45246

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

4A L1659083-01 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 11:40 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139037	1	09/25/23 16:24	09/26/23 09:36	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 09:20	10/01/23 09:20	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	09/30/23 22:50	09/30/23 22:50	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	09/30/23 23:29	09/30/23 23:29	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 03:42	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 16:40	JDG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	5	10/02/23 08:26	10/08/23 11:51	SJM	Mt. Juliet, TN

MW-01 L1659083-02 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 12:30 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139037	1	09/25/23 16:24	09/26/23 09:36	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 09:56	10/01/23 09:56	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	09/30/23 23:42	09/30/23 23:42	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	09/30/23 23:54	09/30/23 23:54	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 04:16	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:00	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:05	SJM	Mt. Juliet, TN

MW-05 L1659083-03 GW

Collected by: Jamie Bailey | Collected date/time: 09/21/23 13:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139028	1	09/25/23 16:09	09/26/23 17:26	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 10:04	10/01/23 10:04	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 00:07	10/01/23 00:07	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	10/01/23 00:20	10/01/23 00:20	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 04:19	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:04	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	20	10/02/23 08:26	10/08/23 12:09	SJM	Mt. Juliet, TN

MW-06 L1659083-04 GW

Collected by: Jamie Bailey | Collected date/time: 09/21/23 14:05 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139028	1	09/25/23 16:09	09/26/23 17:26	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 10:12	10/01/23 10:12	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 00:33	10/01/23 00:33	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 04:21	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:18	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	5	10/02/23 08:26	10/08/23 12:12	SJM	Mt. Juliet, TN

MW-07 L1659083-05 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 11:05 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 10:19	10/01/23 10:19	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 00:46	10/01/23 00:46	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 04:24	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:21	SJM	Mt. Juliet, TN

SAMPLE SUMMARY

MW-07 L1659083-05 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 11:05 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:15	SJM	Mt. Juliet, TN

MW-08 L1659083-06 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 13:35 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 10:41	10/01/23 10:41	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 01:37	10/01/23 01:37	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	10/01/23 01:50	10/01/23 01:50	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 11:55	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:24	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:29	SJM	Mt. Juliet, TN

MW-09 L1659083-07 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 14:35 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 10:49	10/01/23 10:49	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 02:03	10/01/23 02:03	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	10/01/23 02:16	10/01/23 02:16	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 11:58	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:28	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	5	10/02/23 08:26	10/08/23 12:33	SJM	Mt. Juliet, TN

MW-10 L1659083-08 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 15:30 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139037	1	09/25/23 16:24	09/26/23 09:36	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 10:58	10/01/23 10:58	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 02:29	10/01/23 02:29	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 12:00	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:31	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:36	SJM	Mt. Juliet, TN

MW-11 L1659083-09 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 12:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 11:06	10/01/23 11:06	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 02:42	10/01/23 02:42	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 12:03	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:35	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:39	SJM	Mt. Juliet, TN

SAMPLE SUMMARY

MW-12 L1659083-10 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 13:10 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 11:15	10/01/23 11:15	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 02:54	10/01/23 02:54	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	10/01/23 03:07	10/01/23 03:07	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 12:05	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:38	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	5	10/02/23 08:26	10/08/23 12:43	SJM	Mt. Juliet, TN

MW-13 L1659083-11 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 15:55 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 11:18	10/01/23 11:18	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 03:20	10/01/23 03:20	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139771	1	09/30/23 15:51	10/02/23 12:08	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:41	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:46	SJM	Mt. Juliet, TN

MW-14 L1659083-12 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 14:35 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 11:27	10/01/23 11:27	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 03:59	10/01/23 03:59	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 11:31	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:45	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:50	SJM	Mt. Juliet, TN

MW-15 L1659083-13 GW

Collected by: Jamie Bailey | Collected date/time: 09/21/23 16:25 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139032	1	09/25/23 16:12	09/26/23 12:13	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 11:37	10/01/23 11:37	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 04:12	10/01/23 04:12	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	10/01/23 04:24	10/01/23 04:24	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 11:46	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 17:48	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:53	SJM	Mt. Juliet, TN

MW-16 L1659083-14 GW

Collected by: Jamie Bailey | Collected date/time: 09/21/23 15:38 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139032	1	09/25/23 16:12	09/26/23 12:13	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 11:45	10/01/23 11:45	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 04:37	10/01/23 04:37	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	10	10/01/23 04:50	10/01/23 04:50	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 11:48	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 18:02	SJM	Mt. Juliet, TN

SAMPLE SUMMARY

MW-16 L1659083-14 GW

Collected by: Jamie Bailey | Collected date/time: 09/21/23 15:38 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 12:56	SJM	Mt. Juliet, TN

MW-17 L1659083-15 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 10:10 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142540	1	10/01/23 05:03	10/01/23 05:03	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 12:10	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 18:05	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 13:00	SJM	Mt. Juliet, TN

MW-19 L1659083-16 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 09:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142541	1	10/01/23 02:02	10/01/23 02:02	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 12:17	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 18:09	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 13:14	SJM	Mt. Juliet, TN

DUP-1 L1659083-17 GW

Collected by: Jamie Bailey | Collected date/time: 09/21/23 00:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139032	1	09/25/23 16:12	09/26/23 12:13	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 12:24	10/01/23 12:24	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142541	1	10/01/23 02:28	10/01/23 02:28	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142541	10	10/01/23 02:40	10/01/23 02:40	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 12:20	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 18:12	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 13:17	SJM	Mt. Juliet, TN

DUP-2 L1659083-18 GW

Collected by: Jamie Bailey | Collected date/time: 09/22/23 00:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2139060	1	09/25/23 16:44	09/26/23 11:11	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2140482	1	10/01/23 12:08	10/01/23 12:08	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142541	1	10/01/23 02:53	10/01/23 02:53	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2139772	1	09/30/23 14:44	10/02/23 12:22	NDL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/06/23 18:16	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2139102	1	10/02/23 08:26	10/08/23 13:20	SJM	Mt. Juliet, TN

SAMPLE SUMMARY

4A L1659083-19 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 11:40 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2140277	1	09/27/23 12:21	09/29/23 21:09	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139384	1	09/26/23 15:13	09/29/23 21:09	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139384	1	09/26/23 15:13	09/27/23 23:29	RGT	Mt. Juliet, TN

MW-01 L1659083-20 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 12:30 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139384	1	09/26/23 15:13	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139384	1	09/26/23 15:13	09/27/23 23:29	RGT	Mt. Juliet, TN

MW-05 L1659083-21 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/21/23 13:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142212	1	09/29/23 22:36	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139384	1	09/26/23 15:13	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139384	1	09/26/23 15:13	09/27/23 23:29	RGT	Mt. Juliet, TN

MW-06 L1659083-22 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/21/23 14:05 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142212	1	09/29/23 22:36	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139384	1	09/26/23 15:13	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139384	1	09/26/23 15:13	09/27/23 23:29	RGT	Mt. Juliet, TN

MW-07 L1659083-23 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 11:05 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142212	1	09/29/23 22:36	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139384	1	09/26/23 15:13	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139384	1	09/26/23 15:13	09/27/23 23:06	RGT	Mt. Juliet, TN

MW-08 L1659083-24 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 13:35 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142212	1	09/29/23 22:36	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-09 L1659083-25 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 14:35 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142212	1	09/29/23 22:36	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-10 L1659083-26 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 15:30 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142212	1	09/29/23 22:36	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/04/23 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-11 L1659083-27 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 12:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-12 L1659083-28 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 13:10 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-13 L1659083-29 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 15:55 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-14 L1659083-30 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 14:35 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

SAMPLE SUMMARY

MW-15 L1659083-31 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/21/23 16:25 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-16 L1659083-32 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/21/23 15:30 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-17 L1659083-33 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 10:10 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

MW-19 L1659083-34 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 09:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

DUP-1 L1659083-35 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/21/23 00:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

DUP-2 L1659083-36 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/22/23 00:00 | Received date/time: 09/23/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2139612	1	09/26/23 16:22	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2139612	1	09/26/23 16:22	10/02/23 11:35	RGT	Mt. Juliet, TN

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

Report Revision History

Level II Report - Version 1: 10/16/23 19:01

Project Narrative

Added K and Mg to sample 4A

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1280000		20000	1	09/26/2023 09:36	WG2139037

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	290000		8450	20000	1	10/01/2023 09:20	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 09:20	WG2140482

Sample Narrative:

L1659083-01 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	201000		3790	10000	10	09/30/2023 23:29	WG2142540
Fluoride	131	J	64.0	150	1	09/30/2023 22:50	WG2142540
Sulfate	487000		5940	50000	10	09/30/2023 23:29	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U	J6	0.100	0.200	1	10/02/2023 03:42	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 16:40	WG2139102
Arsenic	6.02		0.180	2.00	1	10/06/2023 16:40	WG2139102
Barium	67.6		0.381	2.00	1	10/06/2023 16:40	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 16:40	WG2139102
Boron	7040	V	48.2	150	5	10/08/2023 11:51	WG2139102
Cadmium	0.327	J	0.150	1.00	1	10/06/2023 16:40	WG2139102
Calcium	181000	V	93.6	1000	1	10/06/2023 16:40	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 16:40	WG2139102
Cobalt	7.70		0.0596	2.00	1	10/06/2023 16:40	WG2139102
Lead	1.19	J	0.849	2.00	1	10/06/2023 16:40	WG2139102
Magnesium	112000		73.5	1000	1	10/06/2023 16:40	WG2139102
Molybdenum	13.4		0.348	5.00	1	10/06/2023 16:40	WG2139102
Potassium	5350		108	2000	1	10/06/2023 16:40	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 16:40	WG2139102
Sodium	45600		376	2000	1	10/06/2023 16:40	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 16:40	WG2139102
Lithium	8.52		0.695	2.00	1	10/06/2023 16:40	WG2139102

MW-01

Collected date/time: 09/22/23 12:30

SAMPLE RESULTS - 02

L1659083

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	641000		10000	1	09/26/2023 09:36	WG2139037

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	185000		8450	20000	1	10/01/2023 09:56	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 09:56	WG2140482

Sample Narrative:

L1659083-02 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43400		379	1000	1	09/30/2023 23:42	WG2142540
Fluoride	462		64.0	150	1	09/30/2023 23:42	WG2142540
Sulfate	230000		5940	50000	10	09/30/2023 23:54	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 04:16	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:00	WG2139102
Arsenic	0.295	J	0.180	2.00	1	10/06/2023 17:00	WG2139102
Barium	40.6		0.381	2.00	1	10/06/2023 17:00	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:00	WG2139102
Boron	718		9.63	30.0	1	10/08/2023 12:05	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:00	WG2139102
Calcium	119000		93.6	1000	1	10/06/2023 17:00	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:00	WG2139102
Cobalt	0.0820	J	0.0596	2.00	1	10/06/2023 17:00	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:00	WG2139102
Magnesium	23800		73.5	1000	1	10/06/2023 17:00	WG2139102
Molybdenum	103		0.348	5.00	1	10/06/2023 17:00	WG2139102
Potassium	7630		108	2000	1	10/06/2023 17:00	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:00	WG2139102
Sodium	36800		376	2000	1	10/06/2023 17:00	WG2139102
Thallium	0.223	J	0.121	2.00	1	10/06/2023 17:00	WG2139102
Lithium	31.4		0.695	2.00	1	10/06/2023 17:00	WG2139102

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 ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2160000		50000	1	09/26/2023 17:26	WG2139028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	317000		8450	20000	1	10/01/2023 10:04	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 10:04	WG2140482

Sample Narrative:

L1659083-03 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	522000		3790	10000	10	10/01/2023 00:20	WG2142540
Fluoride	U		64.0	150	1	10/01/2023 00:07	WG2142540
Sulfate	727000		5940	50000	10	10/01/2023 00:20	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 04:19	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:04	WG2139102
Arsenic	0.471	J	0.180	2.00	1	10/06/2023 17:04	WG2139102
Barium	71.4		0.381	2.00	1	10/06/2023 17:04	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:04	WG2139102
Boron	24300		193	600	20	10/08/2023 12:09	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:04	WG2139102
Calcium	410000		93.6	1000	1	10/06/2023 17:04	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:04	WG2139102
Cobalt	0.410	J	0.0596	2.00	1	10/06/2023 17:04	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:04	WG2139102
Magnesium	141000		73.5	1000	1	10/06/2023 17:04	WG2139102
Molybdenum	27.1		0.348	5.00	1	10/06/2023 17:04	WG2139102
Potassium	8080		108	2000	1	10/06/2023 17:04	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:04	WG2139102
Sodium	72100		376	2000	1	10/06/2023 17:04	WG2139102
Thallium	0.169	J	0.121	2.00	1	10/06/2023 17:04	WG2139102
Lithium	10.7		0.695	2.00	1	10/06/2023 17:04	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	556000		13300	1	09/26/2023 17:26	WG2139028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	499000		8450	20000	1	10/01/2023 10:12	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 10:12	WG2140482

Sample Narrative:

L1659083-04 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	76900		379	1000	1	10/01/2023 00:33	WG2142540
Fluoride	499		64.0	150	1	10/01/2023 00:33	WG2142540
Sulfate	6610	B	594	5000	1	10/01/2023 00:33	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 04:21	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:18	WG2139102
Arsenic	15.3		0.180	2.00	1	10/06/2023 17:18	WG2139102
Barium	734		0.381	2.00	1	10/06/2023 17:18	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:18	WG2139102
Boron	3520		48.2	150	5	10/08/2023 12:12	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:18	WG2139102
Calcium	51700		93.6	1000	1	10/06/2023 17:18	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:18	WG2139102
Cobalt	1.69	J	0.0596	2.00	1	10/06/2023 17:18	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:18	WG2139102
Magnesium	86000		73.5	1000	1	10/06/2023 17:18	WG2139102
Molybdenum	157		0.348	5.00	1	10/06/2023 17:18	WG2139102
Potassium	3810		108	2000	1	10/06/2023 17:18	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:18	WG2139102
Sodium	48100		376	2000	1	10/06/2023 17:18	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:18	WG2139102
Lithium	7.83		0.695	2.00	1	10/06/2023 17:18	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	453000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	363000		8450	20000	1	10/01/2023 10:19	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 10:19	WG2140482

Sample Narrative:

L1659083-05 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	3080		379	1000	1	10/01/2023 00:46	WG2142540
Fluoride	114	J	64.0	150	1	10/01/2023 00:46	WG2142540
Sulfate	41500		594	5000	1	10/01/2023 00:46	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 04:24	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:21	WG2139102
Arsenic	U		0.180	2.00	1	10/06/2023 17:21	WG2139102
Barium	91.0		0.381	2.00	1	10/06/2023 17:21	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:21	WG2139102
Boron	115		9.63	30.0	1	10/08/2023 12:15	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:21	WG2139102
Calcium	109000		93.6	1000	1	10/06/2023 17:21	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:21	WG2139102
Cobalt	U		0.0596	2.00	1	10/06/2023 17:21	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:21	WG2139102
Magnesium	33800		73.5	1000	1	10/06/2023 17:21	WG2139102
Molybdenum	0.770	J	0.348	5.00	1	10/06/2023 17:21	WG2139102
Potassium	1330	J	108	2000	1	10/06/2023 17:21	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:21	WG2139102
Sodium	4480		376	2000	1	10/06/2023 17:21	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:21	WG2139102
Lithium	3.87		0.695	2.00	1	10/06/2023 17:21	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	820000		13300	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	192000		8450	20000	1	10/01/2023 10:41	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 10:41	WG2140482

Sample Narrative:

L1659083-06 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	39600		379	1000	1	10/01/2023 01:37	WG2142540
Fluoride	226		64.0	150	1	10/01/2023 01:37	WG2142540
Sulfate	466000		5940	50000	10	10/01/2023 01:50	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 11:55	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:24	WG2139102
Arsenic	0.280	J	0.180	2.00	1	10/06/2023 17:24	WG2139102
Barium	47.7		0.381	2.00	1	10/06/2023 17:24	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:24	WG2139102
Boron	815		9.63	30.0	1	10/08/2023 12:29	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:24	WG2139102
Calcium	162000		93.6	1000	1	10/06/2023 17:24	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:24	WG2139102
Cobalt	U		0.0596	2.00	1	10/06/2023 17:24	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:24	WG2139102
Magnesium	44100		73.5	1000	1	10/06/2023 17:24	WG2139102
Molybdenum	7.81		0.348	5.00	1	10/06/2023 17:24	WG2139102
Potassium	6190		108	2000	1	10/06/2023 17:24	WG2139102
Selenium	3.33		0.300	2.00	1	10/06/2023 17:24	WG2139102
Sodium	26900		376	2000	1	10/06/2023 17:24	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:24	WG2139102
Lithium	13.1		0.695	2.00	1	10/06/2023 17:24	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	923000		13300	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	208000		8450	20000	1	10/01/2023 10:49	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 10:49	WG2140482

Sample Narrative:

L1659083-07 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	75700		379	1000	1	10/01/2023 02:03	WG2142540
Fluoride	325		64.0	150	1	10/01/2023 02:03	WG2142540
Sulfate	401000		5940	50000	10	10/01/2023 02:16	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 11:58	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:28	WG2139102
Arsenic	0.318	J	0.180	2.00	1	10/06/2023 17:28	WG2139102
Barium	74.4		0.381	2.00	1	10/06/2023 17:28	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:28	WG2139102
Boron	2800		48.2	150	5	10/08/2023 12:33	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:28	WG2139102
Calcium	181000		93.6	1000	1	10/06/2023 17:28	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:28	WG2139102
Cobalt	0.128	J	0.0596	2.00	1	10/06/2023 17:28	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:28	WG2139102
Magnesium	42400		73.5	1000	1	10/06/2023 17:28	WG2139102
Molybdenum	44.5		0.348	5.00	1	10/06/2023 17:28	WG2139102
Potassium	6270		108	2000	1	10/06/2023 17:28	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:28	WG2139102
Sodium	36300		376	2000	1	10/06/2023 17:28	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:28	WG2139102
Lithium	9.87		0.695	2.00	1	10/06/2023 17:28	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	274000		10000	1	09/26/2023 09:36	WG2139037

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	203000		8450	20000	1	10/01/2023 10:58	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 10:58	WG2140482

Sample Narrative:

L1659083-08 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31100		379	1000	1	10/01/2023 02:29	WG2142540
Fluoride	262		64.0	150	1	10/01/2023 02:29	WG2142540
Sulfate	22000		594	5000	1	10/01/2023 02:29	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:00	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:31	WG2139102
Arsenic	14.1		0.180	2.00	1	10/06/2023 17:31	WG2139102
Barium	121		0.381	2.00	1	10/06/2023 17:31	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:31	WG2139102
Boron	89.5		9.63	30.0	1	10/08/2023 12:36	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:31	WG2139102
Calcium	49100		93.6	1000	1	10/06/2023 17:31	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:31	WG2139102
Cobalt	0.0702	J	0.0596	2.00	1	10/06/2023 17:31	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:31	WG2139102
Magnesium	17600		73.5	1000	1	10/06/2023 17:31	WG2139102
Molybdenum	5.17		0.348	5.00	1	10/06/2023 17:31	WG2139102
Potassium	3190		108	2000	1	10/06/2023 17:31	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:31	WG2139102
Sodium	26100		376	2000	1	10/06/2023 17:31	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:31	WG2139102
Lithium	1.91	J	0.695	2.00	1	10/06/2023 17:31	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	281000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	171000		8450	20000	1	10/01/2023 11:06	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 11:06	WG2140482

Sample Narrative:

L1659083-09 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	38100		379	1000	1	10/01/2023 02:42	WG2142540
Fluoride	165		64.0	150	1	10/01/2023 02:42	WG2142540
Sulfate	37500		594	5000	1	10/01/2023 02:42	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:03	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:35	WG2139102
Arsenic	8.19		0.180	2.00	1	10/06/2023 17:35	WG2139102
Barium	217		0.381	2.00	1	10/06/2023 17:35	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:35	WG2139102
Boron	70.9		9.63	30.0	1	10/08/2023 12:39	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:35	WG2139102
Calcium	53100		93.6	1000	1	10/06/2023 17:35	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:35	WG2139102
Cobalt	0.616	J	0.0596	2.00	1	10/06/2023 17:35	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:35	WG2139102
Magnesium	16800		73.5	1000	1	10/06/2023 17:35	WG2139102
Molybdenum	4.21	J	0.348	5.00	1	10/06/2023 17:35	WG2139102
Potassium	2960		108	2000	1	10/06/2023 17:35	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:35	WG2139102
Sodium	20100		376	2000	1	10/06/2023 17:35	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:35	WG2139102
Lithium	2.63		0.695	2.00	1	10/06/2023 17:35	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	842000		20000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	71600		8450	20000	1	10/01/2023 11:15	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 11:15	WG2140482

Sample Narrative:

L1659083-10 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	195000		3790	10000	10	10/01/2023 03:07	WG2142540
Fluoride	78.5	J	64.0	150	1	10/01/2023 02:54	WG2142540
Sulfate	313000		5940	50000	10	10/01/2023 03:07	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	1.43		0.100	0.200	1	10/02/2023 12:05	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:38	WG2139102
Arsenic	U		0.180	2.00	1	10/06/2023 17:38	WG2139102
Barium	15.6		0.381	2.00	1	10/06/2023 17:38	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:38	WG2139102
Boron	5450		48.2	150	5	10/08/2023 12:43	WG2139102
Cadmium	1.00		0.150	1.00	1	10/06/2023 17:38	WG2139102
Calcium	151000		93.6	1000	1	10/06/2023 17:38	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:38	WG2139102
Cobalt	3.01		0.0596	2.00	1	10/06/2023 17:38	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:38	WG2139102
Magnesium	50400		73.5	1000	1	10/06/2023 17:38	WG2139102
Molybdenum	U		0.348	5.00	1	10/06/2023 17:38	WG2139102
Potassium	625	J	108	2000	1	10/06/2023 17:38	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:38	WG2139102
Sodium	40100		376	2000	1	10/06/2023 17:38	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:38	WG2139102
Lithium	2.68		0.695	2.00	1	10/06/2023 17:38	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	231000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	123000		8450	20000	1	10/01/2023 11:18	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 11:18	WG2140482

Sample Narrative:

L1659083-11 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28100		379	1000	1	10/01/2023 03:20	WG2142540
Fluoride	176		64.0	150	1	10/01/2023 03:20	WG2142540
Sulfate	46700		594	5000	1	10/01/2023 03:20	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:08	WG2139771

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:41	WG2139102
Arsenic	8.49		0.180	2.00	1	10/06/2023 17:41	WG2139102
Barium	171		0.381	2.00	1	10/06/2023 17:41	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:41	WG2139102
Boron	83.7		9.63	30.0	1	10/08/2023 12:46	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:41	WG2139102
Calcium	42100		93.6	1000	1	10/06/2023 17:41	WG2139102
Chromium	2.46		1.24	2.00	1	10/06/2023 17:41	WG2139102
Cobalt	0.294	J	0.0596	2.00	1	10/06/2023 17:41	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:41	WG2139102
Magnesium	11700		73.5	1000	1	10/06/2023 17:41	WG2139102
Molybdenum	12.6		0.348	5.00	1	10/06/2023 17:41	WG2139102
Potassium	2320		108	2000	1	10/06/2023 17:41	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:41	WG2139102
Sodium	21000		376	2000	1	10/06/2023 17:41	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:41	WG2139102
Lithium	4.43		0.695	2.00	1	10/06/2023 17:41	WG2139102

MW-14

SAMPLE RESULTS - 12

Collected date/time: 09/22/23 14:35 L1659083

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	235000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	118000		8450	20000	1	10/01/2023 11:27	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 11:27	WG2140482

Sample Narrative:

L1659083-12 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	28900		379	1000	1	10/01/2023 03:59	WG2142540
Fluoride	135	J	64.0	150	1	10/01/2023 03:59	WG2142540
Sulfate	54200		594	5000	1	10/01/2023 03:59	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 11:31	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:45	WG2139102
Arsenic	0.651	J	0.180	2.00	1	10/06/2023 17:45	WG2139102
Barium	42.3		0.381	2.00	1	10/06/2023 17:45	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:45	WG2139102
Boron	77.9		9.63	30.0	1	10/08/2023 12:50	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:45	WG2139102
Calcium	44000		93.6	1000	1	10/06/2023 17:45	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:45	WG2139102
Cobalt	0.468	J	0.0596	2.00	1	10/06/2023 17:45	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:45	WG2139102
Magnesium	11600		73.5	1000	1	10/06/2023 17:45	WG2139102
Molybdenum	5.88		0.348	5.00	1	10/06/2023 17:45	WG2139102
Potassium	2570		108	2000	1	10/06/2023 17:45	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:45	WG2139102
Sodium	21400		376	2000	1	10/06/2023 17:45	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:45	WG2139102
Lithium	3.73		0.695	2.00	1	10/06/2023 17:45	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	676000	J3	13300	1	09/26/2023 12:13	WG2139032

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	337000		8450	20000	1	10/01/2023 11:37	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 11:37	WG2140482

Sample Narrative:

L1659083-13 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	247000		3790	10000	10	10/01/2023 04:24	WG2142540
Fluoride	171		64.0	150	1	10/01/2023 04:12	WG2142540
Sulfate	2210	B J	594	5000	1	10/01/2023 04:12	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 11:46	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 17:48	WG2139102
Arsenic	0.772	J	0.180	2.00	1	10/06/2023 17:48	WG2139102
Barium	72.3		0.381	2.00	1	10/06/2023 17:48	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 17:48	WG2139102
Boron	503		9.63	30.0	1	10/08/2023 12:53	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 17:48	WG2139102
Calcium	121000		93.6	1000	1	10/06/2023 17:48	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 17:48	WG2139102
Cobalt	2.44		0.0596	2.00	1	10/06/2023 17:48	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 17:48	WG2139102
Magnesium	34200		73.5	1000	1	10/06/2023 17:48	WG2139102
Molybdenum	30.5		0.348	5.00	1	10/06/2023 17:48	WG2139102
Potassium	3380		108	2000	1	10/06/2023 17:48	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 17:48	WG2139102
Sodium	77800		376	2000	1	10/06/2023 17:48	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 17:48	WG2139102
Lithium	6.36		0.695	2.00	1	10/06/2023 17:48	WG2139102

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 ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	822000		20000	1	09/26/2023 12:13	WG2139032

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	453000		8450	20000	1	10/01/2023 11:45	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 11:45	WG2140482

Sample Narrative:

L1659083-14 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	101000		379	1000	1	10/01/2023 04:37	WG2142540
Fluoride	94.8	J	64.0	150	1	10/01/2023 04:37	WG2142540
Sulfate	194000		5940	50000	10	10/01/2023 04:50	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 11:48	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 18:02	WG2139102
Arsenic	0.216	J	0.180	2.00	1	10/06/2023 18:02	WG2139102
Barium	72.9		0.381	2.00	1	10/06/2023 18:02	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 18:02	WG2139102
Boron	72.6		9.63	30.0	1	10/08/2023 12:56	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 18:02	WG2139102
Calcium	183000		93.6	1000	1	10/06/2023 18:02	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 18:02	WG2139102
Cobalt	1.02	J	0.0596	2.00	1	10/06/2023 18:02	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 18:02	WG2139102
Magnesium	61000		73.5	1000	1	10/06/2023 18:02	WG2139102
Molybdenum	0.524	J	0.348	5.00	1	10/06/2023 18:02	WG2139102
Potassium	3990		108	2000	1	10/06/2023 18:02	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 18:02	WG2139102
Sodium	36400		376	2000	1	10/06/2023 18:02	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 18:02	WG2139102
Lithium	10.2		0.695	2.00	1	10/06/2023 18:02	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	590000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	52400		379	1000	1	10/01/2023 05:03	WG2142540
Fluoride	178		64.0	150	1	10/01/2023 05:03	WG2142540
Sulfate	73800		594	5000	1	10/01/2023 05:03	WG2142540

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:10	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 18:05	WG2139102
Arsenic	0.226	J	0.180	2.00	1	10/06/2023 18:05	WG2139102
Barium	52.7		0.381	2.00	1	10/06/2023 18:05	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 18:05	WG2139102
Boron	62.8		9.63	30.0	1	10/08/2023 13:00	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 18:05	WG2139102
Calcium	134000		93.6	1000	1	10/06/2023 18:05	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 18:05	WG2139102
Cobalt	1.54	J	0.0596	2.00	1	10/06/2023 18:05	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 18:05	WG2139102
Molybdenum	3.03	J	0.348	5.00	1	10/06/2023 18:05	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 18:05	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 18:05	WG2139102
Lithium	9.32		0.695	2.00	1	10/06/2023 18:05	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	549000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33000		379	1000	1	10/01/2023 02:02	WG2142541
Fluoride	75.9	J	64.0	150	1	10/01/2023 02:02	WG2142541
Sulfate	45100		594	5000	1	10/01/2023 02:02	WG2142541

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:17	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 18:09	WG2139102
Arsenic	U		0.180	2.00	1	10/06/2023 18:09	WG2139102
Barium	135		0.381	2.00	1	10/06/2023 18:09	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 18:09	WG2139102
Boron	95.2		9.63	30.0	1	10/08/2023 13:14	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 18:09	WG2139102
Calcium	134000		93.6	1000	1	10/06/2023 18:09	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 18:09	WG2139102
Cobalt	0.396	J	0.0596	2.00	1	10/06/2023 18:09	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 18:09	WG2139102
Molybdenum	2.54	J	0.348	5.00	1	10/06/2023 18:09	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 18:09	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 18:09	WG2139102
Lithium	5.66		0.695	2.00	1	10/06/2023 18:09	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	638000		20000	1	09/26/2023 12:13	WG2139032

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	340000		8450	20000	1	10/01/2023 12:24	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 12:24	WG2140482

Sample Narrative:

L1659083-17 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	221000		3790	10000	10	10/01/2023 02:40	WG2142541
Fluoride	172		64.0	150	1	10/01/2023 02:28	WG2142541
Sulfate	1850	J	594	5000	1	10/01/2023 02:28	WG2142541

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:20	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 18:12	WG2139102
Arsenic	0.769	J	0.180	2.00	1	10/06/2023 18:12	WG2139102
Barium	76.1		0.381	2.00	1	10/06/2023 18:12	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 18:12	WG2139102
Boron	525		9.63	30.0	1	10/08/2023 13:17	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 18:12	WG2139102
Calcium	126000		93.6	1000	1	10/06/2023 18:12	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 18:12	WG2139102
Cobalt	2.63		0.0596	2.00	1	10/06/2023 18:12	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 18:12	WG2139102
Magnesium	36100		73.5	1000	1	10/06/2023 18:12	WG2139102
Molybdenum	31.2		0.348	5.00	1	10/06/2023 18:12	WG2139102
Potassium	3530		108	2000	1	10/06/2023 18:12	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 18:12	WG2139102
Sodium	82600		376	2000	1	10/06/2023 18:12	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 18:12	WG2139102
Lithium	6.71		0.695	2.00	1	10/06/2023 18:12	WG2139102

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	553000		10000	1	09/26/2023 11:11	WG2139060

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	428000		8450	20000	1	10/01/2023 12:08	WG2140482
Alkalinity,Carbonate	U		8450	20000	1	10/01/2023 12:08	WG2140482

Sample Narrative:

L1659083-18 WG2140482: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	32200		379	1000	1	10/01/2023 02:53	WG2142541
Fluoride	U		64.0	150	1	10/01/2023 02:53	WG2142541
Sulfate	44400		594	5000	1	10/01/2023 02:53	WG2142541

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/02/2023 12:22	WG2139772

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/06/2023 18:16	WG2139102
Arsenic	U		0.180	2.00	1	10/06/2023 18:16	WG2139102
Barium	138		0.381	2.00	1	10/06/2023 18:16	WG2139102
Beryllium	U		0.190	2.00	1	10/06/2023 18:16	WG2139102
Boron	103		9.63	30.0	1	10/08/2023 13:20	WG2139102
Cadmium	U		0.150	1.00	1	10/06/2023 18:16	WG2139102
Calcium	137000		93.6	1000	1	10/06/2023 18:16	WG2139102
Chromium	U		1.24	2.00	1	10/06/2023 18:16	WG2139102
Cobalt	0.446	J	0.0596	2.00	1	10/06/2023 18:16	WG2139102
Lead	U		0.849	2.00	1	10/06/2023 18:16	WG2139102
Magnesium	38800		73.5	1000	1	10/06/2023 18:16	WG2139102
Molybdenum	2.49	J	0.348	5.00	1	10/06/2023 18:16	WG2139102
Potassium	1510	J	108	2000	1	10/06/2023 18:16	WG2139102
Selenium	U		0.300	2.00	1	10/06/2023 18:16	WG2139102
Sodium	11900		376	2000	1	10/06/2023 18:16	WG2139102
Thallium	U		0.121	2.00	1	10/06/2023 18:16	WG2139102
Lithium	5.93		0.695	2.00	1	10/06/2023 18:16	WG2139102

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.469	J	0.405		0.742		09/29/2023 21:09	WG2140277
(T) Barium	*98.7*					*30.0-143*	*09/29/2023 21:09*	WG2140277
(T) Yttrium	*107*					*30.0-136*	*09/29/2023 21:09*	WG2140277

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.996		0.564	0.866	09/29/2023 21:09	WG2139384

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.528		0.393		0.447		09/27/2023 23:29	WG2139384
(T) Barium-133	*76.6*					*30.0-143*	*09/27/2023 23:29*	WG2139384

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.866		0.282		0.499		10/05/2023 20:07	WG2142522
(T) Barium	*105*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*74.2*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.866		0.333	0.608	10/05/2023 20:07	WG2139384

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0278	U	0.178		0.348		09/27/2023 23:29	WG2139384
(T) Barium-133	*97.5*					*30.0-143*	*09/27/2023 23:29*	WG2139384

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.266	J	0.266		0.477		10/04/2023 21:23	WG2142212
(T) Barium	*102*					*30.0-143*	*10/04/2023 21:23*	WG2142212
(T) Yttrium	*104*					*30.0-136*	*10/04/2023 21:23*	WG2142212

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.266	U	0.300	0.580	10/04/2023 21:23	WG2139384

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	-0.0262	U	0.138		0.330		09/27/2023 23:29	WG2139384
(T) Barium-133	*82.2*					*30.0-143*	*09/27/2023 23:29*	WG2139384

Radiochemistry by Method 904/9320

	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
Analyte	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.0448	U	0.272		0.494		10/04/2023 21:23	WG2142212
(T) Barium	*117*					*30.0-143*	*10/04/2023 21:23*	WG2142212
(T) Yttrium	*95.6*					*30.0-136*	*10/04/2023 21:23*	WG2142212

Radiochemistry by Method Calculation

	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
Analyte	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.140	U	0.356	0.628	10/04/2023 21:23	WG2139384

Radiochemistry by Method SM7500Ra B M

	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
Analyte	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.0957	U	0.230		0.387		09/27/2023 23:29	WG2139384
(T) Barium-133	*67.3*					*30.0-143*	*09/27/2023 23:29*	WG2139384

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.375	J	0.266		0.473		10/04/2023 21:23	WG2142212
(T) Barium	*113*					*30.0-143*	*10/04/2023 21:23*	WG2142212
(T) Yttrium	*103*					*30.0-136*	*10/04/2023 21:23*	WG2142212

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.470	J	0.375	0.646	10/04/2023 21:23	WG2139384

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0952	U	0.264		0.440		09/27/2023 23:06	WG2139384
(T) Barium-133	*79.9*					*30.0-143*	*09/27/2023 23:06*	WG2139384

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.29		0.286		0.486		10/04/2023 21:23	WG2142212
(T) Barium	*102*					*30.0-143*	*10/04/2023 21:23*	WG2142212
(T) Yttrium	*104*					*30.0-136*	*10/04/2023 21:23*	WG2142212

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.59		0.391	0.578	10/04/2023 21:23	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.305	J	0.267		0.312		10/02/2023 11:35	WG2139612
(T) Barium-133	*71.5*					*30.0-143*	*10/02/2023 11:35*	WG2139612

MW-09 SAMPLE RESULTS - 25

Collected date/time: 09/22/23 14:35 L1659083

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE +/-	TPU +/-	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.03		0.290		0.500		10/04/2023 21:23	WG2142212
(T) Barium	*105*					*30.0-143*	*10/04/2023 21:23*	WG2142212
(T) Yttrium	*110*					*30.0-136*	*10/04/2023 21:23*	WG2142212

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty +/-	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.77		0.488	0.597	10/04/2023 21:23	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE +/-	TPU +/-	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.742		0.393		0.326		10/02/2023 11:35	WG2139612
(T) Barium-133	*71.6*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.790		0.300		0.524		10/04/2023 21:23	WG2142212
(T) Barium	*108*					*30.0-143*	*10/04/2023 21:23*	WG2142212
(T) Yttrium	*91.5*					*30.0-136*	*10/04/2023 21:23*	WG2142212

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.37		0.523	0.717	10/04/2023 21:23	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.583		0.428		0.490		10/02/2023 11:35	WG2139612
(T) Barium-133	*71.7*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.39		0.281		0.483		10/05/2023 20:07	WG2142522
(T) Barium	*115*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*92.1*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.75		0.497	0.733	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.367	J	0.410		0.552		10/02/2023 11:35	WG2139612
(T) Barium-133	*54.0*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.461		0.234		0.425		10/05/2023 20:07	WG2142522
(T) Barium	*92.1*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*93.2*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.497	J	0.272	0.530	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0361	U	0.139		0.317		10/02/2023 11:35	WG2139612
(T) Barium-133	*63.6*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.26		0.351		0.616		10/05/2023 20:07	WG2142522
(T) Barium	*121*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*88.6*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.69		0.507	0.731	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.434		0.366		0.393		10/02/2023 11:35	WG2139612
(T) Barium-133	*50.8*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.27		0.308		0.533		10/05/2023 20:07	WG2142522
(T) Barium	*120*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*68.0*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.60		0.446	0.666	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.334	J	0.323		0.399		10/02/2023 11:35	WG2139612
(T) Barium-133	*65.4*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.579		0.190		0.336		10/05/2023 20:07	WG2142522
(T) Barium	*119*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*116*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.639		0.348	0.604	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0601	U	0.291		0.502		10/02/2023 11:35	WG2139612
(T) Barium-133	*65.1*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.395		0.214		0.389		10/05/2023 20:07	WG2142522
(T) Barium	*98.9*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*93.5*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.521		0.262	0.441	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.126	J	0.151		0.208		10/02/2023 11:35	WG2139612
(T) Barium-133	*91.5*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.580		0.272		0.491		10/05/2023 20:07	WG2142522
(T) Barium	*121*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*73.1*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.681		0.354	0.627	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.101	U	0.226		0.390		10/02/2023 11:35	WG2139612
(T) Barium-133	*57.0*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.827		0.281		0.499		10/05/2023 20:07	WG2142522
(T) Barium	*130*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*100*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.838		0.351	0.660	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0110	U	0.211		0.432		10/02/2023 11:35	WG2139612
(T) Barium-133	*70.6*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.973		0.210		0.358		10/05/2023 20:07	WG2142522
(T) Barium	*118*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*121*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.43		0.421	0.565	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.453		0.365		0.437		10/02/2023 11:35	WG2139612
(T) Barium-133	*81.8*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.781		0.209		0.365		10/05/2023 20:07	WG2142522
(T) Barium	*128*					*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*102*					*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.08		0.337	0.486	10/05/2023 20:07	WG2139612

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.295	J	0.264		0.321		10/02/2023 11:35	WG2139612
(T) Barium-133	*94.7*					*30.0-143*	*10/02/2023 11:35*	WG2139612

Method Blank (MB)

(MB) R3979031-1 09/26/23 17:26

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

L1658605-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1658605-08 09/26/23 17:26 • (DUP) R3979031-3 09/26/23 17:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1460000	1670000	1	13.8	J3	5

L1658795-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1658795-01 09/26/23 17:26 • (DUP) R3979031-4 09/26/23 17:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	484000	504000	1	4.05		5

Laboratory Control Sample (LCS)

(LCS) R3979031-2 09/26/23 17:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8470000	96.3	77.3-123	

Method Blank (MB)

(MB) R3979450-1 09/26/23 12:13

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

L1658529-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1658529-02 09/26/23 12:13 • (DUP) R3979450-3 09/26/23 12:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	764000	844000	1	9.95	J3	5

L1659083-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-13 09/26/23 12:13 • (DUP) R3979450-4 09/26/23 12:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	676000	721000	1	6.49	J3	5

Laboratory Control Sample (LCS)

(LCS) R3979450-2 09/26/23 12:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8510000	96.7	77.3-123	

Method Blank (MB)

(MB) R3979049-1 09/26/23 09:36

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

L1657767-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1657767-01 09/26/23 09:36 • (DUP) R3979049-3 09/26/23 09:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	990000	1010000	1	1.60		5

L1658529-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1658529-09 09/26/23 09:36 • (DUP) R3979049-4 09/26/23 09:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	982000	998000	1	1.62		5

Laboratory Control Sample (LCS)

(LCS) R3979049-2 09/26/23 09:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8690000	98.8	77.3-123	

L1659083-01,02,03,04,05,06,07,09,10,11,12,15,16,18

Method Blank (MB)

(MB) R3979078-1 09/26/23 11:11

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

L1658982-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1658982-01 09/26/23 11:11 • (DUP) R3979078-3 09/26/23 11:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	624000	639000	1	2.32		5

L1659083-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-06 09/26/23 11:11 • (DUP) R3979078-4 09/26/23 11:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	820000	860000	1	4.76		5

Laboratory Control Sample (LCS)

(LCS) R3979078-2 09/26/23 11:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8470000	96.3	77.3-123	

Method Blank (MB)

(MB) R3981388-1 09/29/23 21:09

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.377		0.172	0.312	
(T) Barium	*111*		*111*		
(T) Yttrium	*99.5*		*99.5*		

L1658192-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1658192-08 09/29/23 21:09 • (DUP) R3981388-5 09/29/23 21:09

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.07	0.311	0.545		0.554	0.327	0.596		63.9	1.15	J	20	3
(T) Barium	*104*				*107*	*107*							
(T) Yttrium	*86.3*				*96.0*	*96.0*							

Laboratory Control Sample (LCS)

(LCS) R3981388-2 09/29/23 21:09

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.13	103	80.0-120	
(T) Barium			*121*		
(T) Yttrium			*92.4*		

L1659083-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-19 09/29/23 21:09 • (MS) R3981388-3 09/29/23 21:09 • (MSD) R3981388-4 09/29/23 21:09

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	0.469	16.1	15.3	93.3	89.0	1	70.0-130			4.59		20
(T) Barium		*98.7*			*104*	*108*							
(T) Yttrium		*107*			*87.4*	*99.8*							

Method Blank (MB)

(MB) R3985033-1 10/04/23 21:23

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.198	J	0.234	0.204	
(T) Barium	*122*		*122*		
(T) Yttrium	*99.9*		*99.9*		

L1654335-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1654335-02 10/04/23 21:23 • (DUP) R3985033-5 10/04/23 21:23

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.594	0.211	0.367		1.01	0.281	0.479		51.4	1.17		20	3
(T) Barium	*110*				*121*	*121*							
(T) Yttrium	*98.7*				*97.5*	*97.5*							

Laboratory Control Sample (LCS)

(LCS) R3985033-2 10/04/23 21:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.37	107	80.0-120	
(T) Barium			*123*		
(T) Yttrium			*110*		

L1654335-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1654335-08 10/04/23 21:23 • (MS) R3985033-3 10/04/23 21:23 • (MSD) R3985033-4 10/04/23 21:23

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	0.621	17.7	18.4	103	107	1	70.0-130			3.82		20
(T) Barium		*120*			*122*	*121*							
(T) Yttrium		*94.7*			*98.4*	*105*							

L1659083-1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36

Method Blank (MB)

(MB) R3985039-1 10/05/23 20:07

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.249	U	0.233	0.444	
(T) Barium	*123*		*123*		
(T) Yttrium	*72.7*		*72.7*		

L1659083-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-29 10/05/23 20:07 • (DUP) R3985039-5 10/05/23 20:07

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.26	0.351	0.616		1.38	0.373	0.652		9.17	0.236		20	3
(T) Barium	*121*				*124*	*124*							
(T) Yttrium	*88.6*				*83.0*	*83.0*							

Laboratory Control Sample (LCS)

(LCS) R3985039-2 10/05/23 20:07

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.90	98.0	80.0-120	
(T) Barium			*118*		
(T) Yttrium			*100*		

L1659083-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-34 10/05/23 20:07 • (MS) R3985039-3 10/05/23 20:07 • (MSD) R3985039-4 10/05/23 20:07

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	0.827	16.6	17.2	94.5	98.0	1	70.0-130			3.49		20
(T) Barium		*130*			*116*	*118*							
(T) Yttrium		*100*			*119*	*107*							

Method Blank (MB)

(MB) R3980648-5 09/27/23 23:29

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00462	U	0.0301	0.0595	
(T) Barium-133	*74.5*		*74.5*		

L1658218-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1658218-04 09/27/23 17:21 • (DUP) R3980648-4 09/27/23 17:21

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	1.27	0.446	0.307		2.02	0.555	0.307		45.2	1.04		20	3
(T) Barium-133	*95.1*				*99.0*	*99.0*							

Laboratory Control Sample (LCS)

(LCS) R3980648-1 09/27/23 17:21

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.01	5.19	104	80.0-120	
(T) Barium-133			*69.3*		

L1659083-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-19 09/27/23 23:29 • (MS) R3980648-2 09/27/23 17:21 • (MSD) R3980648-3 09/27/23 17:21

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	0.528	17.5	17.2	84.9	83.4	1	75.0-125			1.79		20
(T) Barium-133		*76.6*			*64.9*	*53.9*							

L1655245-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36

Method Blank (MB)

(MB) R3982629-1 10/02/23 11:35

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.00940	U	0.0488	0.0869	
(T) Barium-133	*88.4*		*88.4*		

L1655245-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1655245-02 10/02/23 11:35 • (DUP) R3982629-5 10/02/23 11:35

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	1.21	0.476	0.287		0.157	0.233	0.350		154	1.98	J	20	3
(T) Barium-133	*76.6*				*77.5*	*77.5*							

Laboratory Control Sample (LCS)

(LCS) R3982629-2 10/02/23 11:35

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.01	4.92	98.3	80.0-120	
(T) Barium-133			*65.2*		

L1659083-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-30 10/02/23 11:35 • (MS) R3982629-3 10/02/23 11:35 • (MSD) R3982629-4 10/02/23 11:35

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-226	20.0	0.334	22.3	19.2	110	94.4	1	75.0-125			15.0		20
(T) Barium-133		*65.4*			*73.0*	*83.7*							

Method Blank (MB)

(MB) R3980120-2 10/01/23 08:44

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

L1659083-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-01 10/01/23 09:20 • (DUP) R3980120-3 10/01/23 09:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	290000	290000	1	0.115		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1659083-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-18 10/01/23 12:08 • (DUP) R3980120-4 10/01/23 12:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	428000	433000	1	1.22		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

APPENDIX A:
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 3, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

Method Blank (MB)

(MB) R3980467-1 09/30/23 20:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Fluoride	U		64.0	150
Sulfate	677	J	594	5000

L1659046-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1659046-06 09/30/23 21:07 • (DUP) R3980467-3 09/30/23 21:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	21100	21300	1	0.924		15
Fluoride	696	694	1	0.201		15
Sulfate	17400	17400	1	0.123		15

L1659083-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-05 10/01/23 00:46 • (DUP) R3980467-7 10/01/23 01:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3080	3030	1	1.65		15
Fluoride	114	124	1	8.23	J	15
Sulfate	41500	41500	1	0.235		15

Laboratory Control Sample (LCS)

(LCS) R3980467-2 09/30/23 20:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40000	100	80.0-120	
Fluoride	8000	8270	103	80.0-120	
Sulfate	40000	39800	99.5	80.0-120	

L1659046-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1659046-06 09/30/23 21:07 • (MS) R3980467-4 09/30/23 21:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	21100	58300	92.8	1	80.0-120	
Fluoride	8000	696	8860	102	1	80.0-120	
Sulfate	40000	17400	53900	91.3	1	80.0-120	

L1659083-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-01 09/30/23 22:50 • (MS) R3980467-5 09/30/23 23:03 • (MSD) R3980467-6 09/30/23 23:16

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	40000	204000	205000	206000	3.66	5.25	1	80.0-120	E V	E V	0.309	15
Fluoride	8000	131	7710	8060	94.8	99.1	1	80.0-120			4.38	15
Sulfate	40000	485000	444000	445000	0.000	0.000	1	80.0-120	E V	E V	0.262	15

L1659083-16,17,18

Method Blank (MB)

(MB) R3980449-1 10/01/23 01:37

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

L1659199-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1659199-01 10/01/23 03:19 • (DUP) R3980449-3 10/01/23 03:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	16300	15400	1	5.83		15
Fluoride	92.7	124	1	29.1	J P1	15
Sulfate	5640	5490	1	2.68		15

L1659207-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1659207-02 10/01/23 05:26 • (DUP) R3980449-6 10/01/23 05:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	9110	9030	1	0.865		15
Fluoride	U	68.7	1	200	J P1	15
Sulfate	21700	21500	1	0.698		15

Laboratory Control Sample (LCS)

(LCS) R3980449-2 10/01/23 01:49

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	41300	103	80.0-120	
Fluoride	8000	8480	106	80.0-120	
Sulfate	40000	39400	98.6	80.0-120	

L1659199-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659199-01 10/01/23 03:19 • (MS) R3980449-4 10/01/23 04:10 • (MSD) R3980449-5 10/01/23 04:22

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	40000	16300	51700	52000	88.5	89.3	1	80.0-120			0.604	15
Fluoride	8000	92.7	8050	8050	99.5	99.5	1	80.0-120			0.0683	15
Sulfate	40000	5640	43300	43300	94.1	94.1	1	80.0-120			0.00139	15

L1659207-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1659207-02 10/01/23 05:26 • (MS) R3980449-7 10/01/23 05:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	9110	46700	94.0	1	80.0-120	
Fluoride	8000	U	7820	97.8	1	80.0-120	
Sulfate	40000	21700	56300	86.6	1	80.0-120	

Method Blank (MB)

(MB) R3980424-1 10/02/23 03:37

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

Laboratory Control Sample (LCS)

(LCS) R3980424-2 10/02/23 03:39

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Mercury	3.00	3.06	102	80.0-120	

L1659083-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-01 10/02/23 03:42 • (MS) R3980424-3 10/02/23 03:44 • (MSD) R3980424-4 10/02/23 03:47

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	U	1.72	1.65	57.2	55.1	1	75.0-125	J6	J6	3.65	20

APPENDIX A:
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 3, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

L1659083-1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18

Method Blank (MB)

(MB) R3980490-1 10/02/23 11:26

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

Laboratory Control Sample (LCS)

(LCS) R3980490-2 10/02/23 11:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	2.50	83.3	80.0-120	

L1659083-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-12 10/02/23 11:31 • (MS) R3980490-3 10/02/23 11:33 • (MSD) R3980490-4 10/02/23 11:36

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	2.93	2.84	97.7	94.6	1	75.0-125			3.27	20

Method Blank (MB)

(MB) R3983274-1 10/06/23 16:33

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
Selenium	U		0.300	2.00
Sodium	U		376	2000
Thallium	U		0.121	2.00
Lithium	U		0.695	2.00

Method Blank (MB)

(MB) R3983451-1 10/08/23 11:45

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) R3983274-2 10/06/23 16:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	48.6	97.3	80.0-120	
Arsenic	50.0	51.6	103	80.0-120	
Barium	50.0	48.6	97.1	80.0-120	
Beryllium	50.0	46.9	93.8	80.0-120	
Cadmium	50.0	53.2	106	80.0-120	
Calcium	5000	5030	101	80.0-120	
Chromium	50.0	54.1	108	80.0-120	
Cobalt	50.0	51.7	103	80.0-120	
Lead	50.0	49.5	99.0	80.0-120	
Magnesium	5000	5020	100	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3983274-2 10/06/23 16:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Molybdenum	50.0	50.4	101	80.0-120	
Potassium	5000	5030	101	80.0-120	
Selenium	50.0	54.2	108	80.0-120	
Sodium	5000	5080	102	80.0-120	
Thallium	50.0	48.7	97.3	80.0-120	
Lithium	50.0	44.9	89.8	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3983451-2 10/08/23 11:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	50.0	52.5	105	80.0-120	

L1659083-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-01 10/06/23 16:40 • (MS) R3983274-4 10/06/23 16:47 • (MSD) R3983274-5 10/06/23 16:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	50.0	U	50.2	51.3	100	103	1	75.0-125			2.12	20
Arsenic	50.0	6.02	58.3	58.3	105	105	1	75.0-125			0.0241	20
Barium	50.0	67.6	119	129	103	123	1	75.0-125			8.24	20
Beryllium	50.0	U	45.9	47.3	91.8	94.5	1	75.0-125			2.98	20
Cadmium	50.0	0.327	54.2	54.1	108	107	1	75.0-125			0.307	20
Calcium	5000	181000	188000	190000	122	162	1	75.0-125		V	1.06	20
Chromium	50.0	U	52.5	52.0	105	104	1	75.0-125			0.834	20
Cobalt	50.0	7.70	59.0	58.8	103	102	1	75.0-125			0.444	20
Lead	50.0	1.19	52.0	51.4	102	100	1	75.0-125			1.24	20
Magnesium	5000	112000	116000	118000	87.2	121	1	75.0-125			1.46	20
Molybdenum	50.0	13.4	65.0	66.4	103	106	1	75.0-125			2.07	20
Potassium	5000	5350	10500	10500	102	103	1	75.0-125			0.523	20
Selenium	50.0	U	54.6	54.9	109	110	1	75.0-125			0.549	20
Sodium	5000	45600	50400	50700	96.8	102	1	75.0-125			0.505	20
Thallium	50.0	U	50.9	50.8	102	102	1	75.0-125			0.182	20
Lithium	50.0	8.52	52.3	52.7	87.5	88.3	1	75.0-125			0.743	20

WG2139102

QUALITY CONTROL SUMMARY

L1659083-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

L1659083-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-01 10/08/23 11:51 • (MS) R3983451-4 10/08/23 11:58 • (MSD) R3983451-5 10/08/23 12:02

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	50.0	7040	7440	7310	796	537	5	75.0-125	V	V	1.76	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

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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
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	LAO000356
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 - Cincinnati
862 E. Crescentville Rd.
Cincinnati. OH 45246

Billing Information:
Accounts Payable
smeinc_invoice@concursolutions.com

Report to: **Vince Epps**
Email To: **vepps@smeinc.com**

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

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

Collected by (print): Jamie Bailey
Collected by (signature): JBailey
Immediately Packed on Ice N ____ Y X

Site/Facility ID # **MFS Unit 115 (Plant)**
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

Chain of Custody Page 3 of 3

Pace
PEOPLE ADVANCING SCIENCE
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
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 # L1659063
Table #
Acctnum: **LITEGNTN**
Template:
Prelogin:
PM: **134**
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Pres Chk	Alk Bicarb/Carb 125mlHDPE-NonPres	Ca, Cl, F, S04 125mlHDPE NonPres	CCR Metals 250mlHDPE HNO3	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Remarks	Sample # (lab only)
MW-17	Grab	GW	NA	9/22/23	1010	5			X	X		X	X		-15
MW-19	Grab	GW	NA	9/22/23	900	5			X	X		X	X		-16
DUP-1	Grab	GW	NA	9/22/23	—	5		X	X	X	X		X		-17
DUP-2	Grab	GW	NA	9/22/23	—	5		X	X	X	X		X		-18
Matrix Spike	Grab	GW	NA	9/22/23	1140	5		X	X	X	X	X	X		

Analysis / Container / Preservative

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

Remarks:
CCR Metals: Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____
Tracking #

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

	Date:	Time:		
Relinquished by : (Signature)			Received by: (Signature)	Trip Blank Received: Yes / No (HCL / MeoH TBR)
Relinquished by : (Signature)			Received by: (Signature)	Temp: °C 0.9+0.9 Bottles Received: 9S
Relinquished by : (Signature)			Received for lab by: (Signature) Tiana Mitchell	Date: 9/23/23 Time: 0930

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Company Name/Address: S&ME - Cincinnati
862 E. Crescentville Rd.
Cincinnati. OH 45246

Billing Information: Accounts Payable smeinc_invoice@concursolutions.com

Report to: Vince Epps

Email To: vepps@smeinc.com

Project Description: Miami Fort Station

City/State Collected: North Bend, OH

Please Circle: PT MT CT ET

Phone: 513-771-8471

Client Project # 7217-17-003D

Lab Project # LITEGNTN-MIAMI

Collected by (print): Jamie Bailey

Site/Facility ID # MFS Unit 115 (Plant)

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

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bicarb/Carb 125mlHDPE-NonPres	Ca, Cl, F, S04 125mlHDPE NonPres	CCR Metals 250mlHDPE HNO3	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Remarks	Sample # (lab only)
4A	Grab	GW	NA	9/22/23	1140	5	X	X	X	X	X	X	MS/MSD	-01 -13
A-1 Pond	Grab	GW	NA			e	X			X		X		
B-1 Pond	Grab	GW	NA			e	X			X		X		
MW-01	Grab	GW	NA	9/22/23	1230		X	X	X	X	X	X		-02 -14
MW-02	Grab	GW	NA			e	X	X	X	X	X	X		
MW-03A	Grab	GW	NA				X	X	X	X	X	X		
MW-04	Grab	GW	NA				X	X	X	X	X	X		
MW-4A	Grab	GW	NA				X	X	X	X	X	X		
MW-05	Grab	GW	NA	9/21/23	1300		X	X	X	X	X	X		-03 -19
MW-06	Grab	GW	NA	9/21/23	1405	V	X	X	X	X	X	X		-04 -20

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

Remarks: CCR Metals: Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier __ _____

Tracking #

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: 1.9+0=0.9 °C Bottles Received: 9S

Date: 09.23 Time: 0950

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9/22/23		To FedEx
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hawa Mwechiwa

PH-10BDH4321 TRC-2352362
CR6-20221V
PH-10BDH4321 TRC-2352362

Chain of Custody Page 1 of 3

Pace PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 # L1659083

Table E147

Acctnum: LITEGNTN

Template:

Prelogin:

PM: 134

PB:

Shipped Via:

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

APPENDIX A.
ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - QUARTER 3, 2023
MIAMI FORT POWER PLANT, POND SYSTEM
MFS-257-115

Company Name/Address: **S&ME - Cincinnati**
862 E. Crescentville Rd.
Cincinnati. OH 45246

Billing Information: **Accounts Payable**
smeinc_invoice@concursolutions.com

Report to: **Vince Epps**
Email To: **vepps@smeinc.com**

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

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

Collected by (print): **Jamie Bailey**
Collected by (signature): **J Bailey**
Immediately Packed on Ice N ____ Y ____

Site/Facility ID # **MFS Unit 115 (Plant)**
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

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bicarb/Carb 125mlHDPE-NonPres	Ca, Cl, F, S04 125mlHDPE NonPres	CCR Metals 250mlHDPE HNO3	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Remarks	Sample # (lab only)
MW-07	Grab	GW	NA	9/22/23	1105	5	X	X	X	X	X	X		-05 -21
MW-08	Grab	GW	NA	1335	9/22/23		X	X	X	X	X	X		-06 -22
MW-09	Grab	GW	NA	9/22/23	1435		X	X	X	X	X	X		-07 -23
MW-10	Grab	GW	NA	9/22/23	1530		X	X	X	X	X	X		-08 -24
MW-11	Grab	GW	NA	9/22/23	1200		X	X	X	X	X	X		-09 -25
MW-12	Grab	GW	NA	9/22/23	1310		X	X	X	X	X	X		-10 -26
MW-13	Grab	GW	NA	9/22/23	1555		X	X	X	X	X	X		-11 -27
MW-14	Grab	GW	NA	9/22/23	1435		X	X	X	X	X	X		-12 -28
MW-15	Grab	GW	NA	9/2/23	1625	5	X	X	X	X	X	X		-13 -29
MW-16	Grab	GW	NA	9/2/23	1530		X	X	X	X	X	X		-14 -30

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

Remarks:
CCR Metals: Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____
Tracking #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hang Mwe Ching

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C 0.6+0.3-0.9
Bottles Received: 95

Date: 9/23 Time: 0900

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

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 2 of 3

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

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 # L1659103
Table #
Acctnum: LITEGNTN
Template:
Prelogin:
PM: 134
PB:
Shipped Via:

Pace Analytical®

ANALYTICAL REPORT

October 16, 2023

S&ME - Nashville, TN

Sample Delivery Group:	L1660383
Samples Received:	09/27/2023
Project Number:	7217-17-003D
Description:	Miami Fort Station - North Bend, OH

Report To: Vince Epps
862 East Crescentville Road
Cincinnati, OH 45246

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

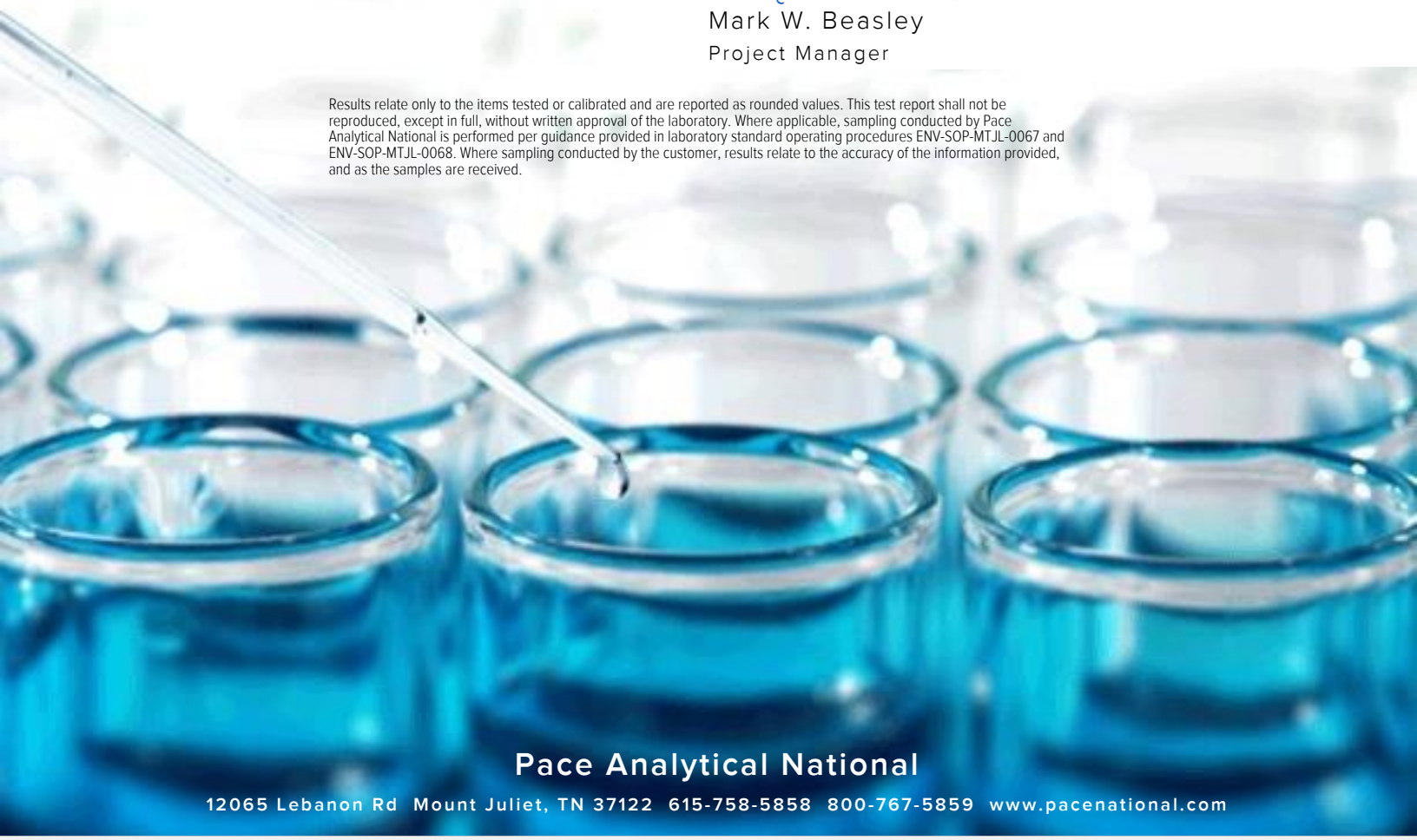


TABLE OF CONTENTS

SAMPLE SUMMARY

A-1 POND L1660383-01 GW

Collected by: Jamie Bailey | Collected date/time: 09/25/23 14:00 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2142028	1	10/01/23 15:18	10/01/23 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2142719	1	10/03/23 09:56	10/03/23 09:56	BJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	1	10/04/23 13:33	10/11/23 20:27	LD	Mt. Juliet, TN

B-1 POND L1660383-02 GW

Collected by: Jamie Bailey | Collected date/time: 09/25/23 13:45 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2142028	1	10/01/23 15:18	10/01/23 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2143265	1	10/02/23 16:06	10/02/23 16:06	BJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	1	10/04/23 13:33	10/11/23 20:31	LD	Mt. Juliet, TN

MW-02 L1660383-03 GW

Collected by: Jamie Bailey | Collected date/time: 09/25/23 10:40 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2142028	1	10/01/23 15:18	10/01/23 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2143838	1	10/03/23 13:03	10/03/23 13:03	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142547	1	10/02/23 17:01	10/02/23 17:01	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2141296	1	10/02/23 15:47	10/03/23 15:00	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	1	10/04/23 13:33	10/11/23 20:34	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	10	10/04/23 13:33	10/11/23 18:28	JPD	Mt. Juliet, TN

MW-03A L1660383-04 GW

Collected by: Jamie Bailey | Collected date/time: 09/25/23 12:05 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2142028	1	10/01/23 15:18	10/01/23 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2143838	1	10/03/23 13:32	10/03/23 13:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142547	1	10/02/23 17:39	10/02/23 17:39	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2141296	1	10/02/23 15:47	10/03/23 15:03	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	1	10/04/23 13:33	10/11/23 20:37	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	10	10/04/23 13:33	10/11/23 18:31	JPD	Mt. Juliet, TN

MW-04 L1660383-05 GW

Collected by: Jamie Bailey | Collected date/time: 09/25/23 13:05 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2142028	1	10/01/23 15:18	10/01/23 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2143838	1	10/03/23 13:39	10/03/23 13:39	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142547	1	10/02/23 17:52	10/02/23 17:52	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142547	10	10/02/23 18:04	10/02/23 18:04	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2141296	1	10/02/23 15:50	10/03/23 15:05	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	1	10/04/23 13:33	10/11/23 20:40	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	10	10/04/23 13:33	10/11/23 18:53	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-4A L1660383-06 GW

Collected by: Jamie Bailey | Collected date/time: 09/25/23 16:00 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2142028	1	10/01/23 15:18	10/01/23 16:34	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2143838	1	10/03/23 13:45	10/03/23 13:45	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2142547	1	10/02/23 18:17	10/02/23 18:17	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2141296	1	10/02/23 15:50	10/03/23 15:07	AKB	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	1	10/04/23 13:33	10/11/23 20:44	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2141496	10	10/04/23 13:33	10/11/23 18:57	JPD	Mt. Juliet, TN

MW-02 L1660383-07 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/25/23 10:40 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2143078	1	10/02/23 10:49	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2143078	1	10/02/23 10:49	10/04/23 11:06	RGT	Mt. Juliet, TN

MW-03A L1660383-08 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/25/23 12:05 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2143078	1	10/02/23 10:49	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2143078	1	10/02/23 10:49	10/04/23 11:06	RGT	Mt. Juliet, TN

MW-04 L1660383-09 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/25/23 13:05 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2143078	1	10/02/23 10:49	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2143078	1	10/02/23 10:49	10/04/23 11:06	RGT	Mt. Juliet, TN

MW-4A L1660383-10 Non-Potable Water

Collected by: Jamie Bailey | Collected date/time: 09/25/23 16:00 | Received date/time: 09/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2142522	1	09/30/23 15:30	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2143078	1	10/02/23 10:49	10/05/23 20:07	DDD	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2143078	1	10/02/23 10:49	10/04/23 11:06	RGT	Mt. Juliet, TN

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	328000		10000	1	10/01/2023 16:34	WG2142028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	81100		8450	20000	1	10/03/2023 09:56	WG2142719
Alkalinity,Carbonate	U		8450	20000	1	10/03/2023 09:56	WG2142719

Sample Narrative:

L1660383-01 WG2142719: Endpoint pH 4.5 Headspace

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Magnesium	23700		73.5	1000	1	10/11/2023 20:27	WG2141496
Potassium	3730		108	2000	1	10/11/2023 20:27	WG2141496
Sodium	30300		376	2000	1	10/11/2023 20:27	WG2141496

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	671000		10000	1	10/01/2023 16:34	WG2142028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	102000		8450	20000	1	10/02/2023 16:06	WG2143265
Alkalinity,Carbonate	16700	J	8450	20000	1	10/02/2023 16:06	WG2143265

Sample Narrative:

L1660383-02 WG2143265: Endpoint pH 4.5 Headspace

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Magnesium	55500		73.5	1000	1	10/11/2023 20:31	WG2141496
Potassium	4780		108	2000	1	10/11/2023 20:31	WG2141496
Sodium	39000		376	2000	1	10/11/2023 20:31	WG2141496

SAMPLE RESULTS - 03

MW-02

Collected date/time: 09/25/23 10:40 L1660383

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	573000		13300	1	10/01/2023 16:34	WG2142028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	584000		8450	20000	1	10/03/2023 13:03	WG2143838
Alkalinity,Carbonate	U		8450	20000	1	10/03/2023 13:03	WG2143838

Sample Narrative:

L1660383-03 WG2143838: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	33200		379	1000	1	10/02/2023 17:01	WG2142547
Fluoride	75.8	J	64.0	150	1	10/02/2023 17:01	WG2142547
Sulfate	10900		594	5000	1	10/02/2023 17:01	WG2142547

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/03/2023 15:00	WG2141296

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/11/2023 20:34	WG2141496
Arsenic	34.4		0.180	2.00	1	10/11/2023 20:34	WG2141496
Barium	439		0.381	2.00	1	10/11/2023 20:34	WG2141496
Beryllium	U		0.190	2.00	1	10/11/2023 20:34	WG2141496
Boron	542		96.3	300	10	10/11/2023 18:28	WG2141496
Cadmium	U		0.150	1.00	1	10/11/2023 20:34	WG2141496
Calcium	131000		93.6	1000	1	10/11/2023 20:34	WG2141496
Chromium	U		1.24	2.00	1	10/11/2023 20:34	WG2141496
Cobalt	0.302	J	0.0596	2.00	1	10/11/2023 20:34	WG2141496
Lead	U		0.849	2.00	1	10/11/2023 20:34	WG2141496
Magnesium	55200		73.5	1000	1	10/11/2023 20:34	WG2141496
Molybdenum	0.462	J	0.348	5.00	1	10/11/2023 20:34	WG2141496
Potassium	846	J	108	2000	1	10/11/2023 20:34	WG2141496
Selenium	U		0.300	2.00	1	10/11/2023 20:34	WG2141496
Sodium	18300		376	2000	1	10/11/2023 20:34	WG2141496
Thallium	U		0.121	2.00	1	10/11/2023 20:34	WG2141496
Lithium	0.761	J	0.695	2.00	1	10/11/2023 20:34	WG2141496

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	213000		10000	1	10/01/2023 16:34	WG2142028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	199000		8450	20000	1	10/03/2023 13:32	WG2143838
Alkalinity,Carbonate	U		8450	20000	1	10/03/2023 13:32	WG2143838

Sample Narrative:

L1660383-04 WG2143838: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	23200		379	1000	1	10/02/2023 17:39	WG2142547
Fluoride	120	J	64.0	150	1	10/02/2023 17:39	WG2142547
Sulfate	2960	J	594	5000	1	10/02/2023 17:39	WG2142547

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/03/2023 15:03	WG2141296

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/11/2023 20:37	WG2141496
Arsenic	9.77		0.180	2.00	1	10/11/2023 20:37	WG2141496
Barium	114		0.381	2.00	1	10/11/2023 20:37	WG2141496
Beryllium	U		0.190	2.00	1	10/11/2023 20:37	WG2141496
Boron	116	J	96.3	300	10	10/11/2023 18:31	WG2141496
Cadmium	U		0.150	1.00	1	10/11/2023 20:37	WG2141496
Calcium	48200		93.6	1000	1	10/11/2023 20:37	WG2141496
Chromium	U		1.24	2.00	1	10/11/2023 20:37	WG2141496
Cobalt	0.0611	J	0.0596	2.00	1	10/11/2023 20:37	WG2141496
Lead	U		0.849	2.00	1	10/11/2023 20:37	WG2141496
Magnesium	12400		73.5	1000	1	10/11/2023 20:37	WG2141496
Molybdenum	0.835	J	0.348	5.00	1	10/11/2023 20:37	WG2141496
Potassium	2070		108	2000	1	10/11/2023 20:37	WG2141496
Selenium	U		0.300	2.00	1	10/11/2023 20:37	WG2141496
Sodium	19300		376	2000	1	10/11/2023 20:37	WG2141496
Thallium	U		0.121	2.00	1	10/11/2023 20:37	WG2141496
Lithium	1.04	J	0.695	2.00	1	10/11/2023 20:37	WG2141496

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1260000		20000	1	10/01/2023 16:34	WG2142028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	131000		8450	20000	1	10/03/2023 13:39	WG2143838
Alkalinity,Carbonate	U		8450	20000	1	10/03/2023 13:39	WG2143838

Sample Narrative:

L1660383-05 WG2143838: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	26000		379	1000	1	10/02/2023 17:52	WG2142547
Fluoride	81.8	J	64.0	150	1	10/02/2023 17:52	WG2142547
Sulfate	858000		5940	50000	10	10/02/2023 18:04	WG2142547

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/03/2023 15:05	WG2141296

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/11/2023 20:40	WG2141496
Arsenic	1.65	J	0.180	2.00	1	10/11/2023 20:40	WG2141496
Barium	15.8		0.381	2.00	1	10/11/2023 20:40	WG2141496
Beryllium	U		0.190	2.00	1	10/11/2023 20:40	WG2141496
Boron	391		96.3	300	10	10/11/2023 18:53	WG2141496
Cadmium	0.726	J	0.150	1.00	1	10/11/2023 20:40	WG2141496
Calcium	255000		93.6	1000	1	10/11/2023 20:40	WG2141496
Chromium	1.49	J	1.24	2.00	1	10/11/2023 20:40	WG2141496
Cobalt	11.4		0.0596	2.00	1	10/11/2023 20:40	WG2141496
Lead	1.14	B J	0.849	2.00	1	10/11/2023 20:40	WG2141496
Magnesium	76900		73.5	1000	1	10/11/2023 20:40	WG2141496
Molybdenum	0.899	J	0.348	5.00	1	10/11/2023 20:40	WG2141496
Potassium	1090	J	108	2000	1	10/11/2023 20:40	WG2141496
Selenium	U		0.300	2.00	1	10/11/2023 20:40	WG2141496
Sodium	23900		376	2000	1	10/11/2023 20:40	WG2141496
Thallium	U		0.121	2.00	1	10/11/2023 20:40	WG2141496
Lithium	4.11		0.695	2.00	1	10/11/2023 20:40	WG2141496

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	630000		20000	1	10/01/2023 16:34	WG2142028

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity,Bicarbonate	420000		8450	20000	1	10/03/2023 13:45	WG2143838
Alkalinity,Carbonate	U		8450	20000	1	10/03/2023 13:45	WG2143838

Sample Narrative:

L1660383-06 WG2143838: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	92700	J6	379	1000	1	10/02/2023 18:17	WG2142547
Fluoride	U		64.0	150	1	10/02/2023 18:17	WG2142547
Sulfate	136000	J6	594	5000	1	10/02/2023 18:17	WG2142547

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	U		0.100	0.200	1	10/03/2023 15:07	WG2141296

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Antimony	U		1.03	4.00	1	10/11/2023 20:44	WG2141496
Arsenic	0.738	J	0.180	2.00	1	10/11/2023 20:44	WG2141496
Barium	99.8		0.381	2.00	1	10/11/2023 20:44	WG2141496
Beryllium	U		0.190	2.00	1	10/11/2023 20:44	WG2141496
Boron	182	J	96.3	300	10	10/11/2023 18:57	WG2141496
Cadmium	U		0.150	1.00	1	10/11/2023 20:44	WG2141496
Calcium	151000		93.6	1000	1	10/11/2023 20:44	WG2141496
Chromium	U		1.24	2.00	1	10/11/2023 20:44	WG2141496
Cobalt	0.334	J	0.0596	2.00	1	10/11/2023 20:44	WG2141496
Lead	3.90	B	0.849	2.00	1	10/11/2023 20:44	WG2141496
Magnesium	39000		73.5	1000	1	10/11/2023 20:44	WG2141496
Molybdenum	2.69	J	0.348	5.00	1	10/11/2023 20:44	WG2141496
Potassium	7570		108	2000	1	10/11/2023 20:44	WG2141496
Selenium	0.379	J	0.300	2.00	1	10/11/2023 20:44	WG2141496
Sodium	44000		376	2000	1	10/11/2023 20:44	WG2141496
Thallium	U		0.121	2.00	1	10/11/2023 20:44	WG2141496
Lithium	12.4		0.695	2.00	1	10/11/2023 20:44	WG2141496

MW-02

SAMPLE RESULTS - 07

Collected date/time: 09/25/23 10:40

L1660383

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.115	U	0.280	0.519	10/05/2023 20:07	WG2142522
(T) Barium	*117*			*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*90.2*			*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.766		0.410	0.554	10/05/2023 20:07	WG2143078

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.651		0.299	0.194	10/04/2023 11:06	WG2143078
(T) Barium-133	*106*			*30.0-143*	*10/04/2023 11:06*	WG2143078

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.857		0.274	0.486	10/05/2023 20:07	WG2142522
(T) Barium	*120*			*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*103*			*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.22		0.454	0.676	10/05/2023 20:07	WG2143078

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.361	J	0.362	0.470	10/04/2023 11:06	WG2143078
(T) Barium-133	*69.3*			*30.0-143*	*10/04/2023 11:06*	WG2143078

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.806		0.283	0.504	10/05/2023 20:07	WG2142522
(T) Barium	*109*			*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*98.6*			*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.955		0.358	0.602	10/05/2023 20:07	WG2143078

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.148	J	0.219	0.329	10/04/2023 11:06	WG2143078
(T) Barium-133	*87.9*			*30.0-143*	*10/04/2023 11:06*	WG2143078

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.30		0.282	0.489	10/05/2023 20:07	WG2142522
(T) Barium	*104*			*30.0-143*	*10/05/2023 20:07*	WG2142522
(T) Yttrium	*118*			*30.0-136*	*10/05/2023 20:07*	WG2142522

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.42		0.328	0.546	10/05/2023 20:07	WG2143078

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.125	J	0.167	0.242	10/04/2023 11:06	WG2143078
(T) Barium-133	*98.0*			*30.0-143*	*10/04/2023 11:06*	WG2143078

Method Blank (MB)

(MB) R3980643-1 10/01/23 16:34

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

L1658605-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1658605-07 10/01/23 16:34 • (DUP) R3980643-3 10/01/23 16:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1400000	1390000	1	1.08		5

L1660383-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1660383-01 10/01/23 16:34 • (DUP) R3980643-4 10/01/23 16:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	328000	332000	1	1.21		5

Laboratory Control Sample (LCS)

(LCS) R3980643-2 10/01/23 16:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800000	8310000	94.4	77.3-123	

Method Blank (MB)

(MB) R3985039-1 10/05/23 20:07

Analyte	MB Result	MB Qualifier	MB Uncertainty	MB MDA
	pCi/l		+ / -	pCi/l
Radium-228	-0.249	U	0.233	0.444
(T) Barium	*123*		*123*	
(T) Yttrium	*72.7*		*72.7*	

L1659083-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1659083-29 10/05/23 20:07 • (DUP) R3985039-5 10/05/23 20:07

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-228	1.26	0.351	0.616	1.38	0.373	0.652	1	9.17	0.236		20	3
(T) Barium	*121*			*124*	*124*							
(T) Yttrium	*88.6*			*83.0*	*83.0*							

Laboratory Control Sample (LCS)

(LCS) R3985039-2 10/05/23 20:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.90	98.0	80.0-120	
(T) Barium			*118*		
(T) Yttrium			*100*		

L1659083-34 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659083-34 10/05/23 20:07 • (MS) R3985039-3 10/05/23 20:07 • (MSD) R3985039-4 10/05/23 20:07

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-228	16.7	0.827	16.6	17.2	94.5	98.0	1	70.0-130			3.49		20
(T) Barium		*130*			*116*	*118*							
(T) Yttrium		*100*			*119*	*107*							

Method Blank (MB)

(MB) R3981952-1 10/04/23 11:06

Analyte	MB Result pCi/l	MB Qualifier	MB Uncertainty + / - pCi/l	MB MDA pCi/l
Radium-226	0.00378	U	0.0351	0.0714
(T) Barium-133	*91.4*		*91.4*	

L1657556-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1657556-19 10/04/23 11:06 • (DUP) R3981952-5 10/04/23 11:06

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	0.0748	0.0841	0.111	0.0374	0.264	0.442	1	66.8	0.135	U	20	3
(T) Barium-133	*106*			*80.8*	*80.8*							

Laboratory Control Sample (LCS)

(LCS) R3981952-2 10/04/23 11:06

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.01	4.64	92.6	80.0-120	
(T) Barium-133			*59.6*		

L1660383-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1660383-10 10/04/23 11:06 • (MS) R3981952-3 10/04/23 11:06 • (MSD) R3981952-4 10/04/23 11:06

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	0.125	16.4	18.1	81.5	89.9	1	75.0-125			9.67		20
(T) Barium-133		*98.0*			*84.4*	*88.5*							

Method Blank (MB)

(MB) R3981066-2 10/03/23 08:33

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

L1660803-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1660803-01 10/03/23 10:27 • (DUP) R3981066-3 10/03/23 10:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	265000	263000	1	0.918		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1659935-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1659935-01 10/03/23 08:48 • (DUP) R3981066-4 10/03/23 10:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	462000	462000	1	0.0121		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) R3980787-2 10/02/23 14:32

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

L1660341-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1660341-02 10/02/23 14:47 • (DUP) R3980787-3 10/02/23 14:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	1270000	1240000	1	2.23		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1660349-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1660349-01 10/02/23 16:20 • (DUP) R3980787-4 10/02/23 16:24

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	1480000	1480000	1	0.139		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3981584-2 10/03/23 12:53

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

L1660383-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1660383-03 10/03/23 13:03 • (DUP) R3981584-3 10/03/23 13:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	584000	586000	1	0.280		20
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1661303-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1661303-01 10/03/23 15:12 • (DUP) R3981584-4 10/03/23 15:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity,Bicarbonate	151000	153000	1	1.62		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) R3981038-1 10/02/23 10:14

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

L1659876-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1659876-05 10/02/23 12:59 • (DUP) R3981038-3 10/02/23 13:12

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	156000	156000	1	0.300		15
Fluoride	270	272	1	0.627		15
Sulfate	40400	40300	1	0.189		15

L1660383-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1660383-06 10/02/23 18:17 • (DUP) R3981038-6 10/02/23 18:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	92700	93400	1	0.697		15
Fluoride	U	U	1	0.000		15
Sulfate	136000	137000	1	0.564		15

Laboratory Control Sample (LCS)

(LCS) R3981038-2 10/02/23 10:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39000	97.4	80.0-120	
Fluoride	8000	7970	99.6	80.0-120	
Sulfate	40000	43900	110	80.0-120	

L1659876-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1659876-05 10/02/23 12:59 • (MS) R3981038-4 10/02/23 13:24 • (MSD) R3981038-5 10/02/23 13:37

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	40000	156000	169000	171000	34.3	38.3	1	80.0-120	J6	J6	0.938	15
Fluoride	8000	270	8220	8290	99.3	100	1	80.0-120			0.871	15
Sulfate	40000	40400	72800	73500	80.9	82.6	1	80.0-120			0.923	15

L1660383-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1660383-06 10/02/23 18:17 • (MS) R3981038-7 10/02/23 18:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	92700	114000	53.6	1	80.0-120	J6
Fluoride	8000	U	7700	96.3	1	80.0-120	
Sulfate	40000	136000	150000	33.6	1	80.0-120	J6

Method Blank (MB)

(MB) R3981209-1 10/03/23 14:16

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

Laboratory Control Sample (LCS)

(LCS) R3981209-2 10/03/23 14:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	3.00	2.71	90.2	80.0-120	

L1660391-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1660391-04 10/03/23 14:21 • (MS) R3981209-3 10/03/23 14:23 • (MSD) R3981209-4 10/03/23 14:33

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 %
Mercury	3.00	U	2.97	2.70	99.0	90.0	1	75.0-125			9.52	20

Method Blank (MB)

(MB) R3985020-1 10/11/23 18:01

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	0.991	J	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	1.46	J	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

Laboratory Control Sample (LCS)

(LCS) R3985020-2 10/11/23 18:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	48.0	96.0	80.0-120	
Arsenic	50.0	46.6	93.2	80.0-120	
Barium	50.0	43.8	87.5	80.0-120	
Beryllium	50.0	46.2	92.4	80.0-120	
Boron	50.0	52.3	105	80.0-120	
Cadmium	50.0	48.4	96.8	80.0-120	
Calcium	5000	4660	93.1	80.0-120	
Chromium	50.0	48.5	97.0	80.0-120	
Cobalt	50.0	48.4	96.8	80.0-120	
Lead	50.0	48.4	96.9	80.0-120	
Magnesium	5000	4780	95.6	80.0-120	
Molybdenum	50.0	49.4	98.9	80.0-120	
Potassium	5000	4710	94.3	80.0-120	
Selenium	50.0	50.3	101	80.0-120	
Sodium	5000	4780	95.6	80.0-120	
Thallium	50.0	48.8	97.6	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3985020-2 10/11/23 18:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lithium	50.0	47.4	94.7	80.0-120	

L1660391-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1660391-04 10/11/23 18:50 • (MS) R3985020-4 10/11/23 18:15 • (MSD) R3985020-5 10/11/23 18:18

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	48.8	51.2	97.6	102	1	75.0-125			4.81	20
Arsenic	50.0	3.41	52.6	53.5	98.4	100	1	75.0-125			1.62	20
Barium	50.0	36.1	85.0	84.1	97.8	95.9	1	75.0-125			1.09	20
Beryllium	50.0	U	45.4	46.0	90.8	92.0	1	75.0-125			1.27	20
Boron	50.0	295	349	340	109	90.8	1	75.0-125	E	E	2.63	20
Cadmium	50.0	0.323	49.3	52.2	98.0	104	1	75.0-125			5.63	20
Calcium	5000	147000	148000	147000	30.4	17.6	1	75.0-125	V	V	0.436	20
Chromium	50.0	1.67	49.9	50.7	96.6	98.1	1	75.0-125			1.52	20
Cobalt	50.0	4.76	53.7	54.2	97.8	99.0	1	75.0-125			1.05	20
Lead	50.0	U	49.6	50.0	99.1	100	1	75.0-125			0.850	20
Magnesium	5000	42700	48300	46400	112	74.8	1	75.0-125		V	3.90	20
Molybdenum	50.0	U	51.8	51.7	104	103	1	75.0-125			0.113	20
Potassium	5000	27900	31900	31000	79.7	62.0	1	75.0-125		V	2.81	20
Selenium	50.0	U	51.9	53.7	104	107	1	75.0-125			3.32	20
Sodium	5000	413000	421000	420000	148	137	1	75.0-125	V	V	0.141	20
Thallium	50.0	U	48.7	51.2	97.4	102	1	75.0-125			4.99	20
Lithium	50.0	51.9	98.0	96.5	92.1	89.3	1	75.0-125			1.45	20

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

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.
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	LAO000356
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 - Cincinnati
[illegible] Crescentville Rd.
Cincinnati. OH 45246

Billing Information:
Accounts Payable
smeinc_invoice@concursolutions.com

Report to: Vince Epps
Email To: vepps@smeinc.com

Project Description: Miami Fort Station
City/State Collected: North Bend, OH
Please Circle: PT MT CT ET

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

Collected by (print): Jamie Bailey
Site/Facility ID #: MFS Unit 115 (Plant)
P.O. #:

Collected by (signature): J E Bailey
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:

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace® PEOPLE ADVANCING SCIENCE
12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

SDG # L1660383
D040
Acctnum: LITEGNTN
Template:
Prelogin:
PM: 134
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Alk Bicarb/Carb 125mlHDPE-NonPres	Ca, Cl, F, SO4 125mlHDPE NonPres	CCR Metals 250mlHDPE HNO3	K, Na, Mg 250mlHDPE-HNO3	RA-226/228COMB 1L-HPE-HNO3	TDS 250mlHDPE-NonPres	Remarks	Sample # (lab only)
~~4A~~	Grab	GW	NA				X	X	X	X	X	X JB		
A-1 Pond	Grab	GW	NA	9/25/23	1400		X			X		X		-01
B-1 Pond	Grab	GW	NA	9/25/23	1345		X			X		X		-02
~~MW-01~~	Grab	GW	NA				X	X	X	X	X	X JB		
MW-02	Grab	GW	NA	9/25/23	1040	5	X	X	X	X	X	X		-03, -07
MW-03A	Grab	GW	NA	9/25/23	1205	5	X	X	X	X	X	X		-04, -08
MW-04	Grab	GW	NA	9/25/23	1305	5	X	X	X	X	X	X		-05, -09
MW-4A	Grab	GW	NA	9/25/23	1600		X	X	X	X	X	X		-06, -10
~~MW-05~~	Grab	GW	NA				X	X	X	X	X	X JB		
~~MW-06~~	Grab	GW	NA				X	X	X	X	X	X JB		

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

Remarks:
CCR Metals: Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Pb, Li, Hg, Mo, Se, Tl

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS X FedEx __ Courier ______

Tracking # 664343030387

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)	Date:	Time:	Received by: (Signature)	
Jamie E Bailey	9/26/23	1400	FedEX	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 5.1+0=5.1 Bottles Received: 26
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Alexa Mitchell	Date: 9/27/23 Time: 0900

If preservation required by Login: Date/Time
PH-10BDH4321 TRC-2352362
CR6-20221V
PH-10BDH4321 TRC-2352362
CR6-20221V

Hold:
Condition: NCF / OK

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 21, 2023
Source Well:	4A	Purge Time:	#VALUE! Minutes
Locked?:	No	Sample Date:	September 22, 2023
Sampled By:	CJH & AKL	Sample Time:	11:40
Weather:	Overcast	Air Temp:	80F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:					ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:		End Time:	11:35	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:			#VALUE!	Gallons	MS/MSD, production well. Well pump ran for			
Final Volume Purge Rate:			#N/A	mL/min	24 hours prior to sampling.			
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
		0.0	---	---	---	---	---	---	---	---	Start Purging
	11:35	#VALUE!	N/A	N/A	20.4	7.1	1.975	1.9	72	18.7	
Final:	11:35	#VALUE!	#N/A	#N/A	20.4	7.1	1.975	1.9	72	18.7	End of Purging

Sample Method: Bladder Pump Sample Start Time: 11:40 Sample End Time: 11:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-01	Purge Time:	20 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	CJH & AKL	Sample Time:	12:30
Weather:	Sunny	Air Temp:	80F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				49.85	ft-TOC
Total Well Depth:				62.76	ft-TOC
Height of Water Column:				12.91	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.1	Gal
3 * Well Volume	6.32	Gal
5 * Well Volume	10.53	Gal

Well Purging Information

Purge Method:	Bladder Pump	Start Time:	12:05	End Time:	12:25		
(If Used) Bladder Pump Control Settings:	On (sec): 3.5	Off (sec):	3.5	Pressure:	100	psi	
Pump Intake Depth from Top of Casing:		ft-TOC					
Water Column Above Pump Intake:		feet	Flow Through Cell Vol:		200	mL	
DTW-TOC at 25% Drawdown of WC Above Pump:		ft-TOC	**Comments:**				
Final Volume Purged:	1.1	Gallons					
Final Volume Purge Rate:	200	mL/min					
Well Purged Dry?:	No	(Yes/No)					

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	12:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:10	0.3	200	49.88	28.0	7.1	0.959	2.6	75	4.20	Clear, no odor
	12:15	0.5	200	49.89	30.5	7.0	0.978	0.7	60	0.90	Clear, no odor
	12:20	0.8	200	49.82	30.8	7.0	0.975	0.5	54	0.50	Clear, no odor
	12:25	1.1	200	48.88	30.7	7.0	0.972	0.3	46	0.30	Clear, no odor
Final:	12:25	1.1	200	48.88	30.7	7.0	0.972	0.3	46	0.3	End of Purging

Sample Method: Bladder Pump Sample Start Time: 12:30 Sample End Time: 12:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 25, 2023
Source Well:	MW-02	Purge Time:	60 Minutes
Locked?:	Yes	Sample Date:	September 25, 2023
Sampled By:	JEB;CR	Sample Time:	10:40
Weather:	Mostly sunny; 65	Air Temp:	

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				19.33	ft-TOC
Total Well Depth:				39.96	ft-TOC
Height of Water Column:				20.63	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.4	Gal
3 * Well Volume	10.10	Gal
5 * Well Volume	16.83	Gal

Well Purging Information

Purge Method:	Bladder Pump	Start Time:	9:35	End Time:	10:35		
(If Used) Bladder Pump Control Settings:	On (sec): 3.5	Off (sec):	3.5	Pressure:	100	psi	
Pump Intake Depth from Top of Casing:		ft-TOC					
Water Column Above Pump Intake:		feet	Flow Through Cell Vol:		200	mL	
DTW-TOC at 25% Drawdown of WC Above Pump:		ft-TOC	**Comments:**				
Final Volume Purged:	1.6	Gallons	YSI ProQuattro B22670B				
Final Volume Purge Rate:	100	mL/min	2100 Turbidmeter B22917B. Well parameters				
Well Purged Dry?:	No	(Yes/No)	did not stablize within one hour.				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:40	0.1	100	20.75	15.3	6.8	1.205	0.2	-126	51.1	
	09:50	0.4	100	21.05	15.7	6.8	1.201	0.2	-126	35.1	
	09:55	0.5	100	21.06	15.9	6.8	1.202	0.2	-122	30.1	
	10:00	0.7	100	21.06	16.0	6.8	1.198	0.2	-120	29.8	
	10:05	0.8	100	21.06	16.5	6.8	1.197	0.2	-120	37.4	
	10:10	0.9	100	21.06	16.6	6.8	1.195	0.8	-120	39.3	
	10:15	1.1	100	21.06	16.5	6.8	1.186	0.6	-120	41.3	
	10:20	1.2	100	21.04	16.3	6.8	1.175	0.5	-119	45.4	
	10:25	1.3	100	21.04	16.1	6.8	1.164	0.8	-119	41.1	
	10:30	1.5	100	21.04	16.2	6.8	1.160	1.1	-119	38.1	
	10:35	1.6	100	21.04	16.0	6.8	1.159	0.9	-118	32.9	
Final:	10:35	1.6	100	21.04	16.0	6.8	1.159	0.9	-118	32.9	End of Purging

Sample Method: Bladder Pump Sample Start Time: 10:40 Sample End Time: 11:05

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 25, 2023
Source Well:	MW-03A	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	September 25, 2023
Sampled By:	JEB;CR	Sample Time:	12:05
Weather:	Mostly sunny; 70	Air Temp:	

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				19.01	ft-TOC
Total Well Depth:				52.04	ft-TOC
Height of Water Column:				33.03	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	5.4	Gal
3 * Well Volume	16.17	Gal
5 * Well Volume	26.95	Gal

Well Purging Information

Purge Method:	Bladder Pump	Start Time:	11:35	End Time:	12:00		
(If Used) Bladder Pump Control Settings:	On (sec): 3.5	Off (sec):	3.5	Pressure:	100	psi	
Pump Intake Depth from Top of Casing:		ft-TOC					
Water Column Above Pump Intake:		feet	Flow Through Cell Vol:		200	mL	
DTW-TOC at 25% Drawdown of WC Above Pump:		ft-TOC	**Comments:**				
Final Volume Purged:	0.8	Gallons	YSI ProQuattro B22670B				
Final Volume Purge Rate:	120	mL/min	2100 Turbidmeter B22917B				
Well Purged Dry?:	No	(Yes/No)					

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:40	0.2	120	19.05	17.0	7.2	0.448	0.1	-91	7.30	
	11:45	0.3	120	19.05	16.8	7.2	0.440	0.0	-112	4.20	
	11:50	0.5	120	19.05	16.7	7.2	0.446	0.0	-121	2.50	
	11:55	0.6	120	19.05	16.7	7.3	0.446	0.0	-129	1.10	
	12:00	0.8	120	19.05	16.7	7.3	0.444	-0.1	-135	1.00	
Final:	12:00	0.8	120	19.05	16.7	7.3	0.444	-0.1	-135	1.0	End of Purging

Sample Method: Bladder Pump Sample Start Time: 12:05 Sample End Time:

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 25, 2023
Source Well:	MW-04	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	September 25, 2023
Sampled By:	JEB; CR	Sample Time:	13:05
Weather:	Sunny; 75	Air Temp:	

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				23.72	ft-TOC
Total Well Depth:				45.00	ft-TOC
Height of Water Column:				21.28	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.5	Gal
3 * Well Volume	10.42	Gal
5 * Well Volume	17.36	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	12:30	End Time:	13:05	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:		0.9		Gallons	YSI ProQuattro B22670B			
Final Volume Purge Rate:		100		mL/min	2100 Turbidmeter B22917B			
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	12:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:35	0.1	100	23.72	18.5	6.8	1.772	2.3	8	10.3	
	12:40	0.3	100	23.72	17.5	6.1	1.964	0.1	58	99.8	
	12:45	0.4	100	23.72	17.2	6.1	1.987	-0.1	66	67.0	
	12:50	0.5	100	23.72	17.3	6.1	1.887	-0.1	65	45.8	
	12:55	0.7	100	23.72	17.3	6.2	1.836	-0.1	60	45.1	
	13:00	0.8	100	23.72	17.4	6.2	1.834	-0.1	58	46.8	
	13:05	0.9	100	23.72	17.4	6.2	1.831	-0.1	55	44.9	
Final:	13:05	0.9	100	23.72	17.4	6.2	1.831	-0.1	55	44.9	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:05 Sample End Time:

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 25, 2023
Source Well:	MW-04A	Purge Time:	60 Minutes
Locked?:	Yes	Sample Date:	September 25, 2023
Sampled By:	JEB;CR	Sample Time:	16:00
Weather:	sunny; 80	Air Temp:	

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				37.56	ft-TOC
Total Well Depth:				68.00	ft-TOC
Height of Water Column:				30.44	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	4	inch
Water Volume	19.9	Gal
3 * Well Volume	59.61	Gal
5 * Well Volume	99.35	Gal

Well Purging Information

Purge Method:	Submersible Pump		Start Time:	15:00	End Time:	16:00	
(If Used) Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:			ft-TOC				
Water Column Above Pump Intake:			feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**			
Final Volume Purged:	3.8		Gallons	YSI ProQuattro B22670B			
Final Volume Purge Rate:	240		mL/min	2100 Turbidmeter B22917B. Well parameters			
Well Purged Dry?:	No		(Yes/No)	did not stabalize in one hour.			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:00	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:05	0.3	240	37.75	19.7	7.8	0.876	9.7	73	0.50	
	15:10	0.6	240	37.75	19.7	7.2	1.062	9.0	72	2.40	
	15:15	1.0	240	37.75	20.0	7.2	1.146	8.6	66	3.40	
	15:20	1.3	240	37.75	19.6	7.1	1.205	5.3	44	4.60	
	15:25	1.6	240	37.75	19.5	7.1	1.239	1.5	55	5.90	
	15:30	1.9	240	37.75	19.9	7.1	1.272	1.2	61	17.6	
	15:35	2.2	240	37.75	19.4	7.1	1.285	1.2	56	6.60	
	15:40	2.5	240	37.75	19.8	7.0	1.297	0.8	54	7.60	
	15:45	2.9	240	37.75	19.8	7.0	1.299	0.8	53	7.40	
	15:55	3.5	240	37.75	20.0	7.0	1.309	0.5	50	8.50	
	16:00	3.8	240	37.75	20.0	7.0	1.314	0.4	48	7.80	
Final:	16:00	3.8	240	37.75	20.0	7.0	1.314	0.4	48	7.8	End of Purging

Sample Method: Submersible Pump Sample Start Time: 16:00 Sample End Time:

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 21, 2023
Source Well:	MW-05	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	September 21, 2023
Sampled By:	CJH & AKL	Sample Time:	13:00
Weather:	Sunny	Air Temp:	76F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				55.90	ft-TOC
Total Well Depth:				75.41	ft-TOC
Height of Water Column:				19.51	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.2	Gal
3 * Well Volume	9.55	Gal
5 * Well Volume	15.92	Gal

Well Purging Information

Purge Method:	Bladder Pump		Start Time:	12:20	End Time:	12:55	
(If Used) Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:			ft-TOC				
Water Column Above Pump Intake:			feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**			
Final Volume Purged:	1.4		Gallons				
Final Volume Purge Rate:	150		mL/min				
Well Purged Dry?:	No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	12:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:25	0.1	100	55.87	19.5	7.0	3.098	6.2	111	18.9	Clear, no odor
	12:30	0.3	100	55.86	19.9	6.9	3.050	2.2	107	25.9	Clear, no odor
	12:35	0.6	250	55.86	20.1	6.8	3.028	1.0	99	17.7	Clear, no odor
	12:40	0.9	200	55.78	20.6	6.8	3.011	0.5	95	14.6	Clear, no odor
	12:45	1.0	100	55.77	20.8	6.8	3.012	0.3	89	11.7	Clear, no odor
	12:50	1.2	150	55.75	21.2	6.8	3.002	0.3	87	8.42	Clear, no odor
	12:55	1.4	150	55.75	20.4	6.8	3.046	0.2	87	8.87	Clear, no odor
Final:	12:55	1.4	150	55.75	20.4	6.8	3.046	0.2	87	8.9	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:00 Sample End Time: 13:20

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 21, 2023
Source Well:	MW-06	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	September 21, 2023
Sampled By:	AKL & CJH	Sample Time:	14:05
Weather:	Sunny	Air Temp:	70F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				53.90	ft-TOC
Total Well Depth:				74.99	ft-TOC
Height of Water Column:				21.09	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.4	Gal
3 * Well Volume	10.32	Gal
5 * Well Volume	17.21	Gal

Well Purging Information

Purge Method:	Bladder Pump		Start Time:	13:30	End Time:	14:05	
(If Used) Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:			ft-TOC				
Water Column Above Pump Intake:			feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**			
Final Volume Purged:	1.8		Gallons				
Final Volume Purge Rate:	200		mL/min				
Well Purged Dry?:	No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:35	0.3	200	53.91	18.7	7.4	2.608	3.0	-31	12.0	Clear, no odor
	13:40	0.5	200	53.91	18.2	7.3	1.569	0.8	-105	7.87	Clear, no odor
	13:45	0.8	200	53.91	18.4	7.3	1.284	0.3	-123	5.75	Clear, no odor
	13:50	1.1	200	53.91	18.6	7.3	1.198	0.2	-129	3.22	Clear, no odor
	13:55	1.3	200	53.91	18.0	7.3	1.103	0.1	-135	2.68	Clear, no odor
	14:01	1.6	200	53.91	17.6	7.3	1.064	0.0	-139	2.27	Clear, no odor
	14:05	1.8	200	53.91	17.3	7.3	1.047	0.0	-142	1.80	Clear, no odor
Final:	14:05	1.8	200	53.91	17.3	7.3	1.047	0.0	-142	1.8	End of Purging

Sample Method: Bladder Pump Sample Start Time: 14:05 Sample End Time: 14:25

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-07	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	CJH & AKL	Sample Time:	11:05
Weather:	Sunny	Air Temp:	75F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				56.07	ft-TOC
Total Well Depth:				64.24	ft-TOC
Height of Water Column:				8.17	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.3	Gal
3 * Well Volume	4.00	Gal
5 * Well Volume	6.67	Gal

Well Purging Information

Purge Method:	Bladder Pump		Start Time:	10:35	End Time:	11:05	
(If Used) Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:			ft-TOC				
Water Column Above Pump Intake:			feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**			
Final Volume Purged:	2.0		Gallons	Turbidimeter not working from 10:35 to 10:55.			
Final Volume Purge Rate:	250		mL/min				
Well Purged Dry?:	No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	10:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	10:40	0.3	250	56.79	15.3	7.0	0.784	6.9	57		Clear, no odor
	10:45	0.7	250	56.80	15.3	6.9	0.785	6.7	64		Clear, no odor
	10:50	1.0	250	56.80	15.3	6.9	0.785	6.8	68		Clear, no odor
	10:55	1.3	250	56.79	15.2	6.9	0.786	6.8	72	2.90	Clear, no odor
	11:00	1.7	250	56.77	15.1	6.9	0.786	6.8	72	1.60	Clear, no odor
	11:05	2.0	250	56.77	15.8	6.9	0.784	6.6	73	0.90	Clear, no odor
Final:	11:05	2.0	250	56.77	15.8	6.9	0.784	6.6	73		End of Purging

Sample Method: Bladder Pump Sample Start Time: 11:05 Sample End Time: 11:25

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-08	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	AKL & CJH	Sample Time:	13:35
Weather:	Sunny	Air Temp:	75F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				39.57	ft-TOC
Total Well Depth:				47.16	ft-TOC
Height of Water Column:				7.59	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.2	Gal
3 * Well Volume	3.72	Gal
5 * Well Volume	6.19	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	13:00	End Time:	13:35	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:		1.8		Gallons				
Final Volume Purge Rate:		200		mL/min				
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:00	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:05	0.3	200	39.58	26.9	7.2	1.261	5.6	73	1.60	Clear, no odor
	13:10	0.5	200	39.61	26.9	7.1	1.256	4.8	78	1.20	Clear, no odor
	13:15	0.8	200	39.57	26.8	7.1	1.235	3.7	79	0.80	Clear, no odor
	13:20	1.1	200	39.60	26.8	7.1	1.228	3.4	82	0.50	Clear, no odor
	13:25	1.3	200	39.59	26.9	7.1	1.209	3.1	78	0.40	Clear, no odor
	13:30	1.6	200	39.59	26.9	7.1	1.209	3.1	78	0.40	Clear, no odor
	13:35	1.8	200	39.59	26.9	7.1	1.204	2.9	78	0.40	Clear, no odor
Final:	13:35	1.8	200	39.59	26.9	7.1	1.204	2.9	78	0.4	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:35 Sample End Time: 13:55

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2002
Source Well:	MW-09	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	CJH & AKL	Sample Time:	14:35
Weather:	Sunny	Air Temp:	85F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				20.02	ft-TOC
Total Well Depth:				29.55	ft-TOC
Height of Water Column:				9.53	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.6	Gal
3 * Well Volume	4.67	Gal
5 * Well Volume	7.78	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	14:00	End Time:	14:30	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet		Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC		**Comments:**		
Final Volume Purged:		2.4		Gallons				
Final Volume Purge Rate:		300		mL/min				
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	14:00	0.0	---	---	---	---	---	---	---	---	Start Purging
	14:05	0.4	300	20.02	25.3	6.9	1.331	0.6	15	8.00	Clear, no odor
	14:10	0.8	300	20.03	25.2	6.9	1.340	1.3	37	4.10	Clear, no odor
	14:15	1.2	300	20.04	25.2	6.9	1.342	0.5	37	2.20	Clear, no odor
	14:20	1.6	300	20.04	25.3	6.9	1.350	0.1	42	1.80	Clear, no odor
	14:25	2.0	300	20.04	25.2	6.9	1.355	0.0	43	1.00	Clear, no odor
	14:30	2.4	300	20.06	25.2	6.9	1.358	0.1	43	1.10	Clear, no odor
Final:	14:30	2.4	300	20.06	25.2	6.9	1.358	0.1	43	1.1	End of Purging

Sample Method: Bladder Pump Sample Start Time: 14:35 Sample End Time: 14:45

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-10	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	AKL & CJH	Sample Time:	15:30
Weather:	Sunny	Air Temp:	80F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				19.69	ft-TOC
Total Well Depth:				29.78	ft-TOC
Height of Water Column:				10.09	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.6	Gal
3 * Well Volume	4.94	Gal
5 * Well Volume	8.23	Gal

Well Purging Information

Purge Method:	Bladder Pump	Start Time:	14:55	End Time:	15:25		
(If Used) Bladder Pump Control Settings:	On (sec): 3.5	Off (sec):	3.5	Pressure:	100	psi	
Pump Intake Depth from Top of Casing:		ft-TOC					
Water Column Above Pump Intake:		feet	Flow Through Cell Vol:		200	mL	
DTW-TOC at 25% Drawdown of WC Above Pump:		ft-TOC	**Comments:**				
Final Volume Purged:	2.0	Gallons					
Final Volume Purge Rate:	300	mL/min					
Well Purged Dry?:	No	(Yes/No)					

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	14:55	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:05	0.5	200	19.71	16.3	7.4	0.531	0.7	-125	33.8	Clear, no odor
	15:10	0.8	200	19.73	16.0	7.4	0.527	0.3	-140	6.50	Clear, no odor
	15:15	1.2	300	19.72	15.9	7.5	0.526	-0.1	-162	2.90	Clear, no odor
	15:20	1.6	300	19.74	16.1	7.5	0.528	-0.1	-172	1.60	Clear, no odor
	15:25	2.0	300	19.74	17.0	7.6	0.526	-0.2	-176	1.20	Clear, no odor
Final:	15:25	2.0	300	19.74	17.0	7.6	0.526	-0.2	-176	1.2	End of Purging

Sample Method: Bladder Pump Sample Start Time: 15:30 Sample End Time: 15:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-11	Purge Time:	35 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	JEB; EF	Sample Time:	12:00
Weather:	Sunny; 80	Air Temp:	

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				20.78	ft-TOC
Total Well Depth:				29.78	ft-TOC
Height of Water Column:				9.00	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.5	Gal
3 * Well Volume	4.41	Gal
5 * Well Volume	7.34	Gal

Well Purging Information

Purge Method:		Bladder Pump		Start Time:	11:20	End Time:	11:55	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:		1.2		Gallons	Used YSI ProQuattro - B22672B			
Final Volume Purge Rate:		125		mL/min	2100P Turbidimeter - B22918B			
Well Purged Dry?:		No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:25	0.2	125	20.77	16.9	7.3	0.465	2.4	194	7.61	
	11:30	0.3	125	20.79	16.5	7.4	0.492	1.0	-50	15.8	
	11:35	0.5	125	20.79	16.5	7.5	0.493	0.8	-103	10.3	
	11:40	0.7	125	20.79	16.4	7.6	0.496	0.5	-126	7.54	
	11:45	0.8	125	20.79	16.3	7.6	0.496	0.5	-136	5.82	
	11:50	1.0	125	20.79	16.6	7.6	0.498	0.4	-143	4.37	
	11:55	1.2	125	20.79	16.7	7.7	0.498	0.5	-145	4.42	
Final:	11:55	1.2	125	20.79	16.7	7.7	0.498	0.5	-145	4.4	End of Purging

Sample Method: Bladder Pump Sample Start Time: 12:00 Sample End Time: 12:20

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-12	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	JEB; EF	Sample Time:	13:10
Weather:	Sunny; 80	Air Temp:	

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				54.56	ft-TOC
Total Well Depth:				65.17	ft-TOC
Height of Water Column:				10.61	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.7	Gal
3 * Well Volume	5.19	Gal
5 * Well Volume	8.66	Gal

Well Purging Information

Purge Method:	Bladder Pump		Start Time:	12:35	End Time:	13:05	
(If Used) Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:			ft-TOC				
Water Column Above Pump Intake:			feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**			
Final Volume Purged:	0.8		Gallons	Used YSI ProQuattro - B22672B			
Final Volume Purge Rate:	100		mL/min	2100P Turbidimeter - B22918B			
Well Purged Dry?:	No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	12:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:40	0.1	100	54.57	21.8	6.7	1.344	5.8	39	2.54	
	12:45	0.3	100	54.57	20.4	5.9	1.334	0.9	126	2.83	
	12:50	0.4	100	54.57	20.2	5.9	1.330	0.5	159	1.79	
	12:55	0.5	100	54.57	19.9	5.9	1.329	0.4	176	2.51	
	13:00	0.7	100	54.57	19.7	5.9	1.328	0.2	185	2.39	
	13:05	0.8	100	54.57	20.9	5.9	1.326	0.4	183	2.64	
Final:	13:05	0.8	100	54.57	20.9	5.9	1.326	0.4	183	2.6	End of Purging

Sample Method: Bladder Pump Sample Start Time: 13:10 Sample End Time: 13:35

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-13	Purge Time:	50 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	JEB: EF	Sample Time:	15:55
Weather:	Sunny	Air Temp:	

Water Level & Well Data

			Measuring Point:	Top of Casing	
			Depth to Water:	26.59	ft-TOC
			Total Well Depth:	34.26	ft-TOC
			Height of Water Column:	7.67	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.3	Gal
3 * Well Volume	3.75	Gal
5 * Well Volume	6.26	Gal

Well Purging Information

	Purge Method:	Bladder Pump		Start Time:	15:05	End Time:	15:55
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
	Pump Intake Depth from Top of Casing:			ft-TOC			
	Water Column Above Pump Intake:			feet	Flow Through Cell Vol:	200	mL
	DTW-TOC at 25% Drawdown of WC Above Pump:			ft-TOC	**Comments:**		
	Final Volume Purged:	1.3		Gallons	Used YSI ProQuattro - B22672B		
	Final Volume Purge Rate:	100		mL/min	2100P Turbidimeter - B22918B		
	Well Purged Dry?:	No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:10	0.1	100	26.53	17.3	7.2	0.410	0.6	-65	324	
	15:15	0.3	100	26.53	17.6	7.4	0.413	0.1	-77	204	
	15:20	0.4	100	26.53	17.4	7.4	0.413	0.0	-110	51.8	
	15:25	0.5	100	26.53	17.7	7.5	0.413	0.1	-121	43.9	
	15:30	0.7	100	26.53	17.6	7.6	0.413	0.0	-124	27.5	
	15:35	0.8	100	26.53	17.6	7.6	0.413	0.0	-130	22.5	
	15:40	0.9	100	26.53	17.5	7.6	0.414	0.0	-139	13.6	
	15:45	1.1	100	26.53	17.4	7.6	0.412	0.0	-142	10.1	
	15:50	1.2	100	26.53	17.6	7.6	0.412	0.0	-145	9.05	
	15:55	1.3	100	26.53	17.6	7.6	0.412	0.0	-151	7.49	
Final:	15:55	1.3	100	26.53	17.6	7.6	0.412	0.0	-151	7.5	End of Purging

Sample Method: Bladder Pump Sample Start Time: 15:55 Sample End Time: 16:20

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-14	Purge Time:	40 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	JEB; EF	Sample Time:	14:35
Weather:	Sunny	Air Temp:	

Water Level & Well Data

			Measuring Point:	Top of Casing	
			Depth to Water:	25.47	ft-TOC
			Total Well Depth:	34.26	ft-TOC
			Height of Water Column:	8.79	feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.4	Gal
3 * Well Volume	4.30	Gal
5 * Well Volume	7.17	Gal

Well Purging Information

	Purge Method:	Bladder Pump	Start Time:	13:50	End Time:	14:30	
(If Used)	Bladder Pump Control Settings:	On (sec): 3.5	Off (sec):	3.5	Pressure:	100	psi
	Pump Intake Depth from Top of Casing:		ft-TOC				
	Water Column Above Pump Intake:		feet	Flow Through Cell Vol:		200	mL
	DTW-TOC at 25% Drawdown of WC Above Pump:		ft-TOC	**Comments:**			
	Final Volume Purged:	1.1	Gallons	Used YSI ProQuattro - B22672B			
	Final Volume Purge Rate:	100	mL/min	2100P Turbidimeter - B22918B			
	Well Purged Dry?:	No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:50	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:00	-1.3	100	25.57	21.9	7.0	0.421	3.5	251	0.90	
	14:05	0.4	100	25.57	20.5	7.1	0.422	1.4	124	1.04	
	14:10	0.5	100	25.57	22.3	7.6	0.425	0.6	-7	1.88	
	14:15	0.7	100	25.57	21.3	7.7	0.423	0.3	-56	2.36	
	14:20	0.8	100	25.57	21.1	7.7	0.422	0.2	-67	1.92	
	14:25	0.9	100	25.57	20.1	7.6	0.420	0.1	-74	1.15	
	14:30	1.1	100	25.57	20.3	7.6	0.414	0.0	-76	1.17	
Final:	14:30	1.1	100	25.57	20.3	7.6	0.414	0.0	-76	1.2	End of Purging

Sample Method: Bladder Pump Sample Start Time: 14:35 Sample End Time:

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 21, 2023
Source Well:	MW-15	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	September 21, 2023
Sampled By:	CJH & AKL	Sample Time:	16:25
Weather:	Sunny	Air Temp:	83F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				43.00	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:	Bladder Pump	Start Time:	15:55	End Time:	16:20		
(If Used) Bladder Pump Control Settings:	On (sec): 3.5	Off (sec):	3.5	Pressure:	100	psi	
Pump Intake Depth from Top of Casing:		ft-TOC					
Water Column Above Pump Intake:		feet	Flow Through Cell Vol:		200	mL	
DTW-TOC at 25% Drawdown of WC Above Pump:		ft-TOC	**Comments:**				
Final Volume Purged:	1.3	Gallons	Duplicate sample collected (DUP-1)				
Final Volume Purge Rate:	200	mL/min					
Well Purged Dry?:	No	(Yes/No)					

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:55	0.0	---	---	---	---	---	---	---	---	Start Purging
	16:00	0.3	200	42.75	18.3	7.2	1.252	6.1	-26	1.92	Clear, no odor
	16:05	0.5	200	42.60	19.6	7.1	1.276	6.1	-29	1.35	Clear, no odor
	16:10	0.8	200	42.60	19.2	7.1	1.295	5.2	-38	1.58	Clear, no odor
	16:15	1.1	200	42.60	18.7	7.1	1.287	5.3	-37	1.53	Clear, no odor
	16:20	1.3	200	42.60	18.6	7.1	1.285	5.3	-38	1.27	Clear, no odor
Final:	16:20	1.3	200	42.60	18.6	7.1	1.285	5.3	-38	1.3	End of Purging

Sample Method: Bladder Pump Sample Start Time: 16:25 Sample End Time: 17:00

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 21, 2023
Source Well:	MW-16	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	September 21, 2023
Sampled By:	CJH & AKL	Sample Time:	15:30
Weather:	Sunny	Air Temp:	83F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				42.80	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	14:55	End Time:	15:25	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:			1.2	Gallons				
Final Volume Purge Rate:			150	mL/min				
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	14:55	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:00	0.2	150	42.81	19.8	7.0	1.311	0.5	-12	2.55	Clear, no odor
	15:05	0.4	150	42.81	19.3	6.9	1.353	0.4	10	9.46	Clear, no odor
	15:10	0.6	150	42.82	19.4	6.8	1.353	0.2	26	14.7	Clear, no odor
	15:15	0.8	150	42.82	19.1	6.8	1.360	2.8	35	11.9	Clear, no odor
	15:20	1.0	150	42.83	20.1	6.8	1.355	2.6	38	9.94	Clear, no odor
	15:25	1.2	150	42.83	19.6	6.8	1.359	2.5	43	8.65	Clear, no odor
Final:	15:25	1.2	150	42.83	19.6	6.8	1.359	2.5	43	8.7	End of Purging

Sample Method: Bladder Pump Sample Start Time: 15:30 Sample End Time: 15:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-17	Purge Time:	30 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	AKL & CJH	Sample Time:	10:10
Weather:	Sunny	Air Temp:	70F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				57.20	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	9:40	End Time:	10:10	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	55	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:			1.6	Gallons				
Final Volume Purge Rate:			200	mL/min				
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:40	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:50	0.5	200	57.15	16.8	7.5	0.847	7.7	113	0.64	Clear, no odor
	09:55	0.8	200	57.17	15.8	7.1	1.035	7.1	-117	0.83	Clear, no odor
	10:00	1.1	200	57.17	16.7	7.0	1.032	0.9	-92	1.09	Clear, no odor
	10:05	1.3	200	57.17	15.9	7.0	1.037	0.8	-55	0.55	Clear, no odor
	10:10	1.6	200	57.17	16.0	7.0	1.036	0.6	-44	0.45	Clear, no odor
Final:	10:10	1.6	200	57.17	16.0	7.0	1.036	0.6	-44	0.5	End of Purging

Sample Method: Bladder Pump Sample Start Time: 10:10 Sample End Time: 10:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 22, 2023
Source Well:	MW-19	Purge Time:	25 Minutes
Locked?:	Yes	Sample Date:	September 22, 2023
Sampled By:	CJH & AKL	Sample Time:	9:00
Weather:	Sunny	Air Temp:	65F

Water Level & Well Data

Measuring Point:				Top of Casing	
Depth to Water:				46.56	ft-TOC
Total Well Depth:					ft-TOC
Height of Water Column:					feet
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:			Bladder Pump	Start Time:	8:35	End Time:	9:00	
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100	psi
Pump Intake Depth from Top of Casing:				ft-TOC				
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**			
Final Volume Purged:			1.7	Gallons	Duplicate sample colelcted (DUP-2)			
Final Volume Purge Rate:			250	mL/min				
Well Purged Dry?:			No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	08:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	08:40	0.3	250	46.55	17.6	6.9	0.971	1.4	141	1.00	Clear, no odor
	08:45	0.7	250	46.55	17.5	6.8	0.989	0.4	136	1.01	Clear, no odor
	08:50	1.0	250	46.55	17.6	6.8	0.984	0.1	125	0.67	Clear, no odor
	08:55	1.3	250	46.55	17.6	6.8	0.984	0.1	119	0.46	Clear, no odor
	09:00	1.7	250	46.55	17.7	6.8	0.985	0.0	118	0.35	Clear, no odor
Final:	09:00	1.7	250	46.55	17.7	6.8	0.985	0.0	118	0.4	End of Purging

Sample Method: Bladder Pump Sample Start Time: 09:00 Sample End Time: 09:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 25, 2023
Source Well:	Basin A Source	Purge Time:	5 Minutes
Locked?:	No	Sample Date:	September 25, 2023
Sampled By:	JEB; CR	Sample Time:	14:00
Weather:	Sunny; 80	Air Temp:	

Water Level & Well Data

Measuring Point:			Top of Casing		
Depth to Water:			N/A	ft-TOC	
Total Well Depth:				ft-TOC	
Height of Water Column:				feet	
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	13:50	End Time:	13:55
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200 mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		0.2		Gallons	YSI ProQuattro B22670B		
Final Volume Purge Rate:		150		mL/min	2100 Turbidmeter B22917B		
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:50	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:55	0.2	150		23.2	8.9	0.557	11.8	40	9.10	
Final:	13:55	0.2	150		23.2	8.9	0.557	11.8	40	9.1	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 14:00 Sample End Time:

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

Notes:

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Miami Fort		
Project Location:	North Bend, Ohio		
Project Number:	7217-17-003D	Purge Date:	September 25, 2023
Source Well:	Basin B Source	Purge Time:	5 Minutes
Locked?:	No	Sample Date:	September 25, 2023
Sampled By:	JEB; CR	Sample Time:	13:45
Weather:	Sunny; 80	Air Temp:	

Water Level & Well Data

Measuring Point:			Top of Casing		
Depth to Water:			N/A	ft-TOC	
Total Well Depth:				ft-TOC	
Height of Water Column:				feet	
Screen Length:	20	feet	Stickup:		ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume		Gal
3 * Well Volume		Gal
5 * Well Volume		Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	13:35	End Time:	13:40
(If Used)	Bladder Pump Control Settings:	On (sec):	3.5	Off (sec):	3.5	Pressure:	100 psi
Pump Intake Depth from Top of Casing:				ft-TOC			
Water Column Above Pump Intake:				feet	Flow Through Cell Vol:		200 mL
DTW-TOC at 25% Drawdown of WC Above Pump:				ft-TOC	**Comments:**		
Final Volume Purged:		0.2		Gallons	YSI ProQuattro B22670B		
Final Volume Purge Rate:		150		mL/min	2100 Turbidmeter B22917B		
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (mS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:40	0.2	150		24.5	8.4	0.904	10.7	-13	5.90	
Final:	13:40	0.2	150		24.5	8.4	0.904	10.7	-13	5.9	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 13:45 Sample End Time:

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative

Name	Signature	Date
(1)		

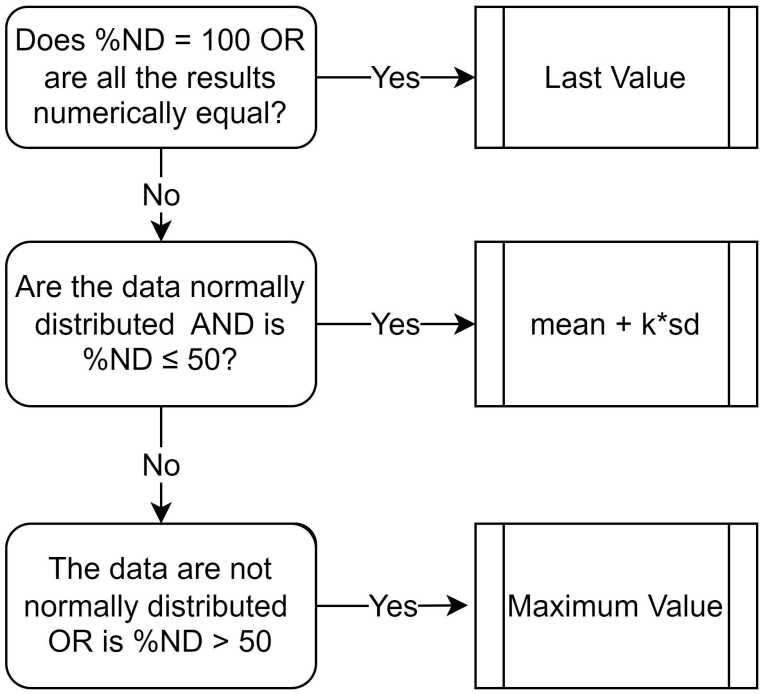
Notes:

Form Revision Date: 2/12/18 16:00

Miami Fort Station				
Well ID	**Date**	**Time**	**Depth to Water**	
Basin A and B Combined - Unit 115				
MW-01	9/21/2023	10:19	49.97	
MW-02	9/21/2023	10:41	18.87	
MW-03A	9/21/2023	11:06	18.74	
MW-04	9/21/2023	11:34	25.62	
MW-4A	9/21/2023	9:48	38.39	
MW-05	9/21/2023	11:16	56.29	
MW-06	9/21/2023	11:22	54.02	
MW-07	9/21/2023	10:02	56.88	
MW-08	9/21/2023	10:29	39.62	No cap
MW-09	9/21/2023	10:34	19.95	
MW-10S	9/21/2023	10:49	13.60	
MW-10	9/21/2023	10:47	19.37	
MW-11S	9/21/2023	10:55	14.49	
MW-11	9/21/2023	10:53	20.89	
MW-12	9/21/2023	11:08	54.37	
MW-13	9/21/2023	11:44	26.97	
MW-13S	9/21/2023	11:42	23.64	
MW-14	9/21/2023	11:36	25.62	
MW-15	9/21/2023	9:18	43.29	
MW-16	9/21/2023	9:13	43.10	
MW-17	9/21/2023	10:06	55.30	
MW-18	9/21/2023	9:55	55.07	
MW-19	9/21/2023	9:33	46.61	No cap
Gypsum Recycle Pond - Former Unit 114				
MW-GP1	9/21/2023	8:51	23.64	
MW-GP2	9/21/2023	8:45	20.17	
MW-GP3	9/21/2023	8:58	34.09	
MW-GP4	9/21/2023			Does not open
MW-GP5	9/21/2023	8:55	23.38	

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
BACKGROUND UPDATE SUPPORTING INFORMATION

APPENDIX C1
BACKGROUND UPDATE SUPPORTING INFORMATION
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Parameter	Statistic	Previous	New
Antimony, total	Sample Count	8	32
	Percent Non-Detect	100	100
	Date Range	12/08/2015 - 07/10/2017	09/15/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Arsenic, total	Sample Count	8	33
	Percent Non-Detect	88	79
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Barium, total	Sample Count	8	33
	Percent Non-Detect	0	0
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Normal	Non-Normal
	Trend	No Trend	No Trend
Beryllium, total	Sample Count	8	33
	Percent Non-Detect	100	100
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Cadmium, total	Sample Count	8	33
	Percent Non-Detect	100	100
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Chromium, total	Sample Count	8	33
	Percent Non-Detect	88	94
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Cobalt, total	Sample Count	8	32
	Percent Non-Detect	100	78
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Fluoride, total	Sample Count	7	33
	Percent Non-Detect	71	64
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend (n<8)	No Trend
Lead, total	Sample Count	8	33
	Percent Non-Detect	100	100
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	Downward
Lithium, total	Sample Count	8	33

APPENDIX C1
BACKGROUND UPDATE SUPPORTING INFORMATION
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Parameter	Statistic	Previous	New
	Percent Non-Detect	75	0
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Normal
	Trend	No Trend	No Trend
Mercury, total	Sample Count	8	33
	Percent Non-Detect	100	100
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Molybdenum, total	Sample Count	8	33
	Percent Non-Detect	88	91
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Radium 226 + Radium 228, total	Sample Count	8	28
	Percent Non-Detect	0	0
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Normal	Log Normal
	Trend	No Trend	No Trend
Selenium, total	Sample Count	8	33
	Percent Non-Detect	88	91
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend
Thallium, total	Sample Count	8	33
	Percent Non-Detect	100	100
	Date Range	12/08/2015 - 07/10/2017	09/14/2020 - 09/21/2022
	Data Normality	Non-Normal	Non-Normal
	Trend	No Trend	No Trend

Notes:
Two background wells (MW-17 and MW-19, installed in 2020) were added to the monitoring system in 2023.
Conclusion: New data were used to calculated updated background values.

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-7	11/18/2020	Antimony, total	mg/L	0.004 U
MW-7	12/10/2020	Antimony, total	mg/L	0.004 U
MW-7	01/14/2021	Antimony, total	mg/L	0.004 U
MW-7	02/26/2021	Antimony, total	mg/L	0.004 U
MW-7	03/24/2021	Antimony, total	mg/L	0.004 U
MW-7	04/28/2021	Antimony, total	mg/L	0.004 U
MW-7	05/25/2021	Antimony, total	mg/L	0.004 U
MW-7	09/15/2021	Antimony, total	mg/L	0.004 U
MW-7	03/23/2022	Antimony, total	mg/L	0.004 U
MW-7	09/21/2022	Antimony, total	mg/L	0.00103 U
MW-7	09/14/2020	Arsenic, total	mg/L	0.002 U
MW-7	11/18/2020	Arsenic, total	mg/L	0.002 U
MW-7	12/10/2020	Arsenic, total	mg/L	0.002 U
MW-7	01/14/2021	Arsenic, total	mg/L	0.002 U
MW-7	02/26/2021	Arsenic, total	mg/L	0.002 U
MW-7	03/24/2021	Arsenic, total	mg/L	0.002 U
MW-7	04/28/2021	Arsenic, total	mg/L	0.002 U
MW-7	05/25/2021	Arsenic, total	mg/L	0.002 U
MW-7	09/15/2021	Arsenic, total	mg/L	0.002 U
MW-7	03/23/2022	Arsenic, total	mg/L	0.002 U
MW-7	09/21/2022	Arsenic, total	mg/L	0.000245 J
MW-7	09/14/2020	Barium, total	mg/L	0.0958
MW-7	11/18/2020	Barium, total	mg/L	0.0935
MW-7	12/10/2020	Barium, total	mg/L	0.0945
MW-7	01/14/2021	Barium, total	mg/L	0.0955
MW-7	02/26/2021	Barium, total	mg/L	0.0794
MW-7	03/24/2021	Barium, total	mg/L	0.0945
MW-7	04/28/2021	Barium, total	mg/L	0.0855
MW-7	05/25/2021	Barium, total	mg/L	0.0873
MW-7	09/15/2021	Barium, total	mg/L	0.0851
MW-7	03/23/2022	Barium, total	mg/L	0.0938
MW-7	09/21/2022	Barium, total	mg/L	0.0919
MW-7	09/14/2020	Beryllium, total	mg/L	0.002 U
MW-7	11/18/2020	Beryllium, total	mg/L	0.002 U
MW-7	12/10/2020	Beryllium, total	mg/L	0.002 U
MW-7	01/14/2021	Beryllium, total	mg/L	0.002 U
MW-7	02/26/2021	Beryllium, total	mg/L	0.002 U
MW-7	03/24/2021	Beryllium, total	mg/L	0.002 U
MW-7	04/28/2021	Beryllium, total	mg/L	0.002 U
MW-7	05/25/2021	Beryllium, total	mg/L	0.002 U
MW-7	09/15/2021	Beryllium, total	mg/L	0.002 U
MW-7	03/23/2022	Beryllium, total	mg/L	0.002 U
MW-7	09/21/2022	Beryllium, total	mg/L	0.00019 U
MW-7	09/14/2020	Cadmium, total	mg/L	0.001 U
MW-7	11/18/2020	Cadmium, total	mg/L	0.001 U
MW-7	12/10/2020	Cadmium, total	mg/L	0.001 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-7	01/14/2021	Cadmium, total	mg/L	0.001 U
MW-7	02/26/2021	Cadmium, total	mg/L	0.001 U
MW-7	03/24/2021	Cadmium, total	mg/L	0.001 U
MW-7	04/28/2021	Cadmium, total	mg/L	0.001 U
MW-7	05/25/2021	Cadmium, total	mg/L	0.001 U
MW-7	09/15/2021	Cadmium, total	mg/L	0.001 U
MW-7	03/23/2022	Cadmium, total	mg/L	0.001 U
MW-7	09/21/2022	Cadmium, total	mg/L	0.00015 U
MW-7	09/14/2020	Chromium, total	mg/L	0.002 U
MW-7	11/18/2020	Chromium, total	mg/L	0.002 U
MW-7	12/10/2020	Chromium, total	mg/L	0.002 U
MW-7	01/14/2021	Chromium, total	mg/L	0.002 U
MW-7	02/26/2021	Chromium, total	mg/L	0.002 U
MW-7	03/24/2021	Chromium, total	mg/L	0.002 U
MW-7	04/28/2021	Chromium, total	mg/L	0.002 U
MW-7	05/25/2021	Chromium, total	mg/L	0.002 U
MW-7	09/15/2021	Chromium, total	mg/L	0.002 U
MW-7	03/23/2022	Chromium, total	mg/L	0.002 U
MW-7	09/21/2022	Chromium, total	mg/L	0.00124 U
MW-7	09/14/2020	Cobalt, total	mg/L	0.002 U
MW-7	11/18/2020	Cobalt, total	mg/L	0.002 U
MW-7	12/10/2020	Cobalt, total	mg/L	0.002 U
MW-7	01/14/2021	Cobalt, total	mg/L	0.002 U
MW-7	02/26/2021	Cobalt, total	mg/L	0.002 U
MW-7	03/24/2021	Cobalt, total	mg/L	0.002 U
MW-7	04/28/2021	Cobalt, total	mg/L	0.002 U
MW-7	05/25/2021	Cobalt, total	mg/L	0.002 U
MW-7	09/15/2021	Cobalt, total	mg/L	0.002 U
MW-7	03/23/2022	Cobalt, total	mg/L	0.002 U
MW-7	09/21/2022	Cobalt, total	mg/L	0.000123 J
MW-7	09/14/2020	Fluoride, total	mg/L	0.15 U
MW-7	11/18/2020	Fluoride, total	mg/L	0.15 U
MW-7	12/10/2020	Fluoride, total	mg/L	0.15 U
MW-7	01/14/2021	Fluoride, total	mg/L	0.15 U
MW-7	02/26/2021	Fluoride, total	mg/L	0.15 U
MW-7	03/24/2021	Fluoride, total	mg/L	0.15 U
MW-7	04/28/2021	Fluoride, total	mg/L	0.15 U
MW-7	05/25/2021	Fluoride, total	mg/L	0.150
MW-7	09/15/2021	Fluoride, total	mg/L	0.15 U
MW-7	03/23/2022	Fluoride, total	mg/L	0.15 U
MW-7	09/21/2022	Fluoride, total	mg/L	0.122 J
MW-7	09/14/2020	Lead, total	mg/L	0.005 U
MW-7	11/18/2020	Lead, total	mg/L	0.005 U
MW-7	12/10/2020	Lead, total	mg/L	0.002 U
MW-7	01/14/2021	Lead, total	mg/L	0.002 U
MW-7	02/26/2021	Lead, total	mg/L	0.002 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-7	03/24/2021	Lead, total	mg/L	0.002 U
MW-7	04/28/2021	Lead, total	mg/L	0.002 U
MW-7	05/25/2021	Lead, total	mg/L	0.002 U
MW-7	09/15/2021	Lead, total	mg/L	0.002 U
MW-7	03/23/2022	Lead, total	mg/L	0.002 U
MW-7	09/21/2022	Lead, total	mg/L	0.000849 U
MW-7	09/14/2020	Lithium, total	mg/L	0.00411
MW-7	11/18/2020	Lithium, total	mg/L	0.00478
MW-7	12/10/2020	Lithium, total	mg/L	0.00442
MW-7	01/14/2021	Lithium, total	mg/L	0.00452
MW-7	02/26/2021	Lithium, total	mg/L	0.00321
MW-7	03/24/2021	Lithium, total	mg/L	0.00398
MW-7	04/28/2021	Lithium, total	mg/L	0.00406
MW-7	05/25/2021	Lithium, total	mg/L	0.00463
MW-7	09/15/2021	Lithium, total	mg/L	0.00456
MW-7	03/23/2022	Lithium, total	mg/L	0.00465
MW-7	09/21/2022	Lithium, total	mg/L	0.00455
MW-7	09/14/2020	Mercury, total	mg/L	0.0002 U
MW-7	11/18/2020	Mercury, total	mg/L	0.0002 U
MW-7	12/10/2020	Mercury, total	mg/L	0.0002 U
MW-7	01/14/2021	Mercury, total	mg/L	0.0002 U
MW-7	02/26/2021	Mercury, total	mg/L	0.0002 U
MW-7	03/24/2021	Mercury, total	mg/L	0.0002 U
MW-7	04/28/2021	Mercury, total	mg/L	0.0002 U
MW-7	05/25/2021	Mercury, total	mg/L	0.0002 U
MW-7	09/15/2021	Mercury, total	mg/L	0.0002 U
MW-7	03/23/2022	Mercury, total	mg/L	0.0002 U
MW-7	09/21/2022	Mercury, total	mg/L	0.0001 U
MW-7	09/14/2020	Molybdenum, total	mg/L	0.005 U
MW-7	11/18/2020	Molybdenum, total	mg/L	0.005 U
MW-7	12/10/2020	Molybdenum, total	mg/L	0.005 U
MW-7	01/14/2021	Molybdenum, total	mg/L	0.005 U
MW-7	02/26/2021	Molybdenum, total	mg/L	0.005 U
MW-7	03/24/2021	Molybdenum, total	mg/L	0.005 U
MW-7	04/28/2021	Molybdenum, total	mg/L	0.005 U
MW-7	05/25/2021	Molybdenum, total	mg/L	0.005 U
MW-7	09/15/2021	Molybdenum, total	mg/L	0.005 U
MW-7	03/23/2022	Molybdenum, total	mg/L	0.005 U
MW-7	09/21/2022	Molybdenum, total	mg/L	0.000592 J
MW-7	09/14/2020	Radium 226 + Radium 228, total	pCi/L	0.860
MW-7	11/18/2020	Radium 226 + Radium 228, total	pCi/L	0.719
MW-7	12/10/2020	Radium 226 + Radium 228, total	pCi/L	1.44
MW-7	01/14/2021	Radium 226 + Radium 228, total	pCi/L	0.253
MW-7	02/26/2021	Radium 226 + Radium 228, total	pCi/L	0.530
MW-7	03/24/2021	Radium 226 + Radium 228, total	pCi/L	0.534
MW-7	04/28/2021	Radium 226 + Radium 228, total	pCi/L	0.534

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-7	05/25/2021	Radium 226 + Radium 228, total	pCi/L	1.36
MW-7	09/15/2021	Radium 226 + Radium 228, total	pCi/L	1.12
MW-7	03/23/2022	Radium 226 + Radium 228, total	pCi/L	0.951
MW-7	09/21/2022	Radium 226 + Radium 228, total	pCi/L	0.414
MW-7	09/14/2020	Selenium, total	mg/L	0.002 U
MW-7	11/18/2020	Selenium, total	mg/L	0.002 U
MW-7	12/10/2020	Selenium, total	mg/L	0.002 U
MW-7	01/14/2021	Selenium, total	mg/L	0.00459
MW-7	02/26/2021	Selenium, total	mg/L	0.002 U
MW-7	03/24/2021	Selenium, total	mg/L	0.002 U
MW-7	04/28/2021	Selenium, total	mg/L	0.002 U
MW-7	05/25/2021	Selenium, total	mg/L	0.002 U
MW-7	09/15/2021	Selenium, total	mg/L	0.002 U
MW-7	03/23/2022	Selenium, total	mg/L	0.00202
MW-7	09/21/2022	Selenium, total	mg/L	0.0003 U
MW-7	09/14/2020	Thallium, total	mg/L	0.002 U
MW-7	11/18/2020	Thallium, total	mg/L	0.002 U
MW-7	12/10/2020	Thallium, total	mg/L	0.002 U
MW-7	01/14/2021	Thallium, total	mg/L	0.002 U
MW-7	02/26/2021	Thallium, total	mg/L	0.002 U
MW-7	03/24/2021	Thallium, total	mg/L	0.002 U
MW-7	04/28/2021	Thallium, total	mg/L	0.002 U
MW-7	05/25/2021	Thallium, total	mg/L	0.002 U
MW-7	09/15/2021	Thallium, total	mg/L	0.002 U
MW-7	03/23/2022	Thallium, total	mg/L	0.002 U
MW-7	09/21/2022	Thallium, total	mg/L	0.000121 U
MW-17	09/15/2020	Antimony, total	mg/L	0.004 U
MW-17	11/18/2020	Antimony, total	mg/L	0.004 U
MW-17	12/10/2020	Antimony, total	mg/L	0.004 U
MW-17	01/14/2021	Antimony, total	mg/L	0.004 U
MW-17	02/26/2021	Antimony, total	mg/L	0.004 U
MW-17	03/24/2021	Antimony, total	mg/L	0.004 U
MW-17	04/28/2021	Antimony, total	mg/L	0.004 U
MW-17	05/25/2021	Antimony, total	mg/L	0.004 U
MW-17	09/15/2021	Antimony, total	mg/L	0.004 U
MW-17	03/23/2022	Antimony, total	mg/L	0.004 U
MW-17	09/21/2022	Antimony, total	mg/L	0.00103 U
MW-17	09/15/2020	Arsenic, total	mg/L	0.00312
MW-17	11/18/2020	Arsenic, total	mg/L	0.00406
MW-17	12/10/2020	Arsenic, total	mg/L	0.00392
MW-17	01/14/2021	Arsenic, total	mg/L	0.00320
MW-17	02/26/2021	Arsenic, total	mg/L	0.00828
MW-17	03/24/2021	Arsenic, total	mg/L	0.00400
MW-17	04/28/2021	Arsenic, total	mg/L	0.002 U
MW-17	05/25/2021	Arsenic, total	mg/L	0.002 U
MW-17	09/15/2021	Arsenic, total	mg/L	0.002 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-17	03/23/2022	Arsenic, total	mg/L	0.002 U
MW-17	09/21/2022	Arsenic, total	mg/L	0.000404 J
MW-17	09/15/2020	Barium, total	mg/L	0.0520
MW-17	11/18/2020	Barium, total	mg/L	0.0505
MW-17	12/10/2020	Barium, total	mg/L	0.0506
MW-17	01/14/2021	Barium, total	mg/L	0.0490
MW-17	02/26/2021	Barium, total	mg/L	0.0468
MW-17	03/24/2021	Barium, total	mg/L	0.0525
MW-17	04/28/2021	Barium, total	mg/L	0.0496
MW-17	05/25/2021	Barium, total	mg/L	0.0501
MW-17	09/15/2021	Barium, total	mg/L	0.0488
MW-17	03/23/2022	Barium, total	mg/L	0.0509
MW-17	09/21/2022	Barium, total	mg/L	0.0531
MW-17	09/15/2020	Beryllium, total	mg/L	0.002 U
MW-17	11/18/2020	Beryllium, total	mg/L	0.002 U
MW-17	12/10/2020	Beryllium, total	mg/L	0.002 U
MW-17	01/14/2021	Beryllium, total	mg/L	0.002 U
MW-17	02/26/2021	Beryllium, total	mg/L	0.002 U
MW-17	03/24/2021	Beryllium, total	mg/L	0.002 U
MW-17	04/28/2021	Beryllium, total	mg/L	0.002 U
MW-17	05/25/2021	Beryllium, total	mg/L	0.002 U
MW-17	09/15/2021	Beryllium, total	mg/L	0.002 U
MW-17	03/23/2022	Beryllium, total	mg/L	0.002 U
MW-17	09/21/2022	Beryllium, total	mg/L	0.00019 U
MW-17	09/15/2020	Cadmium, total	mg/L	0.001 U
MW-17	11/18/2020	Cadmium, total	mg/L	0.001 U
MW-17	12/10/2020	Cadmium, total	mg/L	0.001 U
MW-17	01/14/2021	Cadmium, total	mg/L	0.001 U
MW-17	02/26/2021	Cadmium, total	mg/L	0.001 U
MW-17	03/24/2021	Cadmium, total	mg/L	0.001 U
MW-17	04/28/2021	Cadmium, total	mg/L	0.001 U
MW-17	05/25/2021	Cadmium, total	mg/L	0.001 U
MW-17	09/15/2021	Cadmium, total	mg/L	0.001 U
MW-17	03/23/2022	Cadmium, total	mg/L	0.001 U
MW-17	09/21/2022	Cadmium, total	mg/L	0.00015 U
MW-17	09/15/2020	Chromium, total	mg/L	0.002 U
MW-17	11/18/2020	Chromium, total	mg/L	0.002 U
MW-17	12/10/2020	Chromium, total	mg/L	0.002 U
MW-17	01/14/2021	Chromium, total	mg/L	0.002 U
MW-17	02/26/2021	Chromium, total	mg/L	0.002 U
MW-17	03/24/2021	Chromium, total	mg/L	0.002 U
MW-17	04/28/2021	Chromium, total	mg/L	0.002 U
MW-17	05/25/2021	Chromium, total	mg/L	0.002 U
MW-17	09/15/2021	Chromium, total	mg/L	0.002 U
MW-17	03/23/2022	Chromium, total	mg/L	0.00200
MW-17	09/21/2022	Chromium, total	mg/L	0.00124 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-17	09/15/2020	Cobalt, total	mg/L	0.002 U
MW-17	11/18/2020	Cobalt, total	mg/L	0.002 U
MW-17	12/10/2020	Cobalt, total	mg/L	0.002 U
MW-17	01/14/2021	Cobalt, total	mg/L	0.002 U
MW-17	02/26/2021	Cobalt, total	mg/L	0.002 U
MW-17	03/24/2021	Cobalt, total	mg/L	0.002 U
MW-17	04/28/2021	Cobalt, total	mg/L	0.002 U
MW-17	05/25/2021	Cobalt, total	mg/L	0.002 U
MW-17	09/15/2021	Cobalt, total	mg/L	0.002 U
MW-17	03/23/2022	Cobalt, total	mg/L	0.002 U
MW-17	09/21/2022	Cobalt, total	mg/L	0.00158 J
MW-17	09/15/2020	Fluoride, total	mg/L	0.310
MW-17	11/18/2020	Fluoride, total	mg/L	0.210
MW-17	12/10/2020	Fluoride, total	mg/L	0.212
MW-17	01/14/2021	Fluoride, total	mg/L	0.208
MW-17	02/26/2021	Fluoride, total	mg/L	0.183
MW-17	03/24/2021	Fluoride, total	mg/L	0.191
MW-17	04/28/2021	Fluoride, total	mg/L	0.208
MW-17	05/25/2021	Fluoride, total	mg/L	0.212
MW-17	09/15/2021	Fluoride, total	mg/L	0.190
MW-17	03/23/2022	Fluoride, total	mg/L	0.159
MW-17	09/21/2022	Fluoride, total	mg/L	0.202
MW-17	09/15/2020	Lead, total	mg/L	0.005 U
MW-17	11/18/2020	Lead, total	mg/L	0.005 U
MW-17	12/10/2020	Lead, total	mg/L	0.002 U
MW-17	01/14/2021	Lead, total	mg/L	0.002 U
MW-17	02/26/2021	Lead, total	mg/L	0.002 U
MW-17	03/24/2021	Lead, total	mg/L	0.002 U
MW-17	04/28/2021	Lead, total	mg/L	0.002 U
MW-17	05/25/2021	Lead, total	mg/L	0.002 U
MW-17	09/15/2021	Lead, total	mg/L	0.002 U
MW-17	03/23/2022	Lead, total	mg/L	0.002 U
MW-17	09/21/2022	Lead, total	mg/L	0.000849 U
MW-17	09/15/2020	Lithium, total	mg/L	0.00648
MW-17	11/18/2020	Lithium, total	mg/L	0.00984
MW-17	12/10/2020	Lithium, total	mg/L	0.00947
MW-17	01/14/2021	Lithium, total	mg/L	0.00786
MW-17	02/26/2021	Lithium, total	mg/L	0.00821
MW-17	03/24/2021	Lithium, total	mg/L	0.00995
MW-17	04/28/2021	Lithium, total	mg/L	0.00928
MW-17	05/25/2021	Lithium, total	mg/L	0.0108
MW-17	09/15/2021	Lithium, total	mg/L	0.0118
MW-17	03/23/2022	Lithium, total	mg/L	0.0110
MW-17	09/21/2022	Lithium, total	mg/L	0.00925
MW-17	09/15/2020	Mercury, total	mg/L	0.0002 U
MW-17	11/18/2020	Mercury, total	mg/L	0.0002 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-17	12/10/2020	Mercury, total	mg/L	0.0002 U
MW-17	01/14/2021	Mercury, total	mg/L	0.0002 U
MW-17	02/26/2021	Mercury, total	mg/L	0.0002 U
MW-17	03/24/2021	Mercury, total	mg/L	0.0002 U
MW-17	04/28/2021	Mercury, total	mg/L	0.0002 U
MW-17	05/25/2021	Mercury, total	mg/L	0.0002 U
MW-17	09/15/2021	Mercury, total	mg/L	0.0002 U
MW-17	03/23/2022	Mercury, total	mg/L	0.0002 U
MW-17	09/21/2022	Mercury, total	mg/L	0.0001 U
MW-17	09/15/2020	Molybdenum, total	mg/L	0.0125
MW-17	11/18/2020	Molybdenum, total	mg/L	0.005 U
MW-17	12/10/2020	Molybdenum, total	mg/L	0.005 U
MW-17	01/14/2021	Molybdenum, total	mg/L	0.005 U
MW-17	02/26/2021	Molybdenum, total	mg/L	0.005 U
MW-17	03/24/2021	Molybdenum, total	mg/L	0.005 U
MW-17	04/28/2021	Molybdenum, total	mg/L	0.005 U
MW-17	05/25/2021	Molybdenum, total	mg/L	0.005 U
MW-17	09/15/2021	Molybdenum, total	mg/L	0.005 U
MW-17	03/23/2022	Molybdenum, total	mg/L	0.005 U
MW-17	09/21/2022	Molybdenum, total	mg/L	0.00305 J
MW-17	09/15/2020	Radium 226 + Radium 228, total	pCi/L	0.567
MW-17	11/18/2020	Radium 226 + Radium 228, total	pCi/L	0.182
MW-17	12/10/2020	Radium 226 + Radium 228, total	pCi/L	0.822
MW-17	01/14/2021	Radium 226 + Radium 228, total	pCi/L	2.41
MW-17	02/26/2021	Radium 226 + Radium 228, total	pCi/L	0.697
MW-17	04/28/2021	Radium 226 + Radium 228, total	pCi/L	0.154
MW-17	05/25/2021	Radium 226 + Radium 228, total	pCi/L	0.605
MW-17	09/15/2021	Radium 226 + Radium 228, total	pCi/L	0.263
MW-17	03/23/2022	Radium 226 + Radium 228, total	pCi/L	0.286
MW-17	09/15/2020	Selenium, total	mg/L	0.002 U
MW-17	11/18/2020	Selenium, total	mg/L	0.002 U
MW-17	12/10/2020	Selenium, total	mg/L	0.002 U
MW-17	01/14/2021	Selenium, total	mg/L	0.002 U
MW-17	02/26/2021	Selenium, total	mg/L	0.002 U
MW-17	03/24/2021	Selenium, total	mg/L	0.002 U
MW-17	04/28/2021	Selenium, total	mg/L	0.002 U
MW-17	05/25/2021	Selenium, total	mg/L	0.002 U
MW-17	09/15/2021	Selenium, total	mg/L	0.002 U
MW-17	03/23/2022	Selenium, total	mg/L	0.002 U
MW-17	09/21/2022	Selenium, total	mg/L	0.0003 U
MW-17	09/15/2020	Thallium, total	mg/L	0.002 U
MW-17	11/18/2020	Thallium, total	mg/L	0.002 U
MW-17	12/10/2020	Thallium, total	mg/L	0.002 U
MW-17	01/14/2021	Thallium, total	mg/L	0.002 U
MW-17	02/26/2021	Thallium, total	mg/L	0.002 U
MW-17	03/24/2021	Thallium, total	mg/L	0.002 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-17	04/28/2021	Thallium, total	mg/L	0.002 U
MW-17	05/25/2021	Thallium, total	mg/L	0.002 U
MW-17	09/15/2021	Thallium, total	mg/L	0.002 U
MW-17	03/23/2022	Thallium, total	mg/L	0.002 U
MW-17	09/21/2022	Thallium, total	mg/L	0.000121 U
MW-19	09/15/2020	Antimony, total	mg/L	0.004 U
MW-19	11/18/2020	Antimony, total	mg/L	0.004 U
MW-19	12/10/2020	Antimony, total	mg/L	0.004 U
MW-19	01/14/2021	Antimony, total	mg/L	0.004 U
MW-19	02/25/2021	Antimony, total	mg/L	0.004 U
MW-19	03/24/2021	Antimony, total	mg/L	0.004 U
MW-19	04/28/2021	Antimony, total	mg/L	0.004 U
MW-19	05/25/2021	Antimony, total	mg/L	0.004 U
MW-19	09/15/2021	Antimony, total	mg/L	0.004 U
MW-19	03/23/2022	Antimony, total	mg/L	0.004 U
MW-19	09/21/2022	Antimony, total	mg/L	0.00103 U
MW-19	09/15/2020	Arsenic, total	mg/L	0.00254
MW-19	11/18/2020	Arsenic, total	mg/L	0.002 U
MW-19	12/10/2020	Arsenic, total	mg/L	0.002 U
MW-19	01/14/2021	Arsenic, total	mg/L	0.002 U
MW-19	02/25/2021	Arsenic, total	mg/L	0.002 U
MW-19	03/24/2021	Arsenic, total	mg/L	0.002 U
MW-19	04/28/2021	Arsenic, total	mg/L	0.002 U
MW-19	05/25/2021	Arsenic, total	mg/L	0.002 U
MW-19	09/15/2021	Arsenic, total	mg/L	0.002 U
MW-19	03/23/2022	Arsenic, total	mg/L	0.002 U
MW-19	09/21/2022	Arsenic, total	mg/L	0.000231 J
MW-19	09/15/2020	Barium, total	mg/L	0.203
MW-19	11/18/2020	Barium, total	mg/L	0.147
MW-19	12/10/2020	Barium, total	mg/L	0.151
MW-19	01/14/2021	Barium, total	mg/L	0.142
MW-19	02/25/2021	Barium, total	mg/L	0.117
MW-19	03/24/2021	Barium, total	mg/L	0.136
MW-19	04/28/2021	Barium, total	mg/L	0.151
MW-19	05/25/2021	Barium, total	mg/L	0.139
MW-19	09/15/2021	Barium, total	mg/L	0.137
MW-19	03/23/2022	Barium, total	mg/L	0.132
MW-19	09/21/2022	Barium, total	mg/L	0.144
MW-19	09/15/2020	Beryllium, total	mg/L	0.002 U
MW-19	11/18/2020	Beryllium, total	mg/L	0.002 U
MW-19	12/10/2020	Beryllium, total	mg/L	0.002 U
MW-19	01/14/2021	Beryllium, total	mg/L	0.002 U
MW-19	02/25/2021	Beryllium, total	mg/L	0.002 U
MW-19	03/24/2021	Beryllium, total	mg/L	0.002 U
MW-19	04/28/2021	Beryllium, total	mg/L	0.002 U
MW-19	05/25/2021	Beryllium, total	mg/L	0.002 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-19	09/15/2021	Beryllium, total	mg/L	0.002 U
MW-19	03/23/2022	Beryllium, total	mg/L	0.002 U
MW-19	09/21/2022	Beryllium, total	mg/L	0.00019 U
MW-19	09/15/2020	Cadmium, total	mg/L	0.001 U
MW-19	11/18/2020	Cadmium, total	mg/L	0.001 U
MW-19	12/10/2020	Cadmium, total	mg/L	0.001 U
MW-19	01/14/2021	Cadmium, total	mg/L	0.001 U
MW-19	02/25/2021	Cadmium, total	mg/L	0.001 U
MW-19	03/24/2021	Cadmium, total	mg/L	0.001 U
MW-19	04/28/2021	Cadmium, total	mg/L	0.001 U
MW-19	05/25/2021	Cadmium, total	mg/L	0.001 U
MW-19	09/15/2021	Cadmium, total	mg/L	0.001 U
MW-19	03/23/2022	Cadmium, total	mg/L	0.001 U
MW-19	09/21/2022	Cadmium, total	mg/L	0.00015 U
MW-19	09/15/2020	Chromium, total	mg/L	0.00207
MW-19	11/18/2020	Chromium, total	mg/L	0.002 U
MW-19	12/10/2020	Chromium, total	mg/L	0.002 U
MW-19	01/14/2021	Chromium, total	mg/L	0.002 U
MW-19	02/25/2021	Chromium, total	mg/L	0.002 U
MW-19	03/24/2021	Chromium, total	mg/L	0.002 U
MW-19	04/28/2021	Chromium, total	mg/L	0.002 U
MW-19	05/25/2021	Chromium, total	mg/L	0.002 U
MW-19	09/15/2021	Chromium, total	mg/L	0.002 U
MW-19	03/23/2022	Chromium, total	mg/L	0.002 U
MW-19	09/21/2022	Chromium, total	mg/L	0.00124 U
MW-19	09/15/2020	Cobalt, total	mg/L	0.0145
MW-19	11/18/2020	Cobalt, total	mg/L	0.00427
MW-19	12/10/2020	Cobalt, total	mg/L	0.00401
MW-19	01/14/2021	Cobalt, total	mg/L	0.00339
MW-19	02/25/2021	Cobalt, total	mg/L	0.00301
MW-19	03/24/2021	Cobalt, total	mg/L	0.00233
MW-19	04/28/2021	Cobalt, total	mg/L	0.00254
MW-19	05/25/2021	Cobalt, total	mg/L	0.002 U
MW-19	09/15/2021	Cobalt, total	mg/L	0.00435
MW-19	03/23/2022	Cobalt, total	mg/L	0.002 U
MW-19	09/21/2022	Cobalt, total	mg/L	0.000872 J
MW-19	09/15/2020	Fluoride, total	mg/L	0.15 U
MW-19	11/18/2020	Fluoride, total	mg/L	0.15 U
MW-19	12/10/2020	Fluoride, total	mg/L	0.15 U
MW-19	01/14/2021	Fluoride, total	mg/L	0.15 U
MW-19	02/25/2021	Fluoride, total	mg/L	0.15 U
MW-19	03/24/2021	Fluoride, total	mg/L	0.15 U
MW-19	04/28/2021	Fluoride, total	mg/L	0.15 U
MW-19	05/25/2021	Fluoride, total	mg/L	0.15 U
MW-19	09/15/2021	Fluoride, total	mg/L	0.15 U
MW-19	03/23/2022	Fluoride, total	mg/L	0.15 U

APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-19	09/21/2022	Fluoride, total	mg/L	0.135 J
MW-19	09/15/2020	Lead, total	mg/L	0.005 U
MW-19	11/18/2020	Lead, total	mg/L	0.005 U
MW-19	12/10/2020	Lead, total	mg/L	0.002 U
MW-19	01/14/2021	Lead, total	mg/L	0.002 U
MW-19	02/25/2021	Lead, total	mg/L	0.002 U
MW-19	03/24/2021	Lead, total	mg/L	0.002 U
MW-19	04/28/2021	Lead, total	mg/L	0.002 U
MW-19	05/25/2021	Lead, total	mg/L	0.002 U
MW-19	09/15/2021	Lead, total	mg/L	0.002 U
MW-19	03/23/2022	Lead, total	mg/L	0.002 U
MW-19	09/21/2022	Lead, total	mg/L	0.000849 U
MW-19	09/15/2020	Lithium, total	mg/L	0.00668
MW-19	11/18/2020	Lithium, total	mg/L	0.00663
MW-19	12/10/2020	Lithium, total	mg/L	0.00656
MW-19	01/14/2021	Lithium, total	mg/L	0.00629
MW-19	02/25/2021	Lithium, total	mg/L	0.00521
MW-19	03/24/2021	Lithium, total	mg/L	0.00729
MW-19	04/28/2021	Lithium, total	mg/L	0.00577
MW-19	05/25/2021	Lithium, total	mg/L	0.00706
MW-19	09/15/2021	Lithium, total	mg/L	0.00764
MW-19	03/23/2022	Lithium, total	mg/L	0.00684
MW-19	09/21/2022	Lithium, total	mg/L	0.00606
MW-19	09/15/2020	Mercury, total	mg/L	0.0002 U
MW-19	11/18/2020	Mercury, total	mg/L	0.0002 U
MW-19	12/10/2020	Mercury, total	mg/L	0.0002 U
MW-19	01/14/2021	Mercury, total	mg/L	0.0002 U
MW-19	02/25/2021	Mercury, total	mg/L	0.0002 U
MW-19	03/24/2021	Mercury, total	mg/L	0.0002 U
MW-19	04/28/2021	Mercury, total	mg/L	0.0002 U
MW-19	05/25/2021	Mercury, total	mg/L	0.0002 U
MW-19	09/15/2021	Mercury, total	mg/L	0.0002 U
MW-19	03/23/2022	Mercury, total	mg/L	0.0002 U
MW-19	09/21/2022	Mercury, total	mg/L	0.0001 U
MW-19	09/15/2020	Molybdenum, total	mg/L	0.00707
MW-19	11/18/2020	Molybdenum, total	mg/L	0.005 U
MW-19	12/10/2020	Molybdenum, total	mg/L	0.005 U
MW-19	01/14/2021	Molybdenum, total	mg/L	0.00523
MW-19	02/25/2021	Molybdenum, total	mg/L	0.005 U
MW-19	03/24/2021	Molybdenum, total	mg/L	0.005 U
MW-19	04/28/2021	Molybdenum, total	mg/L	0.005 U
MW-19	05/25/2021	Molybdenum, total	mg/L	0.005 U
MW-19	09/15/2021	Molybdenum, total	mg/L	0.005 U
MW-19	03/23/2022	Molybdenum, total	mg/L	0.005 U
MW-19	09/21/2022	Molybdenum, total	mg/L	0.00275 J
MW-19	09/15/2020	Radium 226 + Radium 228, total	pCi/L	0.556

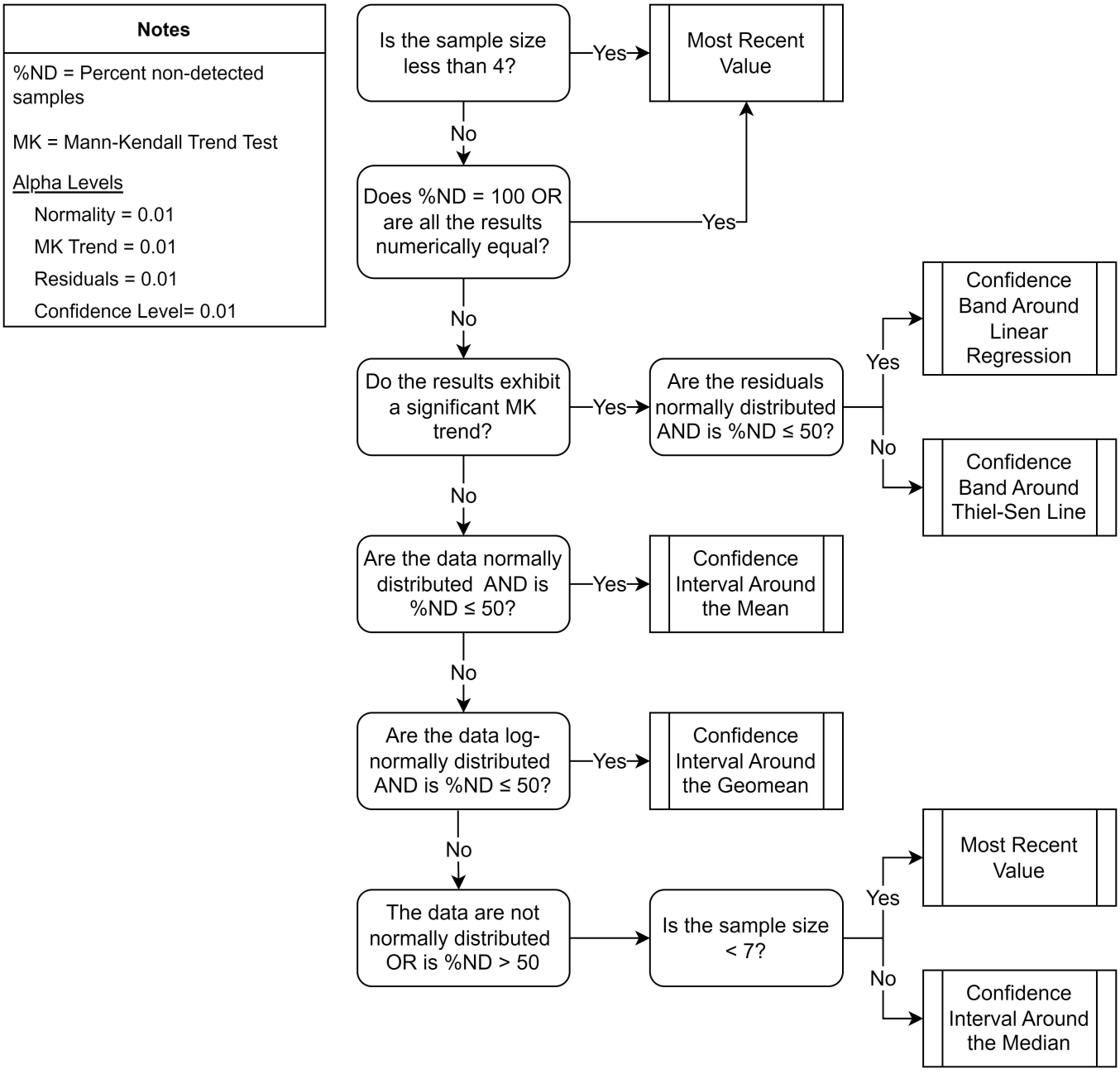
APPENDIX C2
ANALYTICAL RESULTS USED IN BACKGROUND CALCULATIONS
2023 40 C.F.R. § 257 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER PLANT
POND SYSTEM
NORTH BEND, OH

Well ID	Date	Parameter	Unit	Result
MW-19	11/18/2020	Radium 226 + Radium 228, total	pCi/L	0.306
MW-19	12/10/2020	Radium 226 + Radium 228, total	pCi/L	1.45
MW-19	01/14/2021	Radium 226 + Radium 228, total	pCi/L	1.98
MW-19	02/25/2021	Radium 226 + Radium 228, total	pCi/L	0.421
MW-19	04/28/2021	Radium 226 + Radium 228, total	pCi/L	0.297
MW-19	05/25/2021	Radium 226 + Radium 228, total	pCi/L	0.831
MW-19	03/23/2022	Radium 226 + Radium 228, total	pCi/L	0.668
MW-19	09/15/2020	Selenium, total	mg/L	0.002 U
MW-19	11/18/2020	Selenium, total	mg/L	0.002 U
MW-19	12/10/2020	Selenium, total	mg/L	0.002 U
MW-19	01/14/2021	Selenium, total	mg/L	0.00200
MW-19	02/25/2021	Selenium, total	mg/L	0.002 U
MW-19	03/24/2021	Selenium, total	mg/L	0.002 U
MW-19	04/28/2021	Selenium, total	mg/L	0.002 U
MW-19	05/25/2021	Selenium, total	mg/L	0.002 U
MW-19	09/15/2021	Selenium, total	mg/L	0.002 U
MW-19	03/23/2022	Selenium, total	mg/L	0.002 U
MW-19	09/21/2022	Selenium, total	mg/L	0.000663 J
MW-19	09/15/2020	Thallium, total	mg/L	0.002 U
MW-19	11/18/2020	Thallium, total	mg/L	0.002 U
MW-19	12/10/2020	Thallium, total	mg/L	0.002 U
MW-19	01/14/2021	Thallium, total	mg/L	0.002 U
MW-19	02/25/2021	Thallium, total	mg/L	0.002 U
MW-19	03/24/2021	Thallium, total	mg/L	0.002 U
MW-19	04/28/2021	Thallium, total	mg/L	0.002 U
MW-19	05/25/2021	Thallium, total	mg/L	0.002 U
MW-19	09/15/2021	Thallium, total	mg/L	0.002 U
MW-19	03/23/2022	Thallium, total	mg/L	0.002 U
MW-19	09/21/2022	Thallium, total	mg/L	0.000189 J

Notes:
mg/L = milligrams per liter
pCi/L = picoCuries per liter
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.

Generated 2024-01-14 03:28:29.913636 by banoffra

APPENDIX D
STATISTICAL METHODOLGY FOR DETERMINATION OF STATISTICALLY SIGNIFICANT LEVELS


Notes
%ND = Percent non-detected samples
MK = Mann-Kendall Trend Test
Alpha Levels
Normality = 0.01
MK Trend = 0.01
Residuals = 0.01
Confidence Level= 0.01
Is the sample size less than 4?
Yes
Most Recent Value
No
Does %ND = 100 OR are all the results numerically equal?
Yes
No
Do the results exhibit a significant MK trend?
Yes
Are the residuals normally distributed AND is %ND ≤ 50?
Yes
Confidence Band Around Linear Regression
No
Confidence Band Around Thiel-Sen Line
No
Are the data normally distributed AND is %ND ≤ 50?
Yes
Confidence Interval Around the Mean
No
Are the data log-normally distributed AND is %ND ≤ 50?
Yes
Confidence Interval Around the Geomean
No
The data are not normally distributed OR is %ND > 50
Is the sample size < 7?
Yes
Most Recent Value
No
Confidence Interval Around the Median